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RESULTS

OF

METEOROLOGICAL OBSERVATIONS,

MADE UNDER THE DIRECTION OF THE

UNITED STATES PATENT OFFICE AND THE SMITHSONIAN INSTITUTION,

FROM THE

YEAR 1854 TO 1859, INCLUSIVE,

BEING A REPORT OF THE

COMMISSIONER OF PATENTS

MADE AT

THE FIRST SESSION OF THE THIRTY-SIXTH CONGRESS.

**VOL. I.**

WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1861.





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A15  
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IN SENATE OF THE UNITED STATES, April 2, 1860.

*Resolved*, That there be printed, in addition to the usual number, in quarto form, with the plates to illustrate the same, three thousand copies of the Report of the Commissioner of Patents on Meteorological Observations, for the use of the Commissioner of Patents and the Secretary of the Smithsonian Institution.

Attest :

ASBURY DICKINS, *Secretary*.

By W. HICKEY, *Chief Clerk*.



## REPORT.

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UNITED STATES PATENT OFFICE,  
*January 26, 1860.*

SIR: I have the honor herewith to transmit the results of the Meteorological Observations from the year 1854 to 1859, both inclusive, which have been prepared and condensed at the joint expense of the Patent Office and the Smithsonian Institution. It is believed that these results are of sufficient importance to justify their publication. Indeed, it is due to the scientific men throughout our country, who have voluntarily, and without reward, furnished the data upon which these results are based, that the important information which they contain should be published. The accompanying letter from Professor Henry, Secretary of the Smithsonian Institution, will explain more fully the contents of the papers, and the important advantages which will accrue to the country from their publication.

I respectfully submit the subject to the consideration of Congress for such action as they may deem just and proper.

Very respectfully, your obedient servant,

WM. D. BISHOP,  
*Commissioner.*

HON. JOHN C. BRECKINRIDGE,  
*Vice-President of the United States.*

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SMITHSONIAN INSTITUTION,  
*Washington, January 25, 1860.*

SIR: I have the honor herewith to transmit to you the manuscript reductions of the Meteorological Observations which have been made, under the direction of this Institution and the Patent Office, by several hundred voluntary observers, in nearly every State and Territory in the Union. The original observations were furnished free of charge by persons interested in the progress of science; but the reductions, which have been attended with great labor, have been made by Professor Coffin, of Lafayette College, at the joint expense of this Institution and the Patent Office.

The results are considered as furnishing very interesting and valuable statistics, not only in regard to the science of meteorology, but to that of agriculture, which will be of increasing importance in determining the climatology of different portions of the country with reference to their special adaptation to the growth of different kinds of crops.

The reductions are those of the observations for six years, viz: 1854, 1855, 1856, 1857, 1858, and 1859, and include the following results:

1. The average height of the barometer.
2. The maximum and minimum elevation of the same instrument, and the day when they occur for each month.



3. The average temperature for the hours of 7 a. m., 2 and 9 p. m., and for the month.
4. The highest and lowest degree of temperature, and when they occurred.
5. The warmest and coldest days as a whole.
6. The average and maximum and minimum force of vapor.
7. The relative humidity.
8. The number of times the wind blew from each quarter.
9. The amount of rain and snow.
10. The average amount of cloudiness.
11. Summaries for each year.

To the reductions are appended the original observations in detail for the periods of the occurrence of several extensive storms, in order to furnish data of importance in studying the peculiar disturbances of the atmosphere to which the North American continent is subjected.

The information contained in these observations having been called for as a portion of agricultural statistics by the Patent Office, and having been furnished gratuitously and with much labor by the persons who have made the contributions, the results ought, in justice to the observers, to be published. Besides this, it is highly important, since meteorology is at this time occupying so much attention, that all the data accumulated in regard to it should be given to the world.

These reductions may be considered as forming a part of the results of a harmonious system now in operation in this country under the War Department, the Patent Office, and the Smithsonian Institution, the objects of which are briefly set forth in the following remarks from the Transactions of the "American Medical Association:" "The primary object of the Smithsonian Institution is the advancement of the science of meteorology and the elucidation of the laws of atmospheric phenomena; that of the Patent Office, to collect facts and deduce therefrom laws which have immediate reference to agriculture; while the system of the Medical Department is intended to be primarily subservient to the health of the troops and the advancement of medical science. These three Institutions are now in harmonious co-operation, and it is believed that it is no exaggeration to say that under their auspices more is now being done to advance meteorology than has ever before been attempted under any government."

It may be proper to add that the War Department has lately published a large quarto volume of similar results from the military posts of the United States army, and that the Smithsonian Institution has now in press, at the expense of its own funds, a sufficient amount of matter to make another of equal size.

I have the honor to be, very respectfully, your obedient servant,

JOSEPH HENRY,

*Secretary of Smithsonian Institution.*

Hon. W. D. BISHOP, *Commissioner of Patents.*



# CONTENTS OF VOLUME I.

---

	Page.
LETTER FROM THE COMMISSIONER OF PATENTS TO THE VICE-PRESIDENT OF THE UNITED STATES .....	III
LETTER FROM THE SECRETARY OF THE SMITHSONIAN INSTITUTION TO THE COMMISSIONER OF PATENTS.....	III
INTRODUCTION .....	VII
GENERAL LISTS OF STATIONS AND OBSERVERS.....	IX
REDUCTIONS OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1854—	
List of stations and observers.....	3
Barometer, monthly tables .....	7
Thermometer and cloudiness, monthly tables.....	31
Psychrometer, monthly tables.....	79
Winds, direction, monthly tables.....	103
Rain and snow, amount during the year.....	142
Barometer, summary for the year .....	146
Thermometer and cloudiness, summary for the year .....	147
Psychrometer, summary for the year.....	149
Winds, direction, summary for the year.....	150
Winds, mean velocity, summary for the year.....	152
REDUCTIONS OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1855—	
List of stations and observers.....	157
Barometer, monthly tables.....	161
Thermometer and cloudiness, monthly tables .....	185
Psychrometer, monthly tables.....	233
Winds, direction, monthly tables .....	257
Rain and snow, amount during the year.....	294
Barometer, summary for the year.....	297
Thermometer and cloudiness, summary for the year.....	299
Psychrometer, summary for the year.....	301
Winds, direction, summary for the year.....	303
Winds, mean velocity, summary for the year.....	305
REDUCTIONS OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1856—	
List of stations and observers.....	309
Barometer, monthly tables .....	315
Thermometer and cloudiness, monthly tables .....	350
Psychrometer, monthly tables.....	412
Winds, direction, monthly tables .....	436
Rain and snow, amount during the year.....	487
Barometer, summary for the year.....	491
Thermometer, summary for the year .....	493
Psychrometer, summary for the year.....	496
Mean cloudiness, summary for the year.....	498
Winds, direction, summary for the year .....	499
Winds, mean velocity, summary for the year.....	502



## REDUCTIONS OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1857—

List of stations and observers .....	507
Barometer, monthly tables .....	514
Thermometer and cloudiness, monthly tables.....	550
Psychrometer, monthly tables .....	623
Winds, direction, monthly tables .....	654
Rain and snow, amount during the year.....	714
Barometer, summary for the year .....	718
Thermometer and cloudiness, summary for the year .....	720
Psychrometer, summary for the year.....	723
Winds, direction, summary for the year.....	725

## REDUCTIONS OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1858—

List of stations and observers.....	731
Barometer, monthly tables.....	738
Thermometer and cloudiness, monthly tables.....	774
Psychrometer, monthly tables .....	849
Winds, direction, monthly tables .....	885
Rain and snow, amount during the year .....	946
Barometer, summary for the year.....	950
Thermometer and cloudiness, summary for the year .....	952
Psychrometer, summary for the year .....	956
Winds, direction, summary for the year .....	958

## REDUCTIONS OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1859—

List of stations and observers.....	965
Barometer, monthly tables .....	975
Thermometer and cloudiness, monthly tables.....	1012
Psychrometer, monthly tables .....	1090
Winds, direction, monthly tables .....	1126
Rain and snow, amount during the year.....	1203
Barometer, summary for the year.....	1208
Thermometer and cloudiness, summary for the year.....	1210
Psychrometer, summary for the year.....	1214
Winds, direction, summary for the year .....	1216



## INTRODUCTION.

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IN the "Programme of Organization of the Smithsonian Institution," presented to the Board of Regents by the Secretary, December 8, 1847, it was proposed, as a part of the general plan of operations, to establish a system of extended meteorological observations; and all necessary arrangements for securing the co-operation of observers having been completed during the following year, the system went into successful operation on the 1st of January, 1849. More than one hundred registers were received, on an average, monthly during that year, and the number has since increased to over five hundred. The material thus collected is carefully preserved in the archives of the Institution, and has afforded important aid to those who have had occasion to consult it on questions of meteorological science. In regard to many such questions, which depend for their solution on the comparison of simultaneous observations, a reference to the original records is indispensable, mere abstracts being of no value; and, for convenience of such reference, the registers of each month are substantially bound in a volume by themselves, thus forming twelve volumes in each year.

There are other questions, however, relating to the general laws of climate, the influence of local causes, &c., which can be determined more readily by condensed abstracts, and such have been prepared for the years 1854 to 1859, inclusive, and are embodied in Volume I of this work; the leading aim in their preparation being to present, in as succinct a form as possible, all the data afforded by the registers for the investigation of questions of the latter class, taking the observations as reported, and not presuming to sit in judgment upon their accuracy. For this the observers must be alone responsible. Great care has been taken to secure accuracy in the reductions; but it is not impossible that in so large an amount of work errors may have occurred, and if any should be detected by those into whose hands the tables may fall, a favor will be conferred upon the Institution by pointing them out, that a table of errata may be prepared.

The whole is comprised in a series of tables, numbered successively from one to fifty-five, inclusive, for each year.

No. 1 gives the names of the places where the observations were taken, the latitude and longitude of each from Greenwich, and its height above the sea; the number of months in the year through which the observations extend; and the name of the observer.

Nos. 2 to 13, inclusive, are tables of the *barometer* for the several months of the year; showing the mean, the maximum, and the minimum atmospheric pressure, with the day and hour on which the two latter occurred.

Nos. 14 to 25, inclusive, are, in like manner, tables of the *thermometer* (Fahrenheit) and face of the sky, and show the mean temperature of each of the hours of observation, and the mean of these means; the maximum and minimum temperatures, with their dates; the mean temperatures of the warmest and coldest days in the month, with their dates; and the mean cloudiness, in parts of 10.

Nos. 26 to 37, inclusive, show the mean amount of aqueous vapor in the atmosphere, for the several months, at each of the hours of observation, as measured by its equivalent weight in inches of mercury, and the mean and minimum ratio of the same to complete saturation, in parts of 100; also the maximum and minimum amounts of vapor, with the dates on which they were observed.

Nos. 38 to 49, inclusive, show the number of times that the winds, both at the surface of the earth and in the region of the clouds, blew from each of the four cardinal points of the compass and from the intervening quadrants during the several months of the year, and the number of calms. Tables have been prepared for the years 1854, '55, and '56, showing, in a manner similar to the above, the results for each of



the hours of observation; but being found too voluminous to be printed, they are preserved for reference in the archives of the Institution.

No. 50 shows the number of inches of rain and melted snow that fell at each place of observation in each month of the year, and the aggregate for the year. In cases where the depth of snow was not reduced to water, one-tenth of that depth has been assumed as its equivalent in water, and an interrogation mark affixed to the result.

No. 51 is a general summary of the observations on the barometer for the entire year; showing its mean, its maximum, and its minimum height, with the dates of the two latter, and the range for the year.

No. 52 is a corresponding summary of the thermometer and face of the sky; showing, besides the means, maxima, minima, and range, as above, the mean temperature for each of the hours of observation, and the dates and mean temperatures of the warmest and coldest days in the year.

Nos. 53 and 54 are summaries of the psychrometer and winds for the entire year, of the same form as the monthly tables of the same—(Nos. 26 to 37, inclusive, and Nos. 38 to 49, inclusive.)

No. 55 shows the mean velocity of the winds from the several points of the compass, estimated according to the following scale, adopted by the Institution and printed on the blanks that are distributed to the observers:

*Scale by which the force of wind is estimated in figures from 1 to 10.*

1. Very light breeze.....	2 miles per hour.
2. Gentle breeze.....	4 " "
3. Fresh breeze.....	12 " "
4. Strong wind.....	25 " "
5. High wind.....	35 " "
6. Gale.....	45 " "
7. Strong gale.....	60 " "
8. Violent gale.....	75 " "
9. Hurricane.....	90 " "
10. Most violent hurricane.....	100 " "

A more full discussion of the winds has been undertaken by Professor Coffin, and is reserved for a future publication.

The registers, as received from the observers, were sent to Professor Coffin, at Easton, Pennsylvania, and the reductions were made under his supervision.

The work has been carried through the press under the direction of Mr. Wm. Q. Force, of this Institution, who also prepared the General Lists of Stations and Observers, and reduced and incorporated into the tables such observations as were received after the reductions by Professor Coffin were completed.

The observations in detail for the periods of the occurrence of a number of extensive storms, mentioned in the letter to the Commissioner of Patents, form a part of the second volume of this publication.

JOSEPH HENRY,

*Secretary of the Smithsonian Institution.*



# ALPHABETICAL LIST OF STATIONS

FOR THE

## YEARS 1854 TO 1859.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
Acadia College, Nova Scotia.—(See Wolfville.)				
Acquidneset, R. I. ....	41 30 ?	71 40 ?	1856 .....	E. G. Arnold.
Adams Centre, N. Y. ....	43 48	75 52	1859 .....	C. D. Potter, M. D.
Aiken, S. C. ....	33 32	81 34	1854, '55, '56 .....	H. W. Ravenel.
Aiken, S. C. ....	33 32	81 34	1857, '58, '59 .....	John H. Cornish.
Alachua County, Fla.—(See Gainesville.)				
Albion, Ill. ....	38 24	88 11	1857 .....	Edgar P. Thompson.
Albion Mines, Nova Scotia .....	45 34½	62 42	1854 .....	Henry Poole.
Alexandria, Va. ....	38 48	77 01	1854, '55, '56, '57, '58 .....	Benjamin Hallowell.
Agricultural College, Mich.—(See Lansing.)				
Alligator, Fla. ....	30 12	82 37	1857, '58, '59 .....	Edward R. Ives.
All Saints, S. C. ....	33 40	79 17	1854, '55, '56, '57, '58, '59 ..	Rev. Alexander Glennie.
Altoona, Pa. ....	40 37	78 22	1859 .....	W. R. Boyers.
Amherst, Mass. ....	42 22	72 34	1854, '55, '56, '57, '58, '59 ..	Prof. E. S. Snell.
Angelica, N. Y. ....	42 15	78 01	1854, '55, '56, '57, '58 .....	Dr. E. M. Alba.
Annapolis, Md., (Naval Academy) .....	38 58	76 29	1855, '56 .....	A. Zumbrock, M. D.
Annapolis, Md. ....	38 58	76 29	1856, '57, '58, '59 .....	William R. Goodman.
Ann Arbor, Mich., (University of Michigan).	42 16	83 44	1854, '55, '56, '57 .....	Prof. A. Winchell.
Ann Arbor, Mich., (3¼ miles ESE. from Ann Arbor.)	42 16	83 30	1854, '55, '56 .....	Lum Woodruff.
Appleton, Wis., (Lawrence University) .....	44 10	88 35	1856, '57, '58, '59 .....	Prof. R. Z. Mason.
Arcola, Ohio.—(See Unionville)				
Arispe, Ill.—(See Tiskilwa.)				
Arkadelphia, Ark. ....	34 08	92 58	1859 .....	Dennis Barlow.
Ashville, N. C. ....	35 37	82 29	1857, '58 .....	W. W. McDowell.
Ashland, Va., (near Buffalo) .....	38 38	81 57	1854, '55, '56, '57, '58 .....	Prof. George R. Rossiter and Samuel Couch.
Ashville, Ala. ....	33 52	86 20	1857 .....	Thomas M. Barker.
Assumption, Paraguay, S. A. ....	25 16 S	57 45	1854 .....	E. A. Hopkins, U. S. Consul.
Athens, Ga. ....	33 58	83 30	1857, '58, '59 .....	Prof. John D. Easter.
Athens, Ill. ....	39 52	89 56	1854, '55, '56, '57, '58 .....	Joel Hall.
Atlanta, Ga. ....	33 43	84 18	1859 .....	J. G. Westmoreland, M. D.
Atsena Otie, Fla. ....	29 07	83 02	1854, '55, '56, '57, '58, '59 ..	Judge Augustus Steele.
Auburn, Ala. ....	32 37	85 34	1855, '56, '57, '58 .....	Prof. John Darby.
Auburn, Cal. ....	38 54	121 02	1859 .....	Robert Gordon.
Augusta, Ga. ....	33 28	81 54	1854, '55, '57 .....	William Haines.
Augusta, Ga. ....	33 28	81 54	1858, '59 .....	William H. Dougherty, M. D.
Augusta, Ill. ....	40 12	89 45	1854, '55, '56, '57, '58, '59 ..	S. B. Mead, M. D.
Augusta, Mo. ....	38 36	90 30	1859 .....	Conrad Mallinckrodt.
Aurora, Ill. ....	41 40	88 16	1857, '58, '59 .....	Andrew J. Babcock.
Aurora, Ind. ....	39 04	84 47	1859 .....	George Sutton.
Austin, Texas .....	30 20	97 46	1854, '55, '56, '57, '58, '59 ..	Dr. Samuel K. Jennings and J. Van Nostrand.
Austin, Texas .....	30 15	97 47	1857, '58, '59 .....	Swante Palm.
Avon, Ohio .....	41 27	82 04	1858, '59 .....	Rev. L. F. Ward.
Baldwin's Institute, Ohio.—(See Berea.)				
Baldwinsville, N. Y. ....	43 04	76 41	1854, '55, '56, '57, '58, '59 ..	John Bowman.
Ballardsville, Ky. ....	38 26	85 31	1854, '55, '56 .....	John Swain, M. D.
Baltimore, Md. ....	39 18	76 37	1857, '58, '59 .....	Prof. Alfred M. Mayer.
Barbacoos, New Granada, S. A. ....	8 30	79 00	1854 .....	E. L. Berthoud.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
Bardstown, Ky.....	37 52	85 18	1858, '59.....	John H. Lunemann.
Barnstable, Mass.—(See Wood's Hole.)				
Bastrop, Texas.....	30 65	97 22	1859.....	J. L. Cunningham.
Batavia, Ill.....	41 48	88 23	1854.....	Prof. Wm. Coffin.
Batavia, Ill.....	41 52	88 26	1858, '59.....	E. Capon.
Batavia, Ill.....	41 52	88 20	1857, '58, '59.....	Thompson Mead.
Battle Creek, Mich.....	42 20	85 10	1854, '55, '56, '57, '58, '59 ..	Dr. W. M. Campbell.
Bay City, Wis.....	46 33	91 00	1856, '57, '58, '59.....	Edwin Ellis, M. D.
Bayfield, Wis.....	46 18 ?	90 50 ?	1858, '59.....	J. Harvey Nourse.
Beaver Bay, Minn.....	47 12	91 19	1858, '59.....	Thomas Clarke.
Beaver Bay, Minn.....	47 11	91 25	1859.....	Henry Wieland.
Reaver Brook, N. Y.....	41 20 ?	74 50 ?	1854.....	C. S. Woodard.
Beaver Island, Mich.—(See St. James.)				
Bedford, Pa.....	40 01	78 30	1854, '55, '56, '57, '58.....	Samuel Brown.
Bedford, Pa.....	40 01	78 30	1859.....	Rev. Henry Heckerman.
Belair, Fla.....	30 24	84 20	1856, '57, '58, '59.....	Benjamin F. Whitner.
Belfast, Me.....	44 22	69 06	1859.....	J. Emerson Brackett.
Belle Centre, Ohio.—(See Northwood.)				
Bellefontaine, Wis.....	43 40	89 15	1854.....	Thomas Gay.
Bellefontaine, Ohio.....	40 21	83 40	1855, '56, '57, '58, '59.....	Joseph Shaw.
Bellefonte, Pa.....	40 50	77 49	1858, '59.....	J. Ilgin Burrell.
Belle Prairie, Minn.....	46 06 ?	94 20	1856.....	Rev. Benjamin F. Odell.
Bellevue, Iowa.....	42 15	90 25	1856, '57, '58, '59.....	John C. Fory.
Bellevue, Neb.....	41 08	95 50	1857.....	Henry M. Burt.
Bellevue, Neb.....	41 08	95 50	1857, '58, '59.....	William Hamilton.
Bellport, N. Y.....	40 44	72 54	1857, '58, '59.....	Henry William Titus.
Beloit, Wis.....	42 30	89 04	1854, '55, '56, '57, '58, '59 ..	Prof. Wm. Porter and others.
Bendersville, Pa.....	40 00	77 15	1859.....	Franklin W. Cook.
Bentonville, Ark.....	36 23	94 09	1859.....	P. Graham.
Berea, Ohio.....			1855.....	Prof. G. M. Barber.
Berryville, Va.....	39 09	78 00	1856, '57.....	Miss Ellen Kownslar.
Berryville, Va.....	39 11	78 09	1858.....	Dr. R. Kownslar.
Berwick, Pa.....	41 05	76 15	1856, '57, '58, '59.....	John Eggert.
Bethany, Mo.....	40 16	94 02	1859.....	D. J. Heaston.
Beverly, N. Y.....	41 22	74 00	1854, '55, '56, '57, '58, '59 ..	Thomas B. Arden.
Biddeford, Me.....	43 29	70 27	1854.....	Jas. G. Garland and F. A. Small.
Black River Plantation, La.....	31 30	91 46	1856, '57, '58, '59.....	Andrew R. Kilpatrick, M. D.
Black River Falls Iron Works, Wis.—(See New Danemora.)				
Blackwell's Island, N. Y.....	40 45	73 57	1855, '56, '57.....	Wm. W. Sanger, M. D.
Bladensburg, Md.....	38 57	76 58	1854, '55, '56, '57, '58, '59 ..	Benjamin O. Lowndes.
Bloomfield, N. J.....	40 49	74 11	1854, '55, '56, '57, '58.....	Robert L. Cook.
Bloomington, Ill.....	40 27	89 08	1859.....	Jesse Allison.
Blue Hill, Me.—(See Oldtown.)				
Bogota, New Granada.....	4 36	74 14	1857.....	Dr. E. Uricoschea.
Bolivar, Mo.....	37 37	93 20	1859.....	W. J. Van Kirk.
Bonham, Texas.....	33 40	96 13	1859.....	Prof. Solomon Sias.
Boonville, Mo.....	38 55	92 40	1859.....	Norris Sutherland.
Border Plains, Iowa.....	42 36	94 05	1856, '57, '58, '59.....	William K. Goss.
Boston, Mass.....	42 22	71 03	1855, '56.....	
Boston, Mass.....	42 22	71 03	1857.....	R. T. Paine.
Boston, Mass.....	42 22	71 03	1857.....	E. L. Smith.
Boston, Mass.....	42 20	71 03	1859.....	Edward L. Adams.
Boston, Texas.....	33 25	94 24	1859.....	G. Freeze.
Bowling Green, Ky.....	37 00	86 25	1855.....	F. C. Herrick.
Bowling Green, Ohio.....	41 27	83 45	1857, '58, '59.....	Dr. William R. Peck.
Bradford, Vt.....	44 11 ?	72 25 ?	1858.....	L. W. Bliss.
Brandon, Vt.....	43 45	73 00	1854, '55, '56, '57, '58, '59 ..	David Buckland.
Brecksville, Ohio.....	41 23	81 40	1859.....	Rev. Spencer L. Hillier.
Bridgewater, Mass.....	42 00	71 00	1856, '57, '58, '59.....	Bridgewater Normal School.
Brighton, Ill.....	39 00	90 13	1856, '57, '58, '59.....	Rev. William V. Eldredge.
Brooklyn, Mich.....	42 06	83 36	1854.....	Dr. M. K. Taylor.
Brookville, Pa.....	41 12	79 08	1854.....	D. S. Dearing.
Brown University, R. I.—(See Providence.)				
Brown Cottage, N. Y.—(See Eden.)				
Brownsville, Ark.....	34 50	92 00	1859.....	B. F. Coulter.
Brownsville, Neb.....	40 24	95 33	1858, '59.....	Charles B. Smith.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
Bruce, Ill. ....	41 15?	88 45?	1859.....	Dr. George O. Smith.
Buchanan, Minn. ....	47 33	92 00	1857, '58 .....	Stephen Walsh.
Buck Horn, Ark. ....			1859.....	Armistead Younger.
Buffalo, N. Y. ....	42 50	79 33	1854.....	W. D. Allen.
Buffalo, N. Y. ....	42 50	79 33	1854.....	Dr. Sanford B. Hunt.
Buffalo, N. Y. ....	42 50	78 53	1854, '55, '56, '57 .....	Elias O. Salisbury.
Buffalo, N. Y. ....	42 50	78 56	1858, '59.....	William Ives.
Buffalo, N. Y. ....	42 45	79 05	1859.....	Godfrey Zimmerman.
Buffalo, Va.—(See Ashland.)				
Buffalo, Va. ....	38 40	82 11	1858.....	W. R. Boyers.
Burkeville, Texas. ....	31 00	93 34	1859.....	Dr. N. P. West.
Burlingame, Kansas. ....	38 35	96 45	1858, '59.....	Edmund and Lucian Fish.
Burlington, Iowa. ....	40 48	91 12	1859.....	John M. Corse.
Burlington, Minn. ....	47 01	91 30	1857, '58, '59.....	A. A. Hibberd.
Burlington, N. J. ....	40 00	75 12	1854, '55, '56, '57, '58 .....	Rev. Adolph Frost and Dr. E. R. Schmidt.
Burlington, Vt., (University of Vermont) ..	44 29	73 11	1854, '55, '56, '57, '58, '59 ..	Prof. Zadock Thompson and McK. Petty.
Burlington, Wis. ....	42 39	88 04	1859.....	D. Mathews.
Bustleton, Pa. ....	40 05	75 01	1854.....	J. C. Martindale.
Byberry, Pa. ....	40 06	74 58	1854, '57, '58.....	John Comly.
Cahaba, Ala. ....	32 19	87 15	1859.....	Matthew Troy, M. D.
Camanche, Iowa. ....	41 48	90 45	1856, '57, '58 .....	Nathan H. Parker.
Cambridge, Mass., (Harvard University) ..	42 24	71 07	1856, '57, '58, '59 .....	Prof. W. C. Bond.
Camden, Ark. ....	33 32	92 48	1855.....	J. J. McElrath.
Camden, S. C. ....	34 17	80 33	1854, '55, '56, '57.....	Thornton Carpenter and Dr. J. A. Young.
Cannelton, Ind. ....	37 58	86 40	1856, '57, '58, ' .....	Hamilton Smith, jr.
Cannonsburg, Pa. ....	40 17	80 10	1856, '57, '58, '59 .....	Prof. William Smith, D. D.
Canton, Mass. ....	42 12	71 08	1857, '58.....	D. H. Ellis.
Canton, N. Y. ....	44 38	75 15	1854, '55, '56, '57 .....	E. W. Johnson.
Cape Girardeau, Mo., (St. Vincent's College).	37 20	89 34	1856, '57, '58 .....	Rev. James Knoud, Missouri Geological Survey.
Capon Bridge, Va. ....	39 16	78 29	1857.....	John J. T. Offutt, M. D.
Caracas, Venezuela, S. A. ....	10 31S	67 05	1858.....	Augustus Fendler.
Carbon Cliff, Ill. ....	41 31	90 29	1859.....	Mrs. William S. Thomas.
Carlisle, Pa., (Dickinson College) ..	40 12	77 11	1855, '56, '57, '58, '59 .....	Prof. W. C. Wilson.
Carlowville, Ala. ....	32 10	87 15	1856, '57, '58, '59 .....	Dr. H. L. Alison.
Carmel, Maine ....	44 47	69 00	1854, '55, '56, '57 .....	John J. Bell.
Carrollton, Mo. ....	39 21	93 27	1859.....	John Campbell and S. S. Hof-faker.
Carthage, Ill. ....	40 23	91 17	1856, '57, '58, '59 .....	Samuel Jacob Wallace and Mrs. E. M. A. Bell.
Cascade Valley, Wis. ....	44 30	92 00	1856.....	Samuel R. Siebert.
Cass Lake Mission, Minn.—(See Lake Win-nibigoshish.)				
Cassville, Mo. ....	36 41	93 56	1859.....	M. L. Wyrick.
Castleton, Vt. ....	43 34	73 09	1854, '55 .....	D. Underwood.
Catharina Sophia, Surinam, S. A. ....	5 48	56 47	1856, '57, '58, '59 .....	C. T. Hering.
Cayuga, Kansas ....	39 25?	94 58?	1858.....	William H. Gilman.
Cazenovia, N. Y. ....	42 55	75 46	1856, '57, '58, '59 .....	Aaron White.
Cedar Keys, Fla.—(See Atsena Otie.)				
Celestville, Kan.—(See Spring Hill.)				
Centre Signal Station, Bermuda, W. I. ....	?	?	1858.....	James Crawford.
Centre Signal Station, Bermuda. ....	32 20?	64 45?	1859.....	J. Foster.
Ceres, Pa. ....	42 00	78 25	1854.....	Dr. R. P. Stevens.
Cercasco, Wis. ....	43 50	88 57	1854, '55 .....	Miss Mary E. Baker.
Chambersburg, Pa. ....	39 58	77 45	1858, '59.....	William Heyser.
Chanarcillo, Chili, S. A. ....	27 28S	70 28	1858, '59.....	Edward B. Dorsey.
Chapel Hill, N. C., (University of North Carolina) ..	35 54	79 17	1854, '55, '56, '57, '58, '59 ..	Prof. James Phillips, D. D.
Charleston, S. C. ....	32 46	80 00	1855, '56, '57, '58, '59 .....	John L. Dawson, M. D., and Joseph Johnson, M. D.
Charlotte, N. Y. ....	43 14	77 51	1859.....	Andrew Mulligan, under di-rection of Capt. Meade, Su-pintendent Lake Survey.
Charlottesville, Va.—(See Montview.)				



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
Chatfield, Minn .....	43 50	92 25	1859 .....	T. F. Thickstun.
Chatham, N. Y .....	42 26	73 30	1854 .....	C. T. Chase.
Chegoiginan Bay, Wis.—(See Bay City.)				
Chestertown, Md .....	39 14	76 02	1855, '56, '57, '58, '59 .....	Washington College.
Cheviot, Ohio .....	39 07	84 34	1855, '56, '57 .....	Ebenezer Hannaford.
Chicago, Ill. ....	41 53	87 41	1856, '57 .....	G. D. Hiscox.
Chicago, Ill. ....	41 53	87 41	1859 .....	Samuel Brooks.
Chromedale, Pa .....	39 55	75 25	1854, '55, '56, '57, '58 .....	Joseph Edwards.
Chromedale, Pa .....	39 55	75 25	1859 .....	John H. Smedley.
Cincinnati, Ohio, (Woodward High School).	39 06	84 27	1855 .....	Francis W. Hurtt and George W. Harper.
Cincinnati, Ohio, (Woodward High School).	39 06	84 27	1856, '57, '58, '59 .....	George W. Harper.
Cincinnati, Ohio .....	39 06	84 27	1857, '58 .....	Francis W. Hurtt.
Cincinnati, Ohio .....	39 06	84 25	1855, '56 .....	John Lea.
Cincinnati, Ohio .....	39 06	84 28	1859 .....	R. C. and J. H. Phillips.
Cincinnati, Ohio .....	39 06	84 15	1855, '56, '57 .....	Reporter for Bos't'n Telegraph.
Cinnaminson, N. J. ....	40 01	75 03	1859 .....	William Perry.
Claremont, N. H .....	43 29	72 22	1857, '58 .....	F. N. Freeman.
Claremont, N. H .....	43 29	72 22	1859 .....	Arthur Chase.
Clarksville, Ga. ....	34 35	83 31	1859 .....	Jarvis Van Buren.
Cleveland, (near) Ohio .....	41 30 ?	72 22 ?	1859 .....	Edward Colbrunn.
Clarksville, Ga .....	34 41		1859 .....	Col. John R. Stanford.
Clarksville, (near) Tenn.—(See Glenwood.)				
Cleveland, Ohio .....	41 30	81 40	1855, '56, '57, '58, '59 .....	Gustavus A. Hyde.
Clinton, Iowa .....	41 54	90 30	1856 .....	Nathan H. Parker.
Clinton, N. Y .....	43 00	75 20	1856 .....	Prof. O. Root.
Clinton, N. Y .....	43 00	75 20	1857, '58, '59 .....	Dr. H. M. Paine.
Clyde, N. Y .....	43 10	77 10	1859 .....	Matthew Mackie.
Cobham Depot, Va —(See Rougemont)				
College Hill, Ohio, (Farmer's College) .....	39 19 ?	84 25 ?	1854, '56, '57, '58, '59 .....	Prof. R. S. Bosworth and Prof. J. H. Wilson.
College Hill, Ohio .....	39 19	84 25	1859 .....	John W. Hammitt.
Collingwood, Ohio .....	41 49	83 34	1856, '57, '58, '59 .....	Henry Bennett and Miss Sarah E. Bennett.
Colonia Tovar, Venezuela .....	10 26	67 20	1854, '56 .....	Augustus Fendler.
Columbia, Ct .....	41 42	72 16	1856, '57, '58, '59 .....	William H. Yeomans.
Columbia, S. C .....	33 57	81 07	1854 .....	
Columbia, S. C .....	33 59	80 48	1856, '58, '59 .....	Superintend't Arsenal Academy.
Columbia, S. C .....	33 59	80 48	1859 .....	E. H. Barton, M. D.
Columbus, Miss .....	33 30	88 29	1855, '56, '57, '58, '59 .....	James S. Lull.
Columbus, Texas .....	29 43	96 36	1859 .....	W. G. De Graeffenried.
Concord, N. H .....	43 12	71 29	1854, '55, '56, '57, '58 .....	Dr. Wm. Prescott and Henry E. Sawyer.
Concord, N. H .....	43 12	71 29	1858, '59 .....	E. P. Colby.
Concord, N. Y.—(See West Concord.)				
Cooper, Mich .....	42 40	85 31	1854, '55, '56, '57, '58 .....	Mrs. Octavia C. Walker.
Copper Falls Mines, Mich .....	47 25	88 16	1856, '57 .....	Charles S. Whittlesey.
Cordova, Mexico .....	19 26	97 51	1856, '59 .....	J. A. Hieto.
Cornell College, Iowa.—(See Mount Vernon.)				
Cornish, Me .....	43 40	70 44	1856, '57, '58, '59 .....	G. W. Guptill.
Cornish, Me .....	43 40	70 44	1857, '58, '59 .....	Silas West.
Corunna, Mich .....	42 57	84 06	1859 .....	Heber Crane.
Council City, Kansas .....	38 42	95 50	1857 .....	Edmund Fish.
Covert, N. Y.—(See Lodi.)				
Covington, Ga .....	33 34	84 00	1859 .....	Benjamin F. Camp.
Crack Whip, Va .....	39 30	78 31	1856, '57, '59 .....	D. H. Ellis.
Craftsbury, Vt .....	44 40	72 29	1854 .....	Charles A. J. Marsh.
Craftsbury, Vt .....	44 40	72 29	1855, '56, '57, '58, '59 .....	James A. Paddock.
Crescent City, Cal .....	41 45	124 11	1859 .....	Robert B. Randall.
Crichton's Store, Va .....	36 40	77 46	1854, '55, '56, '57, '58, '59 ..	R. F. Astrop.
Cross Creek, Va .....	40 19 ?	80 31 ?	1858, '59 .....	B. D. Sanders.
Cross Roads, Texas .....	30 27	97 26	1859 .....	F. S. Wade
Culloden, Ga .....	32 51	84 13	1854 .....	Prof. John Darby.
Cumberland University, Tenn.—(See Lebanon.)				
Cunningham's Island, Ohio.—(See Kelley Island.)				



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
Dallas, Texas .....	32 40	96 45	1859 .....	John M. Crockett.
Dallasburg, Ohio .....	39 17	84 07	1859 .....	F. G. Hill.
Danvers, Mass. ....	42 35	71 03	1858, '59 .....	A. W. Mack.
Danville, Ky. ....	37 40	84 30	1854, '55, '56, '57, '58, '59 ..	Prof. O. Beatty.
Dansville, N. Y. ....	42 34	77 46	1859 .....	John J. Brown.
Dartmouth College, N. H.—(See Hanover.)				
Davenport, Iowa .....	41 30	90 37	1859 .....	A. J. Finley.
Davidson College, N. C. ....	35 30	80 54	1857, '58, '59 .....	Prof. W. C. Kerr.
Dayton, Ohio .....	39 44	84 10	1855 .....	
Dayton, Ohio .....			1856 .....	Cooper Female Seminary.
Dayton, Ohio .....	39 11	84 11	1856 .....	James C. Fisher, M. D.
Dayton, Ohio .....	39 44	84 10	1858 .....	Lewis Groneweg.
Deaf and Dumb Institute, N. Y.—(See New York city.)				
Deer Creek, Neb. ....	42 49	106 00 ?	1859 .....	Major Thomas S. Twiss.
Delafield, Wis. ....	43 10	88 20	1859 .....	Prof. Ambrose W. Clarke.
Delaware College, Del.—(See Newark.)				
Denver City, Kansas .....	39 35	105 18	1859 .....	D. C. Collier.
Detroit, Mich. ....	42 24	83 00	1854, '55, '56 .....	Rev. George Duffield.
Detroit, Mich., (Marine Hospital) .....	42 24	82 58	1858, '59 .....	Zena Pitcher, M.D., (by L. S. Horton.)
Dexter, Maine .....	44 55	69 32	1858, '59 .....	Benjamin F. Wilbur.
Diamond Grove, Va.—(See Crichton's Store.)				
Dickinson College, Penn.—(See Carlisle.)				
Dixon, Ill. ....	41 50	89 36	1859 .....	J. T. Little.
Downieville, Cal. ....	39 27		1859 .....	T. B. Kibbe, M. D.
Dry Ridge, Mo.—(See Hannibal.)				
Dubuque, Iowa .....	42 30	90 52	1854, '55, '56, '57, '58, '59 ..	Asa Horr, M. D.
Dudley, Ohio .....	40 35	83 35	1859 .....	Hannah E. Hampton.
Dundee, Mo. ....	38 30	91 10	1859 .....	S. S. Bailey.
Eagle River, Mich. ....	47 26	88 02	1855 .....	
Eagle River, Mich. ....	47 26	88 02	1856 .....	Mrs. Mary A. Goff.
East Exeter, Maine .....	45 00	69 00	1858 .....	Stephen Gilman.
East Fairfield, Ohio .....	40 47	80 44	1859 .....	Smith B. McMillan.
East Greenwich, R. I.—(See Aquidnet.)				
East Montpelier, Vt. ....	44 18	72 31	1855 .....	B. J. Wheeler.
East Tennessee University, Tenn.—(See Knoxville.)				
Easton, Pa., (Lafayette College.) .....	40 43	75 16	1855, '56, '57, '58, '59 .....	S. J. Coffin and G. R. Houghton
East Smithfield, Pa. ....	41 56	76 37	1859 .....	James E. Tracy.
Eden, N. Y. ....	42 38	79 07	1856, '57, '58, '59 .....	Stephen Landon and Anna S. Landon.
Edgar Co., (near S. W. corner,) Ill. ....	39 30	88 36 ?	1858 .....	J. W. Brown.
Edgefield, S. C. ....	33 45	81 48	1857 .....	
Edgington, Ill. ....	41 25	90 46	1857, '58, '59 .....	Dr. E. H. Bowman.
Edinburg, Ohio .....	41 20	81 00	1857, '58 .....	Smith Sanford.
Edisto Island, S. C. ....	32 34	80 18	1856 .....	Edward A. Fuller.
Edisto Island, S. C. ....	32 34	80 18	1857 .....	Dr. E. N. Fuller.
Elgin, Ill. ....	42 00	88 15	1858, '59 .....	J. B. Newcomb.
Elkhorn, Neb. ....	41 22	96 12	1858, '59 .....	Miss Anna M. J. Bowen.
Elk Run Township, Ohio.—(See East Fairfield.)				
Elk Township, Iowa.—(See Poultney.)				
Elliot Academy, Miss.—(See Port Gibson.)				
Elmwood, Mass.—(See Richmond.)				
Emerson, Mo. ....	39 56	91 40	1859 .....	Wm. B. Kizer.
Evanstown, Ill. ....	42 00	87 51	1858 .....	H. G. Meacham.
Evansville, Ind. ....	38 08	87 29	1857, '58 .....	John F. Crisp.
Exeter, N. H. ....	42 58	70 55	1854, '55 .....	Rev. L. W. Leonard.
Factory Mills, Ga. ....	33 40	84 46	1857 .....	F. T. Simpson.
Fairfax, Vt. ....	44 39	72 58	1854 .....	Prof. S. H. Peabody.
Fairfield, Iowa .....	41 01	91 57	1855, '56, '57, '58, '59 .....	Dr. J. M. Shaffer.
Fairmount Institute, N. Y.—(See Morrisania.)				
Fairfield, Iowa .....	41 01	91 57	1859 .....	Miss Sue McBeth.
Falconer, N. Y. ....	42 05	79 10	1854 .....	Lawrence A. Langdon.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
Falls of St. Croix, Wis.—(See St. Croix.)	0 1	0 1		
Falmouth, Mass.—(See Wood's Hole.)				
Falmouth, Va.....	38 15	77 34	1858, '59.....	Abram Van Doren.
Farmer, N. Y.—(See Lodi.)				
Farmer's College, Ohio.—(See College Hill.)				
Farmington, Mo.....	37 48	90 24	1859.....	Nathan P. Force.
False River, La.—(See Point Coupee.)				
Fayette Village, Iowa.....	42 50	91 50	1859.....	John M. McKenzie.
Fishkill, N. Y.....	41 34	74 18	1854, '55.....	William Harkness.
Fishkill Landing, N. Y.....	41 34	74 18	1856, '57, '58, '59.....	William H. Denning.
Flatbush, N. Y.....	40 37	74 01	1856, '57, '58, '59.....	Rev. R. D. Van Kleek.
Fleming, Pa.....	40 55	77 53	1856, '57, '58, '59.....	Samuel Brugger.
Flint, Mich.....	42 58	83 39	1854, '55.....	Drs. D. Clark and M. Miles.
Flippen's Barrens, Ark.—(See Yellville.)				
Florida, Mass.....	42 42	73 10	1857, '58, '59.....	L. F. Whitcomb.
Flushing, N. Y.....	40 46	73 52	1855.....	John Evans.
Fontenelle, Neb.....	41 31	96 45	1859.....	St. John's College.
Fordham, N. Y.....	40 54	74 03	1856, '57, '59, '59.....	A. C. Smith.
Forest City, Minn.....	45 45	96 00	1858, '59.....	Daniel Sheldon.
Forestville, Iowa.....	42 40	91 50	1859.....	Lieut. C. N. Turnbull, top.
Forestville, Mich.....	43 40	82 34	1858.....	engs., under direction of Capt. Meade, Superintend- ent Lake Survey.
Fork Union, Va.....	37 40	78 21	1859.....	Silas B. Jones.
Fort Edward, N. Y.....	43 13	73 42	1857, '58, '59.....	Prof. Solomon Sias.
Fort Gibson, Indian Territory.....	35 47	95 10	1857.....	Lieut. Charles N. Turnbull,
Fort Gratiot, Mich.....	42 60	82 25	1858, '59.....	top. engs., & Heber Squier, under direction of Captain Meade, Sup't Lake Survey.
Fort Madison, Iowa.....	40 37	91 28	1854, '55, '56, '57, '58, '59 ..	Daniel McCready.
Fort Niagara, N. Y.....	43 18	79 08	1859.....	L. Leffman, under direction of Capt. Meade, Superin- tendent Lake Survey.
Fort Pierre, Neb.....	44 23	100 11	1854.....	F. Behman.
Fort Rae, B. A., on Great Slave Lake.....			1859.....	Lawrence Clarke, jr.
Fort Riley, Kansas.....	39 02	97 00	1859.....	Rev. David Clarkson.
Fort Simpson, British America.....	61 51	121 25	1858, '59.....	Bernard R. Ross.
Fort Snyder, Oregon.....	42 00	?	1858.....	James A. Snyder.
Fort Thompson, Oregon.....	42 58	108 56	1857, '58.....	W. H. Wagner.
Fort Union, Neb.....	48 15	103 15	1854.....	E. T. Denig.
Fort Union, Dakota.....	48 00	104 00	1857, '58.....	F. G. Ritter.
Fort Vancouver, Oregon.....	45 40	122 30	1859.....	Dr. Barnes.
Francetown, N. H.....	42 59	71 45	1857, '58.....	A. H. Bixby.
Francetown, N. H.....	43 00	71 46	1857.....	Dr. Martin N. Root.
Franklin, Iowa.....	42 45	92 11	1856, '57, '58, '59.....	Dexter Beal.
Franklin, Ohio.....	39 30	84 00	1856, '57.....	W. L. Schenck, M. D.
Frederick, Md.....	39 24	77 18	1854, '55, '56, '57, '58, '59 ..	Henry E. Hanshaw.
Fredericksburg, Va.....	38 20	77 28	1859.....	Charles H. Robey.
Freedom, Ohio.....	41 13	81 08	1859.....	H. M. Davidson.
Freedom, Me.....	44 30	69 19	1859.....	E. A. Fuller.
Freehold, N. J.....	40 15	74 21	1857, '58, '59.....	O. R. Willis.
Freeport, Pa.....	40 30	79 41	1854.....	A. D. Weir.
Fremont Centre, Ill.....	42 18	88 06	1857, '58.....	Isaac H. Smith.
Friendship, Tenn.....	35 50	89 25	1855.....	Dr. Robert Thadd. Carver.
Fruit Farm, Va.—(See The Plains.)				
Fryeburg, Me.....	44 03	71 00	1854, '55, '56.....	Dr. George B. Barrows.
Gainesville, Ark.....	36 12	90 35	1859.....	James F. Davies.
Gainesville, Fla.....	29 35	82 26	1856, '57, '58, '59.....	James B. Bailey.
Galena, Ill.....	42 25	90 33	1859.....	Emil Haeuser.
Gallipolis, Ohio.....	39 00	82 01	1854, '55, '56.....	Dr. G. W. Livesay.
Gallipolis, Ohio.....	39 00	82 01	1857, '58.....	A. P. Rodgers.
Gardiner, Me.....	44 11	69 46	1855, '56, '57, '58, '59.....	R. H. Gardiner.
Garlandville, Miss.....	32 23	89 20	1854, '55.....	Rev. E. S. Robinson.
Garysville, Va.....	37 18	77 16	1856.....	Dr. T. Francis Beckwith.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
Genito, or Genito Mills, Va.—(See Crich-ton's Store )	° ' ° '	° ' ° '		
Gaston, N. C. ....	36 32	77 45	1856, '57, '58, '59 .....	Dr. George F. Moore.
Geneva, N. Y. ....	42 53	77 02	1856 .....	Prof. W. D. Wilson.
Geneva, N. Y. ....	42 53	77 02	1859 .....	Job Elletson.
Geneva Hall, Ohio.—(See Northwood.)				
Georgetown, Ct. ....	41 15	73 25	1856, '57 .....	Aaron B. Hull.
Georgetown, Del. ....	38 43	75 22	1857, '58 .....	Dr. D. W. Mauld.
Georgetown, D. C. ....	38 55	77 05	1859 .....	Rev. C. B. MacKee.
Germantown, N. Y. ....	42 08	73 58	1859 .....	William Tompkins.
Germantown, Ohio .....	39 30	84 20	1854, '55, '56 .....	Lewis Groneweg.
Germantown, Ohio .....	39 39	84 11	1856, '57 .....	J. S. Binkerd.
Germantown, Pa. ....	40 03	75 10	1859 .....	Thos. Meehan and S. Ebert.
Gettysburg, Pa. ....	39 49	77 15	1854, '55, '56, '57, '58, '59 ..	Prof. M. Jacobs.
Gilbert's Trading Post, Neb., six miles east from summit of South Pass .....	42 28	108 40	1858, '59 .....	Charles H. Miller.
Gilmer, Texas .....	32 46	94 48	1859 .....	J. M. Glasco.
Glenwood, Tenn. ....	36 28	87 13	1854, '55, '56, '57, '58, '59 ..	Prof. William M. Stewart.
Glenwood Cottage, Tenn.—(See Glenwood )				
Goldsborough, N. C., (Wayne Institute and Normal College) .....	35 20	77 51	1856, '57, '58 .....	Rev. Daniel Morrelle.
Goliad, Texas .....	28 30	97 15	1857, '58 .....	John C. Brightman.
Gonzales, Texas .....	29 28	97 39	1859 .....	M. H. Allis.
Gouverneur, N. Y. ....	44 25	75 35	1854, '55 .....	Dr. P. O. Williams.
Grand Haven, Mich. ....	43 01	86 11	1859 .....	Heber Squier, under direction of Captain Meade, Superintendent Lake Survey.
Grand Rapids, Mich. ....	43 00	86 00	1854, '55, '56, '57, '58 .....	Alfred O. Currier.
Grand Rapids, Mich. ....	43 00	86 00	1856, '57, '58, '59 .....	L. H. Streng.
Grand Traverse, Mich. ....	44 56	85 30	1854 .....	H. R. Schellerly.
Granville, Ill. ....	41 14	89 21	1857 .....	J. L. Jenkins.
Granville, Ohio .....	40 03	82 34	1854, '55, '56, '57 .....	Prof. S. N. Sanford.
Great Falls, N. H. ....	43 17	70 52	1854, '55, '56, '57 .....	Henry E. Sawyer.
Great Salt Lake City, Utah .....	40 45	112 10	1857 .....	H. E. Phelps.
Great Salt Lake City, Utah .....	40 45	111 26	1858, '59 .....	W. W. Phelps.
Great Valley, N. Y. ....	42 12	78 45	1859 .....	Kathalo Kelsey.
Green Bay, Wis. ....	44 30	88 00	1858, '59 .....	D. Underwood.
Greencastle, Ind. ....	39 39	86 46	1854 .....	Prof. Joseph Tingley.
Greencastle, Ind. ....	39 39	86 46	1859 .....	William H. Larrabee.
Greene Springs, Ala. ....	32 50	89 46	1854, '55, '56, '57, '58, '59 ..	Prof. Henry Tutwiler.
Greenfield, Mo. ....	37 24	93 48	1859 .....	S. B. Bowles, M. D.
Green Mount, Ind.—(See Richmond, Haines.)				
Green Plains, N. C.—(See Gaston.)				
Greensborough, Ala. ....	32 40	87 40	1856, '57, '58, '59 .....	Robert B. Waller.
Greenville, Mo. ....	37 07	90 30	1859 .....	O. D. Dalton.
Greenville, Tenn.—(See Walnut Grove.)				
Greenville, Texas .....	33 10	97 22	1859 .....	R. Dejernett.
Greenwood, Dakota Ter .....	42 52	98 24	1859 .....	F. Norvell.
Grenada, Miss. ....	33 46	89 53	1859 .....	Albert Moore.
Gautemala, Central America .....	14 37	30 30	1857, '58, '59 .....	Antonio Canudas.
Halifax, Nova Scotia .....	44 39	63 36	1854 .....	Meteorological Papers, British Board of Trade.
Halifax, Nova Scotia .....	44 39	63 37	1859 .....	R. J. Nelson.
Hamilton, Canada .....	43 15	79 57	1854, '55, '57, '58, '59 .....	Dr. William Craigie.
Hamline University, Minn.—(See Red Wing )				
Hannibal, Mo. ....	39 44	91 23	1854, '55 .....	O. H. P. Lear.
Hannibal, Mo. ....	39 45	91 28	1856 .....	Edward Duffield, M. D.
Hanover, N. H., (Dartmouth College) .....	43 42	72 17	1854 .....	Prof. Ira Young and Albert A. Young.
Hardinsburg, Ky., (Mt. Alba College) .....	37 45	86 24	1859 .....	Mrs. Mary A. Waller and J. C. Barbage.
Harrisburg, Pa. ....	40 16	76 50	1854, '55, '56, '57, '58, '59 ..	Dr. John Heisely.
Harrisburg, Pa. ....	40 16	76 55	1857, '58 .....	W. O. Hickok.
Harrisonville, Mo. ....	38 36	94 17	1859 .....	John Christian.
Hartland, Me. ....	44 51	69 30	1859 .....	E. E. Brown and S. W. Hall.
Hartland, Me. ....	44 51	69 30	1859 .....	Rev. H. B. Marshall and L. S. Strickland.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
Hartwood, Va.—(See Falmouth.)	° ' ° '			
Harvard University, Mass.—(See Cambridge.)				
Havana, Ala.—(See Greene Springs.)				
Havana, N. Y.	42 20	76 54	1859	E. C. Frost.
Hazlewood, Minn.	45 00	95 30	1854, '55, '56, '57, '58, '59	Rev. S. B. Riggs.
Helena, Texas.	29 00	97 56	1857	John C. Brightman.
Henrietta, N. Y.	43 06	77 51	1859	A. S. Wadsworth.
Hermann, Mo.	38 40	91 27	1859	Philip Weber.
Hernando, Miss.	36 48	89 55	1859	William M. Johnston, M. D.
Hibernia, Fla.	30 15	81 30	1857, '58	F. L. Batchelder.
Hill Grove, Va.—(See Fork Union.)				
Hillsborough, Ga.	33 13	83 45	1857, '58	Eli S. Glover.
Hillsborough, Ill.	39 12	89 26	1858	John S. Titcomb.
Hillsborough, Ohio	39 00		1859	J. W. Gamble.
Hillsborough, Ohio			1857	C. C. Janes.
Hillsborough, Ohio	39 13	83 30	1854, '55, '56, '57, '58, '59	Joseph McD. Mathews, D. D.
Hiram, Ohio	41 20	81 15	1855	Rev. Spencer L. Hillier.
Hiram, Ohio	41 20	81 15	1856, '57, '58, '59	S. M. Luther.
Hocking Port, Ohio	39 18	81 41	1859	John Rhodes, M. D.
Holliday's Cove, Va.	40 22?	80 31?	1858	B. D. Sanders.
Holland, Mich.	42 45	86 11	1856	L. H. Streng.
Homer, N. Y.	42 38	76 11	1856	E. G. Reed.
Honcut Creek, Cal.—(See Union Rancho.)				
Hornersville, Mo.	36 03	90 00	1859	W. H. Horner.
Hopewell, N. Y.—(See Wilson.)				
Horta, Fayal, Azores.	38 30	28 42	1856, '57	S. W. Dabney.
Horton, Nova Scotia —(See Wolfville.)				
Houseville, N. Y.	43 40	75 32	1854, '56, '57, '58, '59	Walter D. Yale.
Hudson, Ohio, (Western Reserve College)	41 15	81 24	1858, '59	Prof. Charles A. Young and E. W. Childs.
Huntersville, Va.	39 30	80 31	1854, '56	William Skeen.
Huntsville, Texas.	30 41	95 29	1854	
Huntsville, Texas.			1858, '59	T. Gibbs.
Huron, Ohio	41 25	82 40	1854	Edmund W. West.
Iberia, Ohio	40 46	82 51	1859	S. T. Boyd.
Ilion, N. Y.	43 01	75 14	1859	J. D. Ingersoll.
Illinois Institute, Ill.—(See Wheaton.)				
Independence, La.—(See Tickfaw Station.)				
Indian Agency, Dakota Ter.—(See Greenwood.)				
Iowa City, Iowa	41 39	91 33	1856	Herman H. Fairall.
Iowa City, Iowa	41 39	91 33	1857, '58	Dr. William Reynolds.
Ireland Island, Bermuda.	32 20?	64 45	1859	John G. Calder.
Jackson, Miss.	32 00	90 00	1854	A. R. Green.
Jackson, Miss.	32 23	90 08	1855	Hatch & Co.
Jackson, N. C.—(See Thornbury.)				
Jackson, Jackson county, Ohio.	39 07	82 30	1854, '55	George L. Crookham.
Jackson, Jackson county, Ohio.	39 10	82 32	1855, '57, '58	Moses Gilmor.
Jackson, Monroe county, Ohio.	39 34	80 56	1857, '58, '59	Enoch D. Johnson.
Jackson, Jackson county, Ohio	39 07	82 30	1855	S. B. Wood.
Jacksonport, Ark.	35 36	91 15	1859	Dr. G. A. Martin.
Jacksonville, Fla.	30 30	82 00	1854, '55, '56, '57, '58, '59	Dr. A. S. Baldwin.
Jacksonville, Ill.	39 48	90 19	1858, '59	Timothy Dudley.
Janesville, Wis.	42 42	89 91	1854, '55, '56, '57, '58	J. F. Willard.
Janesville, Wis.	42 42	89 91	1859	George J. Kellogg.
Jefferson Barracks, Mo.	38 37	90 16	1854	
Jefferson, Ohio	42 00	81 00	1856, '57, '58	James D. Herrick.
Jefferson, Texas	32 44	94 20	1859	W. T. Epperson.
Jerusalem, Palestine	31 47	35 13 E	1858, '59	Dr. R. G. Barclay.
Kanawha, Va.	38 53	81 25	1856, '57	David L. Ruffner.
Kanawha, Va.	38 53	81 25	1858, '59	W. C. Reynolds.
Kanawha Salines, Va.—(See Poplar Grove.)				
Kandotta, Minn.	45 45	94 55	1859	Edwin Whitefield.
Kanosha, Neb.	40 51	95 53	1859	Bela White.
Kaufman, Texas.	32 37	96 20	1859	James T. Rayel.
Keene, Ohio.	40 23	81 53	1854	E. Spooner.
Kelley's Island, Ohio.	41 36	82 43	1859	George C. Huntington.



## GENERAL LIST OF STATIONS.

XVII

NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
Kendallville, Ind.....	40 28	85 13	1854.....	J. Knauer & W. B. Coventing.
Kenosha, Wis.....	42 35	87 50	1856, '57, '58, '59.....	Rev. John Gridley.
Keokuk, Iowa.....	40 25	91 21	1854, '55.....	Dr. J. E. Ball and Mrs. Ida E. Ball.
Key West, Fla.—(See Salt Ponds)				
King's College, Nova Scotia. (See Windsor)				
Kingsley's, Penn.—(See Moss Grove.)				
Kirksville, Mo.....	40 11	92 33	1859.....	Dr. Robert Byers.
Knox Hill, Fla.....	30 30	86 01	1854, '55.....	John Newton.
Knoxville, Tenn., (East Tennessee University.)	35 59	83 54	1854, '55, '56.....	Prof. George Cooke and Prof. T. L. Griswold.
Laconia, N. H.....			1857, '58, '59.....	Josiah B. French.
Lac qui Parle, Minn.—(See Hazlewood.)				
Lafayette, Ind.....	40 25	86 49	1854.....	A. H. Bixby.
Lafayette College, Penn.—(See Easton)				
La Grange, Ga.....	33 02	84 55	1855.....	_____.
La Grange, Tenn.....			1859.....	J. R. Blake.
Lake City, Fla.—(See Alligator.)				
Lake George, Mich.....	46 15?	85 00?	1859.....	Captain A. W. Whipple and Edward Perrault.
Lake Mills, Wis.....	43 00	89 00	1859.....	Isaac Atwood.
Lake, N. Y.....	43 15	73 33	1856, '57, '58.....	Peter Reid.
Lake Village, N. H.....			1857, '58, '59.....	Josiah B. French.
Lake Washington, Miss.....	33 00	91 06	1854.....	Rev. J. Avery Shepherd.
Lake Winnibigoshish, Minn.....	47 30	94 40	1856, '57.....	Rev. Benjamin F. Odell.
Lambertville, N. J.....	40 23	74 56	1854, '55, '56, '57, '58, '59.....	Lemuel H. Parsons.
Lancaster, Mo.....	40 30	92 30	1859.....	John M. Weatherford.
Lancaster, Ohio.....	39 40	82 40	1857, '59.....	Lewis M. Dayton.
Lancaster, Ohio.....	39 40	82 40	1858.....	H. W. Jaeger.
Lancaster, Ohio.....	39 46	82 36	1859.....	W. E. Davis.
Lancaster, Penn.—(See Shamokin.)				
Lancaster Colliery, Penn.—(See Shamokin.)				
Lansing, Mich., (State Agricultural College)	42 44	84 15	1858, '59.....	J. C. Holmes and Cleveland Abbe.
Lapham, Minn.....	46 10	96 00	1857.....	E. M. Wright.
Lapham, Minn.....	46 10	96 00	1858.....	Sam'l Locke and F. McMullin.
Larissa, Texas.....	31 45	95 50	1858, '59.....	F. L. Yoakum.
Lawrence, Kansas.....	38 58	95 12	1857, '58, '59.....	G. W. Brown.
Lawrence, Mass.....	42 42	71 11	1856, '57, '58, '59.....	John Fallon.
Lawrence University, Wis.—(See Appleton.)				
Leavenworth City, Kansas.....	39 20	94 33	1858, '59.....	E. L. Berthoud.
Leavenworth City, Kansas.....	39 20	94 33	1857, '58, '59.....	H. D. McCarty.
Lebanon, Ill., (McKendree College).....	38 37	89 56	1859.....	Rev. Nelson E. Cobleigh, D. D.
Lebanon, Tenn., (Cumberland University)	36 15	86 15	1854, '55.....	Prof. Alex. P. Stewart and Prof. Benjamin C. Jillson.
Lecompton, Kansas.....	39 02	95 10	1859.....	Dr. William Y. Ellis.
Leitersburg, Md., (near).....	39 35	77 30	1858, '59.....	Jacob E. Bell.
Leonardtown, Md.....	38 17	76 43	1858, '59.....	Dr. Alexander McWilliams.
Leroy, N. Y.....	42 57	78 07	1854.....	L. F. Munger.
Lewinsville, Va.....	38 56	77 04	1858, '59.....	Rev. Charles B. McKee.
Lewisburg, Pa., (University).....	40 58	76 58	1856, '57, '58, '59.....	Prof. Charles S. James.
Lewisburg, Va.....	38 00	80 00	1854, '55, '56, '57, '58, '59.....	Thomas Patton, M. D.
Lewisburg, Va.....	38 00	80 00	1859.....	J. W. Stalnaker.
Lexington, Ky.....	38 06	84 18	1859.....	Rev. S. R. Williams.
Lexington, Mo.....	39 10	93 50	1859.....	Joseph A. Wilson.
Liberty, N. Y.....	41 45	74 46	1856.....	John Felt, jr.
Lima, Pa.—(See Chromedale.)				
Linington, Maine.....	43 40	70 40	1859.....	W. G. Lord.
Lind, Wis.....	44 20	89 00	1857, '58.....	R. H. Struthers.
Linden, Pa.....	41 10	77 11	1858, '59.....	James Barrett.
Lisbon, Maine.....	44 00	70 04	1859.....	Asa P. Moore.
Livingston, Ala.....	32 35	88 19	1859.....	Rev. Stephen U. Smith.
Livingston, Ala.....	32 38	88 14	1859.....	Dr. Robert D. Webb.
Lockport, N. Y.....	43 10	78 51	1858.....	E. S. Holmes.
Lodi, N. Y.....	42 37	76 54	1854, '55, '56, '57, '58, '59.....	John Lefferts.
Logansport, Ind.....	40 45	86 25	1854.....	E. L. Berthoud.
Logansport, Ind.....	40 45	86 14	1857, '58.....	Charles B. Lasselle.
Logansport, Ind.....	40 45	86 14	1859.....	Isaac Bartlett.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
Londonderry, N. H. ....	42 53	71 20	1854, '55, '56, '57.....	Robert C. Mack.
Longwood, Va. ....	37 30	79 31	1857.....	Thomas J. Wickline.
Louisville, Ky. ....	38 03	85 30	1858, '59.....	Rev. S. R. Williams.
Louisville, Ky., near.—(See Springdale.)				
Lovers' Point, Md.—(See Leonardtown)				
Lowville, N. Y. ....	43 46	75 38	1854.....	Ira R. Adams.
Lowville, N. Y. ....	43 46	75 38	1855, '56, '57.....	J. Carroll House.
Lunatic Hospital, Mass.—(See Worcester.)				
Lunenburg, Vt. ....	44 28	71 41	1859.....	Hiram A. Cutting.
Luray, Mo., near.....	40 28	91 55	1859.....	B. P. Hanan.
Lynchburg, Va. ....	36 30	79 07	1854.....	A. Nettleton.
Lynde Point Light-house, Con —(See Saybrook.)				
Lyons City, Iowa.....	41 50	90 10	1859.....	A. T. Hudson, M. D.
Lyons, N. Y. ....	43 04	77 04	1859.....	E. Ware Sylvester.
McKendree College, Ill.—(See Lebanon.)				
Madison, Ind. ....	38 15	85 00	1854, '55, '58.....	Charles Barnes.
Madison, Ohio.....	41 49	81 10	1857, '58, '59.....	Rev. L. S. Atkins.
Madison, Ohio.....	41 52	81 00	1854, '55, '56, '57, '58, '59 ..	Mrs. Ardelia C. King.
Madison, Wis.....	43 05	90 13	1856, '57.....	A. Schue, M. D.
Madison, Wis., (Wisconsin University)...	43 05	89 25	1854, '55, '56, '57, '58, '59 ..	Profs. S. H. Carpenter and J. W. Sterling.
Madrid, N. Y. ....	44 43	75 33	1854, '55, '56, '57, '58, '59 ..	E. A. Dayton.
Manchester, Ill. ....	39 33	90 34	1854, '55, '56, '57, '58, '59 ..	John Grant.
Manchester, N. H. ....	42 59	71 28	1854, '55, '56, '57, '59.....	Samuel N. Bell.
Manhattan, Kansas.....	39 13	96 45	1857, '58, '59.....	Isaac T. Goodnow.
Manhattan, Kansas.....	39 13	96 45	1859.....	Rev. N. O. Preston.
Manitowoc, Wis.....	44 07	87 37	1856, '57, '58, '59.....	Jacob Lups.
Mapleton, Kansas.....	38 04	94 51	1857, '58.....	Dr. S. O. Himoc.
Maquoketa, Iowa.....	42 04	90 41	1857.....	E. F. Hobart.
Marengo, Ill. ....	42 14	88 38	1856, '57, '58, '59.....	O. P. and J. S. Rogers.
Marietta, Ohio.....	39 25	81 29	1854, '55.....	Prof. J. W. Andrews.
Marion, Ohio.....	40 36	83 12	1859.....	T. Chase.
Marlborough, N. C. ....	35 28	75 36	1858.....	Robert H. Drysdale.
Marquette, Mich.....	46 32	87 41	1857.....	Peter White.
Marquette, Mich.....	46 32	87 41	1854, '59.....	G. H. Blaker.
Marysville, Cal.....	39 12	121 42	1857, '58, '59.....	W. C. Belcher.
McGrawville, N. Y. ....	42 54	76 11	1856, '57.....	J. Metcalf Smith.
Meadow Dale, Va. ....	38 23	79 35	1857, '58.....	James Slaven.
Meadow Dale, Va. ....	38 23	79 35	1859.....	Jesse B. Slaven.
Meadville, Pa. ....	41 39	80 11	1855, '56, '57, '58.....	T. F. Thickstun.
Media, Pa —(See Chromedale.)				
Medina, Ohio.....	41 07	81 42	1857, '58.....	Rev. L. F. Ward.
Memphis, Tenn.....	35 06	90 08	1854.....	Navy Yard.
Memphis, Tenn.....	35 08	90 00	1857, '58, '59.....	Drs. W. J. Tuck, Daniel F. Wright, and E. W. Mitchell.
Menasha, Wis.....	44 13	88 18	1857, '58.....	Col. D. Underwood.
Mendon, Mass.....	42 06	71 34	1854, '55, '56, '57, '58, '59 ..	John George Metcalf, M. D.
Mexico City, Mexico.....	14 30	99 01	1856.....	Prof. L. C. Ervendberg.
Mexico, N. Y. ....	43 27	76 14	1856, '57.....	John R. French.
Micanopy, Fla. ....	29 35	82 31	1858, '59.....	Dr. James B. Bean.
Michigan City, Ind.....	41 41	86 53	1857, '58.....	G. S. Woodard.
Michigan City, Ind.....	41 41	86 53	1859.....	William Woodbridge, under direction of Capt. Meade.
Middletown, Ct., (Wesleyan University)...	41 33	72 39	1858, '59.....	Prof. John Johnson.
Milford, Del. ....	38 55	75 27	1857, '58.....	Richard A. Martin.
Millersburg, Ky.....	38 40	84 27	1854.....	Rev. J. Miller.
Millersburg, Ky.....	38 20	84 00	1855, '56, '57, '58, '59.....	Rev. George S. Savage, M. D.
Milton, Ind.....	39 47	85 02	1854, '55.....	Dr. V. Kersey.
Milwaukee, Wis.....	43 03	87 57	1854, '57, '58, '59.....	Increase A. Lapham, LL. D.
Milwaukee, Wis.....	43 04	87 38	1859.....	E. P. Larkin.
Milwaukee, Wis., (2 miles north of the city)...	43 04	87 59	1855, '56, '57, '58, '59.....	F. C. Pomeroy.
Milwaukee, Wis.....	43 04	87 59	1855, '56, '57, '58, '59.....	Carl Winkler, M. D.
Minatitlan, Mexico.....	17 59	94 07	1858, '59.....	Charles Laszlo.
Mirador, Mexico.....	19 50	96 25	1851, '55, '56, '57, '58, '59 ..	Charles Sartorius.
Mishawaka, Ind.....	41 39	86 02	1859.....	George C. Menfield.
Mobile, Ala., 6 miles west of.....	30 42	88 01	1859.....	Rev. Joseph John Nicholson.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° /	° /		
Moneka, Kansas.....	38 19	94 49	1858, '59.....	John O. Wattles.
Monroe, Mich.....	41 58	83 24	1854, '55.....	Capt. A. D. Perkins.
Monroe, Mich.....	41 56	83 22	1854, '55, '56, '57, '58, '59 ..	Miss Helen Irene Whelpley.
Monroe, Mich.....			1859.....	George W. Bowlsby.
Monroe Piers, Mich.....	41 53	83 19	1859.....	John Lane, under direction of Capt. Meade, Superintendent of Lake Survey.
Monroeville, Ala.....	31 33	87 25	1854, '55.....	S. J. Cumming.
Monson, Maine.....	45 11	69 35	1856, '57, '58.....	Benjamin F. Wilbur.
Montcalm, Va.....	38 05	78 21	1854, '55.....	Charles J. Meriwether.
Monterey, Cal.....	36 40	121 55	1859.....	Colbert A. Canfield, M. D.
Montgomery, Ala.....	32 25	86 22	1858, '59.....	Rev. J. Avery Shepherd.
Montgomery, Ala.....	32 25	86 22	1859.....	William S. Foster.
Montreal, Canada.....	45 30	73 36	1855, '56, '57, '58, '59.....	Archibald Hall, M. D.
Montross, Va.....	38 07	76 46	1856, '57.....	H. H. Fauntleroy.
Montross, Va.....	38 07	76 54	1858, '59.....	E. E. Spence.
Mont View, Va.....	38 00	78 30	1859.....	J. Ralls Abell.
Montville, Ohio.....	41 07	81 47	1858, '59.....	William P. Clark.
Moorestown, N. J.....	39 58	75 02	1859.....	Miss E. E. Thornton.
Moose Factory, Hudson Bay Territory.....	51 15	80 45	1857, '58, '59.....	John Mackenzie.
Moquelumne Hill, Cal.....	38 18	120 28	1859.....	Wesley K. Boucher.
Morrisania, N. Y., (Fairmount Institute) ..	40 53	74 01	1856, '57, '58, '59.....	J. S. Gorton and Joseph Zaeffel.
Morristown, N. J.....	40 48	74 33	1859.....	William Day.
Morrisville, Pa.....	40 12	74 53	1854, '55, '56, '57, '58, '59 ..	Ebenezer Hance.
Morrisville, Pa.....	40 12	74 53	1859.....	Mahlon Moore.
Mosinee, Wis.....	44 44	89 35	1859.....	Dr. J. S. Pashley.
Moss Grove, Pa.....	41 40	79 51	1854, '55, '56, '57.....	Francis Schreiner.
Moss Grove Plantation, La.—(See Trinity )				
Mossy Creek, Va.....	38 20	79 05	1856, '57, '58.....	Jed. Hotchkiss.
Mosul, Mesopotamia, Asia.....	36 22	43 14 E	1854, '55.....	
Moulton, Ala.....	34 32	87 25	1859.....	Ashley D. Hunt.
Mount Alba College, Ky.—(See Hardins- burg.)				
Mount Joy, Pa.....	40 08	77 32	1857, '58, '59.....	Dr. J. R. Hoffer.
Mount Pleasant, Ohio.....	40 20	80 32	1859.....	David H. Tweedy.
Mount Pleasant, S. C.....	32 47	79 55	1857.....	Dr. Edward N. Fuller.
Mount Solon, Va.....	38 00	79 00?	1856.....	James T. Clarke.
Mount Union, Ohio.....	41 20	81 01	1857, '58, '59.....	Newton Anthony.
Mount Vernon, Iowa, (Cornell College).....	42 00	91 00	1856, '57.....	Prof. B. Wilson Smith.
Mount Vernon, Ohio.....	40 25	82 31	1854, '55.....	F. A. Benton.
Mount Washington, N. H.....	44 15	71 16	1859.....	Joseph S. Hall.
Murfreesborough, N. C.....	36 30	77 06	1856, '57, '58, '59.....	Rev. A. McDowell.
Murrysville, Pa.....	40 28	79 35	1857, '58, '59.....	Thomas H. Stewart.
Muscatine, Iowa.....	41 26	91 05	1854, '55, '56, '57, '58, '59 ..	Theodore S. Parvin.
Mustapha, Va.....	39 20	81 41	1856, '57, '59.....	James Frazer.
Nantucket, Mass.....	41 16	70 06	1854, '55, '56, '57, '58, '59 ..	Hon. William Mitchell.
Naperville, Ill.....	41 46	88 10	1859.....	Milton S. Ellsworth and Lewis Ellsworth.
Nashata Lake, Wis.—(See Delafield.)				
Nassau, Bahamas, W. I.....	25 05	77 02	1858, '59.....	A. M. Smith.
Natchez, Miss.....	31 34	91 24	1856.....	J. Edwards Smith.
Natchez, Miss.....	31 34	91 25	1858, '59.....	Robert McCary.
Nazareth, Pa.....	40 43	75 21	1855, '56, '57, '59.....	Hermann A. Brickenstein and J. C. Harvey.
Nebraska City, Neb.....	40 40	95 43	1859.....	E. E. Mason.
Nengenenge, Africa.....	0 00	10 20 E	1855.....	Rev. A. Bushnell.
Neosho Falls, Kan.....	38 03	95 31	1859.....	B. F. Goss.
New Albany, Ind.....	38 17	85 45	1856, '57.....	Charles Barnes.
New Albany, Ind.....	38 17	85 45	1859.....	Dr. Alexander Martin.
Newark, Del.....	39 38	75 47	1854, '55, '56, '57, '58.....	Delaware College.
Newark, Mich.....	42 30?	86 00?	1856.....	L. H. Streng.
Newark, N. J.....	40 45	74 10	1854, '55, '56, '57, '58, '59 ..	W. A. Whitehead.
Newark, Ohio.....	40 06	82 28	1855.....	Lewis M. Dayton.
Newark, Ohio.....	40 06	82 28	1859.....	Israel Dille.
New Bedford, Mass.....	41 39	70 56	1854, '55, '56, '57, '58, '59 ..	Samuel Rodman.
Newburyport, Mass.....	42 47	70 52	1854, '55, '56, '57, '58.....	H. C. Perkins, M. D.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
New Braunfels, Texas.....	29 42	98 15	1854, '55 .....	Prof. L. C. Ervendberg.
New Braunfels, Texas.....	29 42	98 15	1856, '57 .....	Rev. J. L. Forke.
New Braunfels, Texas.....	29 42	98 15	1858, '59 .....	Otto Friedrich.
New Brunswick, N. J.....	40 30	75 31	1859.....	Edwin Allen.
New Buffalo, Mich.....	41 45	86 46	1857, '58, '59 .....	J. B. Crosby.
New Castle, Maine.....	44 07	69 36	1859.....	Charles L. Nichols.
New Creek Depot, Va.....	39 25	79 00	1854.....	M. McDonald.
New Danemora, Wis.....	44 17	90 38	1858, '59 .....	Emil Haeuser.
New England, Va.—(See Mustapha.)				
New Harmony, Ind.....	38 08	87 50	1854, '55, '56, '57, '58, '59 ..	John Chappellsmith.
New Haven, Ct.....	41 18	72 57	1859.....	H. G. Du Bois, jr.
New Lisbon, Ohio.....	40 45	80 46	1855.....	
New Lisbon, Ohio.....	40 45	80 46	1857, '58, '59 .....	J. F. Benner.
New London, Ct.....	41 21	72 03	1854, '55, '56, '57, '58 .....	Rev. Tryon Edwards, D. D.
New London, Wis.....	44 21	88 45	1856, '57, '58 .....	J. Everett Breed.
New Orleans, La.....	29 57	90 00	1854, '55, '57 .....	E. H. Barton, M. D.
New Orleans, La.....	29 57	90 00	1856, '57, '58, '59 .....	Lewes B. Taylor.
New Wied, Texas —(See New Braunfels.)				
New York city, N. Y.....	40 42	74 01	1854.....	J. C. Gibbons.
New York city, N. Y., (Deaf and Dumb Inst.)	40 43	74 05	1854, '55, '56, '57, '58, '59 ..	Prof. O. W. Morris.
Nichols, N. Y.....	42 00	76 32	1857, '58, '59 .....	Robert Howell.
Nolin, Ky.....	37 10	85 35	1858.....	John Grinnell.
Norristown, Pa.....	40 08	75 19	1854, '55, '56, '57, '58, '59 ..	Rev. J. Grier Ralston.
North Attleborough, Mass.....	41 52	71 23	1854, '55, '56, '57 .....	Henry Rice.
North Barnstead, N. H.....	43 38	71 27	1856, '57, '58 .....	R. F. Hanscam.
North Belgrade, Me.....	44 30	69 53	1859.....	Almond H. Wyman.
North Bend, Ohio.....	39 08	84 35	1859.....	A. A. Warder.
North Littleton, N. H.....	44 20	71 49	1859.....	Rufus Smith.
North Salem, N. Y.....	40 20	73 38	1856.....	Mrs. M. J. Lobdell.
North Scituate, R. I.....	41 50	71 34	1854.....	Henry C. Sheldon.
North Whitehall, Pa.....	40 40	75 26	1856, '57, '58, '59 .....	Edward Kohler.
Northwood, Ohio.....	40 28	83 45	1854, '57, '58, '59 .....	Rev. Robert Shields and J. C. Smith.
Norwalk, Ohio.....	41 13	82 43	1854, '55.....	Gustavus A. Hyde.
Norway, Maine.....	44 12	70 39	1859.....	G. W. Verrill, jr.
Norway, Wis.....	42 50	88 10	1856, '57.....	John E. Himoe.
Norwich, Ct.....	41 32	72 03	1856, '57, '58.....	N. Scholfield.
Norwich, Vt.....	43 42	72 21	1856, '57, '58, '59 .....	Prof. A. Jackman.
Notre Dame, Ind.....	41 45	86 10	1858, '59.....	Thomas Vagnier.
Oak Grove, Maine.—(See Vassalborough.)				
Oakland, Md.....	39 40	79 00	1857, '58.....	L. R. Cofran.
Oakland Station, Pa.—(See Pittsburg.)				
Oberlin, Ohio.....	41 20	82 15	1854, '55, '56, '57.....	Prof. J. H. Fairchild.
Oberlin, Ohio.....	41 20	82 15	1857.....	Prof. George N. Allen.
Ogdensburg, N. Y.....	44 43	75 26	1854, '55, '56, '57, '58, '59 ..	William E. Guest.
Oldtown, Maine.....	44 48	68 45	1854, '55.....	Rev. Samuel H. Merrill.
Omaha, Neb.....	41 15	96 10	1857, '58, '59 .....	William N. Byers.
Omaha, Neb.....	41 15	96 10	1859.....	John G. Rain.
Ontonagon, Mich.....	46 52	89 30	1859.....	Henry Shelby, under direction of Captain Meade, Superintendent Lake Survey.
Open Prairie, Ill.—(See Bruce.)				
Orange Hill, Fla.—(See Knox Hill)				
Oregon City, Oregon.....			1857, '58, '59 .....	G. H. Atkinson.
Orville, Ala.....	32 24	87 06	1859.....	Samuel K. Jennings, M. D.
Crhard Farm, Ill.—(See Pekin.)				
Oswego, N. Y.....	43 25	76 35	1854.....	J. H. Hart.
Oswego, N. Y.....	43 28	76 34	1855, '56, '57, '58, '59 .....	William S. Malcolm.
Otsego, Mich.....	42 27	85 40	1859.....	Matthew Coffin.
Otsego, Wis.....	43 27	89 13	1859.....	L. H. Doyle.
Ottawa, Ill.....	41 20	88 47	1854, '55, '56, '57, '58, '59 ..	Dr. J. O. Harris.
Ottawa Point, Mich.....	44 16	83 25	1858, '59.....	John Oliver, under direction of Captain Meade, Superintendent Lake Survey.
Ovid, N. Y., (Seneca Collegiate Institute) ..	42 41	76 52	1855, '56, '57, '58.....	J. W. Chickering.
Oxford, Miss., (University of Mississippi) ..	34 20	89 25	1854, '55, '56.....	Prof. L. Harper.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
Paducah, Ky.....	37 06	88 36	1859.....	A. Mattison.
Palmyra, Mo., (St. Paul's College).....			1856, '57.....	G. P. Comings, Missouri Geological Survey.
Paradise, Pa.....	40 00	76 08	1854, '55, '56, '57, '58.....	Jacob Frantz.
Pardeeville, Wis.....	43 29	89 14	1859.....	S. Armstrong.
Paris, Ky.....	38 16	84 07	1856, '57, '58, '59.....	L. G. Ray, M. D.
Paris, Mo.....	39 30	92 00	1859.....	William F. Maxey.
Parson's Seminary, Texas.—(See Webberville.)				
Patoka, Ind.....	38 28	87 26	1859.....	A. P. Turner.
Paulding, Miss.....	32 03	89 10	1858, '59.....	Rev. E. S. Robinson.
Peach Grove Lodge, Va.....	39 15	81 00	1856.....	Walter C. Quincy.
Peach Lawn, Va.—(See Falmouth)				
Pekin, Ill.....	40 36	89 45	1856, '57, '58, '59.....	J. H. Riblet.
Pella, Iowa.....	41 30	92 55	1854, '55, '56.....	E. H. A. Scheeper.
Penn Yan, N. Y.....	42 42	77 11	1854, '55, '56, '57, '58, '59.....	Dr. H. P. Sartwell.
Pensacola, Fla.—(See Warrington)				
Peoria, Ill.....	40 36	89 30	1856, '57, '58, '59.....	Frederick Brendell, M. D.
Perry, Me.....	45 00	67 06	1854, '55, '56, '57, '58, '59.....	William D. Dana.
Perrysburg, Ohio.....	41 39	83 40	1854, '55, '56, '57, '58.....	F. and D. K. Hollenbeck.
Perryville, Ark.....	35 00	92 46	1858.....	Harmon F. Hardy.
Perryville, Ark.....	35 00	92 46	1859.....	William H. Blackwell.
Philadelphia, Pa., (Central High School).....	39 57	75 11	1854, '55, '56, '57, '58, '59.....	Prof. James A. Kirkpatrick.
Phillipstown, N. Y.—(See Beverly.)				
Philomath, Ga.....	33 45	83 15	1857.....	James M. Reid.
Piasa Farms, Ill.—(See Brighton)				
Pilot Prairie, Ark.—(See Waldron)				
Pine Fork of Short Creek, Ohio.—(See Mount Pleasant.)				
Pine Hill, 6 miles N. E. from Buffalo, N. Y.—(See Buffalo, Zimmerman)				
Pine Land Village, Fla.—(See Belair.)				
Pin Oak, Texas.....	30 00	97 15	1856.....	W. H. Gantt, M. D.
Pioneer Grove, Neb.—(See Omaha, Rain.)				
Pittsburg, Pa.....	40 30	80 00	1854, '55, '57, '58, '59.....	Marine Hospital.
Pittsburg, Pa., (Oakland Station).....	40 32	80 02	1854, '55, '56, '57, '58.....	W. W. Wilson.
Plainfield, Mass.....	42 30	72 56	1857.....	Francis Shaw.
Plainville, N. Y.....	43 00	77 16	1856, '57.....	J. H. Norton.
Platteville, Wis.....	42 45	90 00	1854, '55, '56, '57, '58, '59.....	Dr. J. L. Pickard.
Platteville, Wis.....	42 45	90 00	1859.....	A. K. Johnson.
Plattsburg, N. Y.....	44 40	73 26	1856.....	Joseph W. Taylor.
Pleasant Plain, Iowa.....	41 07	91 54	1856, '57, '58, '59.....	Townsend McConnel.
Pleasant Ridge, Pa.—(See Bendersville.)				
Plum Spring, Iowa.—(See Poultney)				
Pocahontas, Pa.....	39 54	75 37	1854, '55, '56, '57, '58, '59.....	Fene'on Darlington.
Point Coupee, La., (Loydas College).....	30 42	91 30	1859.....	A. W. Jackson, M. D.
Point Lookout, Md.—(See Ridge.)				
Point Pleasant, Va.....	38 50	82 31	1853, '59.....	W. R. Boyers.
Pomfret, Ct.....	41 52	72 00	1854, '55, '56, '57, '58, '59.....	Rev. Daniel Hunt.
Pomona, Tenn.....	36 00	85 00	1859.....	J. W. Dodge & Son.
Pompey, N. Y.....	42 52	76 09	1857, '58.....	S. Marshall Ingalls.
Pompey Hill, N. Y.....	42 52	76 09	1856.....	John F. Kendall.
Poplar Grove, Va.....	38 20	81 21	1856, '57, '58, '59.....	James E. Kendall.
Port Gibson, Miss., (Elliott Academy).....	31 51	91 02	1855, '56, '57.....	Prof. J. Boyd Elliott.
Port Huron, Mich.....	42 53	82 24	1857, '58, '59.....	James Allen.
Portland, Me.....	43 37	70 19	1855, '56, '57, '58, '59.....	Henry Willis.
Portland, Me.....	43 39	70 15	1859.....	J. W. Adams.
Portland, Oregon.....	45 24	121 30	1858, '59.....	George H. Stebbins.
Port La Vaca, Texas.....	28 40	96 45	1859.....	James Gardiner.
Port of Spain, Trinidad, W. I.....	10 39	61 34	1-56, '57.....	Geological Surveyors.
Portsmouth, Ohio.....	38 50	82 49	1856, '57, '58.....	James H. Poe.
Portsmouth, Ohio.....	38 50	82 49	1859.....	D. B. Cotton.
Portsmouth, Va.....	36 50	76 19	1854, '56, '57, '58, '59.....	Prof. N. B. Webster.
Pottsville, Pa.....	40 41	76 24	1855.....	Dr. A. Heger.
Pottsville, Pa.....	40 41	76 09	1857.....	Rev. B. R. Smyser.
Pottsville, Pa.....	40 41	76 09	1858.....	D. Washburn.
Poultney, Iowa.....	42 40	91 21	1854, '55, '56, '58, '59.....	Rev. Benjamin F. Odell.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
Poydras College, La.—(See Point Coupee.)				
Prairie Glen Farm, Mo.—(See Kirksville.)				
Prescott, Wis. ....	44 56	92 40	1857.....	Rev. Spencer L. Hillier.
Preston, Texas .....	33 47	96 35	1859.....	James E. Moke.
Princeton, Mass. ....	42 28	71 53	1854, '55, '56, '57 .....	John Brooks.
Princeton, Minn. ....	45 50	93 45	1856, '57, '58, '59 .....	O. E. Garrison.
Providence, R. I., (Brown University).....	41 49	71 25	1854, '55, '56, '57, '58, '59...	Prof. Alexis Caswell.
Quasqueton, Iowa .....	42 23	91 43	1854, '55, '56 .....	Dr. Edwin C. Bidwell.
Racine, Wis. ....	42 49	87 40	1856, '57, '58 .....	W. J. Durham.
Racine, Wis. ....			1856.....	E. Seymour.
Raleigh, N. C. ....	35 47	78 48	1859.....	W. H. Hamilton and T. Carter.
Randolph, Pa. ....	41 28	80 10	1854, '55, '56 .....	O. T. Hobbs.
Ravenna, Ohio.—(See Freedom.)				
Reading, Pa. ....	40 19	75 56	1858.....	J. Burd Peale, M. D., and Charles Hahn.
Red Lake, Minn. ....	48 30	95 30	1854.....	Rev. E. W. Carver.
Red River Settlement, Hudson's Bay Terr'y.	50 06	97 00	1855, '56, '57, '58, '59 .....	Donald Gunn.
Red Wing, Minn., (Hamline University) ...	44 34	92 30	1855, '56.....	Rev. Jabez Brooks.
Rhineland, Mo. ....	38 46	91 46	1859.....	Charles Vogel.
Richland, Iowa —(See Forestville.)				
Richmond, Ind. ....	39 47	84 47	1854, '58, '59 .....	W. W. Austin.
Richmond, Ind. ....	39 47	84 47	1856, '57, '58, '59 .....	Joseph Moore.
Richmond, Ind. ....	39 47	84 46	1859.....	John Haines.
Richmond, Mass. ....	42 23	73 20	1854, '55, '56, '57, '58, '59 ...	William Bacon.
Richmond, Mo. ....	39 12	93 56	1859.....	Rufus W. Finley.
Richmond, Ohio. ....	40 20	81 01	1854, '55 .....	Jacob M. Desellein.
Richmond, Va., near.—(See Westwood.)				
Richmond Hill, Ga., 5 miles from Augusta.	33 30	82 01	1854.....	W. Schley, jr.
Ridge, Md. ....	38 05	76 18	1856, '57 .....	T. G. Stagg.
Rigolet, Labrador .....	54 00	55 00	1857, '58, '59 .....	Henry Connolly.
Riley, Ill. ....	42 08	88 33	1856, '57, '58, '59 .....	E. Babcock.
Ripley, Ohio .....	38 47	83 31	1857, '58, '59 .....	J. Ammen.
Rocheport, Mo. ....	38 55	92 38	1856.....	Charles Q. Chandler, M. D.
Rochester, N. Y. ....	43 08	77 51	1856, '57 .....	William Harkness.
Rochester, N. Y. ....	43 08	77 51	1856, '57, '58, '59 .....	Prof. Chester Dewey, LL. D.
Rochester, N. Y. ....	43 08	77 51	1859.....	M. M. Mathews, M. D.
Rockport, Ohio .....	41 31	81 53	1859.....	Edward Colbrunn.
Rockville, Ind. ....	39 46	87 06	1859.....	H. H. Anderson and J. W. Tenbrock.
Rocky Run, Wis. ....	43 26	89 19	1859.....	W. W. Curtis.
Romeo, Mich. ....	42 44	83 00	1856, '57 .....	Seth L. Andrews, M. D.
Rose Hill, Va. ....	38 00	76 57	1857, '58, '59 .....	George Wythe Upshaw.
Rossville, Iowa .....	43 10	91 21	1857, '58, '59 .....	Carlisle D. Beeman.
Rougemont, Va. ....	38 05	78 21	1856, '57, '58, '59 .....	George C. Dickinson.
Roundtop, Texas .....			1859.....	Bruno Schuman.
Rupert, Vt. ....	43 15	73 11	1857, '58, '59 .....	Joseph Parker.
Ruthven, Va. ....	37 21	77 33	1856, '57, '58, '59 .....	Julian C. Ruffin.
Sackett's Harbor, N. Y. ....	43 55	75 57	1859.....	Henry Metcalf, under direction of Capt. Meade, Superintendent Lake Survey.
Sacramento, Cal. ....	38 34	121 40	1854, '55.....	F. W. Hatch, M. D.
Sacramento, Cal. ....	38 34	121 40	1854, '55, '56, '57, '58, '59 ..	Thomas M. Logan, M. D.
Sag Harbor, N. Y. ....	41 00	72 20	1854, '55, '56, '57, '58 .....	Ephraim N. Byram.
St. Anthony's Falls, Minn. ....	45 00	93 15	1854.....	Dr. C. L. Anderson.
St. Augustine, Fla. ....	29 48	81 35	1855, '56, '57, '58, '59 .....	P. B. Mauran, M. D.
St. Croix, (Falls of,) Wis. ....	45 30	92 40	1857.....	Marine T. W. Chandler.
St. Croix, (Falls of,) Wis. ....	45 30	92 40	1858.....	William M. Blanding.
St. Francisville, La. ....	30 49	91 27	1856.....	B. R. Gifford.
St. George's, Bermuda .....	32 23	64 40	1857, '58, '59 .....	Royal Engineers.
St. Inigoes, Md.—(See Ridge.)				
St. Inigoes, Md.—(See St. Mary's City.)				
St. James, Mich. ....	45 44	85 27	1854, '55, '56.....	James J. Strang.
St. John's, Newfoundland.....	47 35	52 38	1856, '57, '58, '59 .....	John Delaney & Sons.
St. John's, S. C. ....	33 00	80 00	1854, '56, '58, '59 .....	T. P. Ravenel.
St. Johnsbury, Vt. ....	44 25	72 00	1854, '55, '57, '58, '59 .....	James K. Colby and Franklin Fairbanks.
St. John's College, N. Y.—(See Fordham.)				



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
St. Joseph's, Minn.....	48 55	98 00	1854.....	Rev. D. B. Spencer.
St. Joseph's, Minn.....	48 55	98 00	1855.....	O. A. Kellum.
St. Joseph's, Mo.....	39 40	94 40	1857, '58.....	Edward B. Neely, Missouri Geological Survey.
St. Louis, Mo.....	38 37	90 16	1854, '55, '56, '57, '58, '59 ..	George Engelmann, M. D., and A. Wislizenus, M. D.
St. Louis, Mo.....	28 37	90 16	1859.....	Augustus Fendler.
St. Martin, Canada.....	45 32	73 36	1854, '55, '56, '57, '58, '59 ..	Chs. Smallwood, M.D., LL.D.
St. Mary's, Iowa.....	41 00	95 45	1854.....	D. E. Read.
St. Mary's City, Md.....	38 10	76 41	1859.....	Rev. James Stephenson.
St. Mary's River, Mich.....	46 20	84 10	1859.....	
St. Paul's College, Mo — (See Palmyra.)				
St. Vincent's Col., Mo.—(See Cape Girardeau.)				
Salem, N. J.....	39 34	75 27	1856.....	C. M. Dodd.
Salem, Oregon.....	44 55	122 45	1857.....	
Salem, Va.....	39 20	80 01	1857, '58.....	J. Carson Wells.
Salisbury, Ct.....	42 00	73 18	1854.....	Dr. Ovid Plumb.
Salmon Falls, N. H.....	43 30	71 00	1854, '55.....	George B. Sawyer.
Salt Ponds, Fla., 2½ miles NE. from Key West.	24 33	81 48	1854, '55, '56, '57, '58, '59 ..	William C. Dennis.
Sand Brook, N. J.—(See Sergeantsville.)				
Sandwich, Ill.....	41 31	88 30	1858, '59.....	N. E. Ballou, M. D.
San Francisco, Cal.....	38 00	122 00	1854, '55.....	H. Gibbons, M. D.
San Francisco, Cal.....	37 48	122 27	1856, '57, '58, '59 ..	W. O. Ayres, M. D.
San Patricio, Texas.....	27 55	97 50	1859.....	James O. Gaffney.
Santa Clara, Cal., (University of the Pacific)	37 20	122 00	1859.....	Prof. Oliver S. Frambes.
Santa Clara, Cal.....	37 10	122 00	1859.....	S. A. Gould.
Saratoga, N. Y.....	43 06	74 00	1856, '57, '58, '59 ..	Walter H. Riker.
Saugatuck, Mich.....	42 30	85 50	1854, '55, '56.....	L. H. Streng.
Savannah, Ga.....	32 05	81 07	1851, '55, '56, '57, '58, '59 ..	Dr. John F. Posey.
Savannah, Ga.—(See Whitemarsh Island.)				
Savannah, Ohio.....	41 12	82 31	1854, '55, '56, '57, '58, '59 ..	Dr. John Ingram.
Saybrook, Ct., (Lynde Point light-house)	41 18	72 20	1854, '55, '56, '57, '58, '59 ..	James Rankin.
Schellman Hall and Schellman Hills, Md.— (See Sykesville)				
Schenectady, N. Y., (Union College).....	42 49	73 55	1858, '59.....	Alexis A. Julien and Hubert A. Schaubert.
Scioto, Ohio.....	38 40	81 49	1856.....	James H. Poe.
Selma, Ala.....	32 25	86 51	1858, '59.....	Samuel K. Jennings, M. D.
Seneca Collegiate Institute, N. Y.—(See Ovid)				
Sennett, N. Y.....	43 00	76 55	1857.....	Henry B. Fellows.
Sergeantsville, N. J.....	40 29	75 03	1857, '58.....	John F. Sergeant.
Seville, Fla.....	30 29	84 07	1859.....	Lardner Gibbon.
Sewickleyville, Pa.....	40 27	80 09	1859.....	John J. Travelli.
Shamokin, Pa.....	40 45	76 31	1856, '57, '58, '59 ..	P. Friel.
Sharonville, Ohio.....	33 12	84 35	1859.....	W. T. Bowen.
Shelburne, N. H.....	44 23	71 06	1856, '57, '58, '59 ..	Fletcher Odell.
Shelburn, Vt.....	44 23	73 11	1856, '57.....	George Bliss.
Shelby Bay, Bermuda.....	32 28	64 32	1857.....	James B. Arnold.
Shelbyville, Ind.....	39 30	85 43	1859.....	J. T. Bulloch.
Sidney, Ohio.....	40 21	84 11	1856, '57.....	Joseph Shaw.
Sioux City, Iowa.....	42 31	96 25	1857, '58, '59 ..	Dr. John J. Saville.
Sisterdale, Texas.....	29 54	98 35	1859.....	Ernst Kapp.
Sistersville, Va.—(See Jackson, Monroe Co., Ohio.)				
Smithfield, Va.....	37 02	76 37	1854, '55, '56, '57, '58, '59 ..	Dr. John R. Purdie.
Smithville, N. Y.....	44 00	76 01	1854, '55, '56 ..	J. Everett Breed.
Smithsonian Institution.—(See Washington, D. C.)				
Smithville Seminary, R. I.—(See North Scituate)				
Somerset, Pa.....	40 02	79 02	1856.....	Frank Chorprenning, M. D.
Somerset, Pa.....	40 02	79 02	1857, '58, '59 ..	George Mowry.
South Bend, Ind.....	41 37	86 08	1859.....	Miss Georgiana Webb and J. H. Dayton.
South Groton, Mass.....	42 34	71 30	1859.....	Alfred Collier.
South Pass, Ill.....	37 28	89 14	1857, '58.....	Frank Baker.
South Thomaston, Me.....	44 06	69 12	1854, '55.....	Joshua Bartlett.
Southwick, Mass.....	42 02	72 51	1851, '55, '56, '57 ..	Amasa Holcomb.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' ° '	° ' ° '		
Sparta, Ga .....	33 17	83 09	1854, '55, '56, '57, '58, '59 ..	E. M. Pendleton, M. D.
Spencertown, N. Y .....	43 19	73 41	1854, '55, '56, '57, '58, '59 ..	Rev. T. C. P. Hyde and others.
Springdale, Ky .....	38 07	85 24	1854, '55, '56, '57, '58, '59 ..	Mrs. Lawrence Young.
Springfield, Mass .....	42 06	72 35	1854, '55, '56 .....	Lucius C. Allin.
Springfield, Mass .....	42 06	72 35	1857, '58, '59 .....	Francis A. Brewer.
Springfield, Mo .....	37 12	93 12	1857, '58 .....	J. A. Stephens, Missouri Geo- logical Survey.
Springfield, Texas .....	31 39	96 40	1859 .....	T. A. Turner.
Spring Hill Institute, Ala.—(See Mobile.)				
Spring Hill, Ark .....	33 33	93 35	1859 .....	P. F. Finley.
Spring Hill, Kansas .....	38 37	94 56	1859 .....	Rev. J. H. Drummond.
Springvale, Wis.—(See Pardeeville)				
Stanbridge, Canada East .....	45 00	73 00	1856, '57, '58, '59 .....	J. C. Baker.
State Reform Farm, Ohio.—(See Lancaster.)				
Steuben, Me .....	44 44	67 50	1854, '55, '56, '57, '58, '59 ..	J. D. Parker.
Stillwater, Minn .....	45 04	92 45	1858 .....	A. Van Vorhes.
Stockton, Cal .....	37 57	121 14	1854, '56 .....	Robert K. Reid, M. D.
Stockton, Mo .....	37 36	93 48	1859 .....	William Wells.
Stratford, N. H .....	44 40	71 34	1855 .....	William B. G. Brown.
Stratford, N. H .....	44 08	71 34	1856, '57 .....	B. Gould Brown.
Stratford, N. H .....	44 08	71 34	1858, '59 .....	Branch Brown.
Stratham, N. H .....	43 00	70 54	1859 .....	Andrew Wiggin.
Stribling Springs, Va .....	38 17	79 12	1858, '59 .....	Jed. Hotchkiss.
Sugar Grove, Pa .....	42 00	79 20	1854 .....	W. O. Blodget.
Superior, Wis .....	46 38½	92 03½	1855 .....	William H. Newton.
Superior, Wis .....	46 38	92 03	1856 .....	L. Washington.
Superior, Wis .....	46 38	92 03	1859 .....	William Mann.
Superior, Wis .....	46 38	92 03	1859 .....	George B. Stuntz, under di- rection of Capt. Meade, Su- perintendent Lake Survey.
Sykesville, Md .....	39 23	76 57	1854, '55, '56, '57, '58, '59 ..	Miss Harriott M. Baer.
Tallahassee, Fla.—(See Belair.)				
Tarentum, Pa .....	40 37	79 19	1856, '57, '58, '59 .....	John H. Baird.
Tarrant, Texas .....	33 16	95 34	1859 .....	Dr. B. L. D'Spain and J. M. Ewing.
Taunton, Mass .....	41 49	71 09	1854, '55, '56 .....	Albert Schlegel.
Texana, Texas .....	28 55	96 40	1859 .....	William Coleman.
The Plains, Va .....	38 50	77 51	1859 .....	John Pickett
The Rock, Ga .....	32 52	84 23	1854, '55, '56, '57 .....	Dr. James Anderson.
Thomaston, Ga .....	32 56	84 30	1859 .....	Dr. James Anderson.
Thomson, Ga .....	33 26	82 28	1858, '59 .....	Dr. W. T. Grant.
Thornbury, N. C .....	36 20	77 21	1854, '55 .....	Rev. F. Fitzgerald and Prof. Daniel Morrelle.
Thunder Bay Island, Mich .....	45 02	83 09	1858, '59 .....	J. J. Malden, under direction of Capt. Meade, Supt. Lake Survey.
Tickfaw Station, La .....	30 30	90 32	1859 .....	C. B. Swasey.
Tiskilwa, Ill .....	41 15	89 30	1859 .....	Verry Aldrich.
Toledo, Ohio .....	41 45	83 36	1859 .....	E. B. Raffensperger.
Toledo, Ohio, near.—(See Collingwood.)				
Topeka, Kansas .....	39 03	95 39	1858 .....	F. W. Giles.
Topsham, Me .....	44 00	70 00	1859 .....	Warren Johnson.
Toronto, Can. da .....	43 39	79 21	1855, '56, '57, '58, '59 .....	Magnetic Observatory.
Toronto, Mo.—(See Wet au Glaize.)				
Townsendville, N. Y.—(See Lodi.)				
Trenton, Mo., (5 miles S. W. of) .....	40 02	93 39	1859 .....	Thomas A. Conkling.
Trinity, La., (near) .....	31 37	91 47	1856, '57, '58 .....	Edward Merrill, M. D.
Trout Run Valley, Va.—(See Crack Whip.)				
Troy, N. Y .....	42 44	73 36	1854 .....	Prof. E. H. Allen.
Troy, N. Y .....	42 44	73 36	1856, '57 .....	Prof. Dascom Greene.
Troy Hill, Pa .....	40 30	80 00	1856 .....	Victor Scriba.
Troy, Ohio .....	40 03	84 06	1859 .....	Charles L. McClung.
Truxillo, Honduras, Central America .....	15 54	86 00	1854 .....	E. Purdot.
Turk's Island, West Indies .....	21 29	71 05	1858, '59 .....	J. B. Hayne.
Tuscaloosa, Ala., (University of Alabama)	33 12	87 28	1854, '55 .....	Prof. M. Tuomey and George Benagh.
Tuscumbia, Mo .....	38 13	92 23	1859 .....	William M. Lumpkin.



## GENERAL LIST OF STATIONS.

XXV

NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
	° ' "	° ' "		
Union College, N. Y.—(See Schenectady.)				
Union Hill, Texas	30 30	96 31	1857, '58, '59	Dr. W. H. Gantt.
Union Rancho, Cal.	39 30	121 00	1858	William L. Dunkum.
Union Rancho, Cal.	39 30	121 00	1859	James Slaven.
Uniontown, Ala.	32 30	87 33	1859	Rev. R. A. Cobb.
Unionville, Ohio	41 50	81 00	1855, '56	Miss Ardelia Cunningham.
University of Alabama.—(See Tuscaloosa.)				
University of Michigan.—(See Ann Arbor.)				
University of Mississippi.—(See Oxford.)				
University of North Carolina.—(See Chapel Hill.)				
University of the Pacific.—(See Santa Clara.)				
University of Vermont.—(See Burlington.)				
University of Wisconsin.—(See Madison.)				
University Place, Tenn.	35 12	85 48	1859	Charles B. Barney.
Up Park Camp, Jamaica.	17 59	76 56	1855	Col. W. B. Marlow.
Up Park Camp, Jamaica.	17 59	76 56	1856	James G. Sawkins.
Upper Alton, Ill.	38 55	90 10	1854, '55, '56, '57, '58, '59	Dr. John James.
Urbana, Ohio, (Urbana University)	40 06	83 43	1854, '55, '56, '57, '58, '59	Prof. Milo G. Williams.
Utica, N. Y., (Lunatic Asylum).	43 07	75 15	1856, '57	L. A. Tourtellot, M. D.
Vassalborough, Me.	40 27	69 42	1859	James Van Blascow.
Vera Cruz, Mexico.	19 12	96 09	1856, '57, '58, '59	Dr. German Berendt.
Vera Cruz, Mexico.	19 08	96 08	1858	Charles Sartorius.
Vicksburg, Miss.	32 22	90 56	1854	N. Hatch.
Wabashaw, Minn.	44 30	92 15	1857, '58	Rev. Spencer L. Hillier.
Waccamaw, S. C.—(See All Saints.)				
Waldron, Ark.	34 53	94 00	1859	George W. Featherston.
Wales, N. Y.	42 46	78 37	1854	S. O. Carpenter.
Wallingford, Ct.	41 27	72 50	1856, '57, '58, '59	Benjamin F. Harrison.
Walnut Grove, Tenn.	36 00	82 53	1856, '57	James B. Bean.
Wampsville, N. Y.	43 04	75 50	1854, '55, '56, '57, '58, '59	Dr. Stillman Spooner.
Wardensville, Va.—(See Crack Whip.)				
Warren, Me.	44 05	59 15	1859	Calvin Bickford.
Warrenton, Mo.	38 45	91 11	1859	Marion F. Hamaker.
Warrenton, Mo.	38 37	91 16	1859	Miss Mary Alice Tidswell.
Warrenton, N. C.	36 30	78 15	1857	Dr. W. M. Johnston.
Warrington, Fla., (Navy Yard)	30 20	87 16	1854, '55, '56, '57, '58, '59	John Pearson and others.
Warrior's Mark, Pa.	40 39	78 14	1854	J. R. Lowrie.
Warsaw, Ill.	40 20	91 31	1856, '57, '58	Benjamin Whitaker.
Washington, Ark.	33 43	93 37	1859	Nathan D. Smith, M. D.
Washington, D. C., (near)	38 56	76 58	1857	E. G. Arnold.
Washington, D. C.	38 53	77 01	1854, '55, '56, '57, '58, '59	Smithsonian Institution.
Washington, D. C., (near)			1857, '58	J. Weissner.
Washington, Ga.—(See Factory Mills.)				
Washington, Texas	30 26	96 15	1856	W. H. T. Rhodes.
Washington, Texas	30 26	96 15	1856, '57, '58, '59	B. H. Rucker.
Washington College, Md.—(See Chestertown.)				
Waterford, N. Y.	42 48	73 41	1856, '57, '58, '59	John C. House.
Waterloo, Iowa	42 30	92 30	1859	L. H. Doyle.
Watertown, N. Y.	43 56	76 08	1855, '56	Peter O. Williams, M. D.
Waukesha, Wis.	42 50	88 11	1856, '57, '58, '59	Prof. S. A. Bean and L. C. Slye, M. D.
Wausau, Wis.	45 00	89 40	1858, '59	W. A. Gordon, M. D.
Waynesville, Ill.	40 16	89 07	1858, '59	Joshua E. Cantril.
Waynesville, Mo.	37 50	92 07	1859	B. G. Lingow.
Webberville, Texas.	30 14	97 34	1859	E. W. Yellowby.
Welshfield, Ohio	41 23	81 12	1857, '58, '59	B. F. Abell.
Wellsburg, Va.—(See Cross Creek.)				
Wellsville, N. Y.	42 07	78 06	1857, '58	H. M. Sheerar.
West Bedford, Ohio	40 18	82 01	1856, '57	H. D. McCarty.
Wesleyan University, Ct.—(See Middletown.)				
West Concord, N. Y.	42 32	78 52	1856, '57	Lewis Woodward.
West Cornwall, Ct.	41 50	73 21	1854	T. S. Gold.
West Day, N. Y.	43 20	74 16	1858, '59	Jude M. Young.



NAME OF STATION.	North latitude.	West longitude from Greenwich.	DATE OF OBSERVATION.	NAME OF OBSERVER.
West Enfield, N. H.....	43 30	72 00	1856, '57, '58 .....	Nathaniel Purmort.
Western Reserve College, Ohio.—(See Hudson.)				
Westerville, Ohio.....	40 04	83 10	1858, '59.....	Prof. John Haywood.
West Fairlee, Vt.....	43 55	72 15	1856, '57.....	L. W. Bliss.
West Farms, N. Y.—(See Morrisania.)				
Westfield, Mass.....	42 06	72 48	1854, '55, '56, '57, '58, '59 ..	Rev. Emerson Davis, D.D.
West Green, N. C.....	36 06	79 45	1859.....	Samuel W. Westbrook.
West Haverford, Pa.....	40 00	75 21	1854, '55, '56, '57, '58, '59 ..	Paul Swift, M. D.
West Salem, Ill.....	38 30	88 00	1856, '57, '58, '59 .....	Henry A. Titz.
Westtown, Pa.....	39 57	75 34	1857, '58, '59 .....	Samuel Alsop.
West Urbana, Ill.....	40 09	88 17	1857, '58, '59 .....	Dr. John Swain.
Westville, Miss.....	31 52	90 00	1859.....	J. R. Cribbs.
Westwood, Va.....	37 33	77 27	1859.....	Charles J. Meriwether.
Wet au Glaize, Mo.....	38 06	92 17	1859.....	B. D. Dodson.
Wewokaville, Ala.....	33 20?	86 00?	1854.....	Benjamin T. Holley.
Weymouth, Mass.....	42 10	71 00	1856, '57, '59.....	Norton Quincy Tirrell, M. D.
Wheaton, Ill., (Illinois Institute).....	41 49	88 06	1857, '58, '59.....	Prof. George H. Collier.
Wheeling, Va.....	40 07	80 42	1859.....	George P. Lockwood.
Wheelock, Texas.....	30 55	96 27	1859.....	F. Kellogg.
Whitemarsh Island, Ga.....	32 04	81 05	1854, '55, '56, '57, '58, '59..	R. T. Gibson.
Williams College, Mass.—(See Williamstown.)				
Williamstown, Mass.....	42 43	73 13	1854, '55, '56, '57, '58, '59..	Williams' College.
Willow Creek, Ill.....	41 45	89 05	1859.....	E. E. Bacon.
Wilson, N. Y.....	43 20	78 56	1858, '59.....	E. S. Holmes.
Winchester, Tenn.....	35 12	86 00	1859.....	S. W. Houghton.
Winchester, Va.....	39 15	78 10	1854, '55, '56, '57, '58, '59...	John W. Marvin.
Windham, Maine.....	43 49	70 17	1854, '55, '56.....	Samuel A. Eveleth.
Windham, Ohio.....	41 10	81 05	1857, '58, '59.....	Samuel W. Treat.
Windsor, Nova Scotia, (King's College)....	44 59	64 07	1857, '58, '59.....	Rev Prof. J. M. Hensley and Prof. H. How.
Winnebago, Ill.....	42 17	89 11	1857, '58, '59.....	James W. Tolman.
Wirt Court-house, Va.....	39 05	81 26	1856, '57, '58.....	Dr. Josiah W. Hoff.
Wolfville, Nova Scotia, (Acadia College)....	45 06	64 25	1855, '56, '57, '58, '59.....	Prof. A. P. S. Stuart and C. F. Hartt.
Woodbourne, Va.—(See Garysville.)				
Woodborough, Texas.—(See Preston )				
Wood's Hole, Mass.....	41 40	70 17	1854, '55.....	R. R. Gifford.
Woodstock, Ill.....	42 20	88 30	1859.....	George R. Bassett.
Woodstock, Vt.....	43 36	72 35	1857, '58, '59.....	Charles Marsh.
Woodstown, N. J.....	39 39	75 25	1859.....	George Watson.
Worcester, Mass.....	42 16	71 48	1854, '55, '56, '57, '58, '59...	State Lunatic Hospital.
Worthington, Pa.....	40 52	79 39	1859.....	Samuel Scott.
Wyandotte City, Kansas.....	39 08	94 20	1859.....	John H. Millar.
Yankeetown, Ohio.....	40 00	84 32	1854.....	A. Jaque.
Yellville, Ark.....	36 14	92 40	1859.....	L. W. West and W. B. Flippin.
Yorkville, Ala.....	33 30	88 17	1854.....	Dr. John W. Payne.
Youngsville, Pa.....	41 50	79 29	1854.....	Dr. A. C. Blodget.
Ypsilanti, Mich.....	42 15	83 47	1859.....	C. S. Woodard.
Zanesfield, Ohio.....	40 22	83 38	1854.....	J. F. Lukins.
Zanesville, Ohio.....	40 00	81 31	1856.....	L. M. Dayton.
Zanesville, Ohio.....	39 58	82 29	1854, '55, '56, '57.....	John G. F. Holston, M. D.
Zanesville, Ohio.....	39 58	82 01	1859.....	Aaron Peters.
Zebulon, Ga.....	33 07	84 26	1856, '57, '58, '59.....	Mrs. J. T. Arnold.



# ALPHABETICAL LIST OF OBSERVERS

FOR THE

## YEARS 1854 TO 1859.

NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Abbe, Cleveland	1859	Lansing	Michigan.
Abell, B. F.	1857, '58, '59	Welshfield	Ohio.
Abell, J. Ralls	1859	Mont View	Virginia.
Abert, Thayer	1859	Warrington	Florida.
Adams, Edward L.	1859	Boston	Massachusetts.
Adams, Irah B.	1854	Lowville	New York.
Adams, J. W.	1859	Portland	Maine.
Alba, Dr. E. M.	1854, '55, '56, '57, '58	Angelica	New York.
Alcott, William P.	1859	Williamstown	Massachusetts.
Aldrich, Verry	1859	Tiskilwa	Illinois
Alexander, Jas. M.	1859	Spencertown	New York.
Alison, Dr. H. L.	1856, '57, '58, '59	Carlisle	Alabama.
Allen, Edwin	1859	New Brunswick	New Jersey.
Allen, James	1857, '58, '59	Port Huron	Michigan.
Allen, Prof. E. H.	1854	Troy	New York.
Allen, Prof. Geo. N.	1857	Oberlin	Ohio.
Allen, W. D.	1854	Buttalo	New York.
Allin, Lucius C.	1854, '55, '56	Springfield	Massachusetts.
Allis, M. H.	1859	Gonzales	Texas.
Allison, Jesse	1859	Bloomington	Illinois.
Alsep, Samuel	1857, '58, '59	Westtown	Pennsylvania.
Ammen, J.	1857, '58, '59	Ripley	Ohio.
Anderson, Dr. C. L.	1854	St. Anthony's Falls	Minnesota.
Anderson, Dr. James.	1854, '55, '56, '57	The Rock	Georgia.
	1859	Thomaston	Georgia.
Anderson, H. H.	1859	Rockville	Indiana.
Andrews, Dr. Seth L.	1856, '57	Romeo	Michigan.
Andrews, Prof. J. W.	1854, '55	Marietta	Ohio.
Anthony, Newton	1857, '58, '59	Mount Union	Ohio.
Arden, Thomas B.	1854, '55, '56, '57, '58, '59	Beverly	New York.
Armstrong, S.	1859	Pardeeville	Wisconsin.
Arnold, E. G.	1856	Acquidnesset	Rhode Island.
	1857	Near Washington	Dist. of Columbia.
Arnold, James B.	1857	Shelby Bay	Bermuda.
Arnold, Mrs. J. T.	1856, '57, '58, '59	Zebulon	Georgia.
Astrop, R. F.	1854, '55, '56, '57, '58, '59	Crichton's Store	Virginia.
Atkins, Rev. L. S.	1857, '58, '59	Madison	Ohio.
Atkinson, G. H.	1857, '58, '59	Oregon City	Oregon.
Atwood, Isaac	1859	Lake Mills	Wisconsin.
Aubier, Prof. John	1858, '59	Fordham	New York.
Austin, W. W.	1854, '58, '59	Richmond	Indiana.
Ayres, Dr. W. O.	1856, '57, '58, '59	San Francisco	California.
Babcock, Andrew J.	1857, '58, '59	Aurora	Illinois.
Babcock, E.	1856, '57, '58, '59	Riley	Illinois.
Bacon, E. E.	1859	Willow Creek	Illinois.
Bacon, William	1854, '55, '56, '57, '58, '59	Richmond	Massachusetts.
Baer, Miss Harriott M.	1854, '55, '56, '57, '58, '59	Sykesville	Maryland.
Bailey, James B.	1856, '57, '58, '59	Gainesville	Florida.
Bailey, S. S.	1859	Dundee	Missouri.
Baird, John H.	1856, '57, '58, '59	Tarentum	Pennsylvania.
Baker, Frank	1857, '58	South Pass	Illinois.
Baker, J. C.	1856, '57, '58, '59	Stanbridge	Canada.
Baker, Miss Mary E.	1854, '55	Ceresco	Wisconsin.
Baldwin, Dr. A. S.	1854, '55, '56, '57, '58, '59	Jacksonville	Florida.
Ball, Dr. J. E., and Mrs. Ida E.	1854, '55	Keokuk	Iowa.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Ballou, Dr. N. E.	1858, '59	Sandwich	Illinois.
Barbage, Joshua C.	1859	Hardinsburg	Kentucky.
Barber, Prof. G. M.	1855	Berea	Ohio.
Barclay, Dr. R. G.	1858, '59	Jerusalem	Palestine.
Barker, Thomas M.	1857	Ashville	Alabama.
Barlow, Dennis	1859	Arkadelphia	Arkansas.
Barnes, Charles	1854, '55, '58	Madison	Indiana.
Barnes, Dr.	1856, '57	New Albany	Indiana.
Barney, Charles B.	1859	Fort Vancouver	Oregon.
Barrett, James	1859	University Place	Tennessee.
Barrows, Dr. George B.	1858, '59	Linden	Pennsylvania.
Bartlett, Isaac	1854, '55, '56	Fryeburg	Maine.
Bartlett, Joshua	1859	Logansport	Indiana.
Barton, Dr. E. H.	1854, '55	South Thomaston	Maine.
Bassett, George R.	1854, '55, '57	New Orleans	Louisiana.
Batchelder, F. L.	1859	Columbia	South Carolina.
Beal, Dexter	1859	Woodstock	Illinois.
Beal, Willard W.	1857, '58	Hibernia	Florida.
Bean, Dr. James B.	1856, '57, '58, '59	Franklin	Iowa.
Bean, Prof. S. A.	1857	Franklin	Iowa.
Beatty, Prof. O.	1856, '57	Walnut Grove	Tennessee.
Beckwith, Dr. T. Francis	1858, '59	Micanopy	Florida.
Beeman, Carlisle D.	1856, '57, '58, '59	Waukesha	Wisconsin.
Behman, F.	1854, '55, '56, '57, '58, '59	Danville	Kentucky.
Belcher, W. C.	1856	Garysville	Virginia.
Bell, Hon. Samuel N.	1857, '58, '59	Rossville	Iowa.
Bell, Jacob E.	1854	Fort Pierre	Nebraska.
Bell, John J.	1857, '58, '59	Marysville	California.
Bell, Mrs. E. M. A.	1854, '55, '56, '57, '59	Manchester	New Hampshire.
Benagh, Prof. George	1858, '59	Leitersburg	Maryland.
Benner, J. F.	1854, '55, '56, '57	Carmel	Maine.
Bennett, Henry	1858, '59	Carthage	Illinois.
Bennett, Miss Sarah E.	1854, '55	Tuscaloosa	Alabama.
Benton, F. A.	1857, '58, '59	New Lisbon	Ohio.
Berendt, Dr. German	1856, '57, '58	Collingwood	Ohio.
Berger, Martin L.	1859	Collingwood	Ohio.
Berthoud, E. L.	1854, '55	Mount Vernon	Ohio.
Bickford, Calvin	1856, '57, '58, '59	Vera Cruz	Mexico.
Bidwell, Dr. Edwin C.	1859	Williamstown	Massachusetts.
Binkerd, J. S.	1854	Barbacoos	N. Granada, S. A.
Bixby, A. H.	1854	Logansport	Indiana.
Blackwell, William H.	1858, '59	Leavenworth City	Kansas.
Blake, J. B.	1859	Warren	Maine.
Blaker, G. H.	1854, '55, '56	Quasqueton	Iowa.
Blanding, William M.	1856, '57	Germantown	Ohio.
Bliss, George	1854	Lafayette	Indiana.
Bliss, L. W.	1857, '58	Francestown	New Hampshire.
Blodget, Dr. A. C.	1859	Perryville	Arkansas.
Blodget, W. O.	1859	Lagrange	Tennessee.
Board of Trade	1858, '59	Marquette	Michigan.
Bond, Prof. W. C.	1858	Falls of St. Croix	Wisconsin.
Boston Telegraph, (newspaper)	1856, '57	Shelburn	Vermont.
Bosworth, Prof. R. S.	1856, '57	West Fairlee	Vermont.
Boucher, Wesley K.	1858	Bradford	Vermont.
Bowen, Miss Anna M. J.	1854	Youngsville	Pennsylvania.
Bowen, W. T.	1854	Sugar Grove	Pennsylvania.
Bowles, Dr. S. B.	1856, '57, '58, '59	Halifax	Nova Scotia.
Bowlsby, George W.	1855, '56	Cambridge	Massachusetts.
Bowman, Dr. E. H.	1855, '56	Cincinnati	Ohio.
Bowman, John	1854, '56, '57	College Hill	Ohio.
Boyers, W. R.	1859	Moquelumne Hill	California.
Boyd, S. T.	1858, '59	Elkhorn	Nebraska.
Brackett, J. Emerson	1859	Sharonville	Ohio.
Breed, J. Everett	1859	Greenfield	Missouri.
	1857, '58, '59	Monroe	Michigan.
	1854, '55, '56, '57, '58, '59	Edgington	Illinois.
	1858	Baldwinsville	New York.
	1858, '59	Buffalo	Virginia.
	1859	Point Pleasant	Virginia.
	1859	Altoona	Pennsylvania.
	1859	Iberia	Ohio.
	1859	Belfast	Maine.
	1854, '55, '56	Smithville	New York.
	1856, '57, '58	New London	Wisconsin.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Brendel, Dr. Frederick .....	1856, '57, '58, '59 .....	Peoria .....	Illinois.
Brewer, Francis A. ....	1857, '58, '59 .....	Springfield .....	Massachusetts.
Brickenstein, Hermann A. ....	1855, '56, '57 .....	Nazareth .....	Pennsylvania.
Brightman, John C. ....	1857, '58 .....	Goliad .....	Texas.
Brooks, John .....	1857 .....	Helena .....	Texas.
Brooks, Rev. Jabez .....	1854, '55, '56, '57 .....	Princeton .....	Massachusetts.
Brooks, Samuel .....	1855, '56 .....	Red Wing .....	Minnesota.
Brown, Branch .....	1859 .....	Chicago .....	Illinois.
Brown, B. Gould .....	1858, '59 .....	Stratford .....	New Hampshire.
Brown, E. E. ....	1856, '57 .....	Stratford .....	New Hampshire.
Brown, G. W. ....	1859 .....	Hartland .....	Maine.
Brown, John J. ....	1857, '58, '59 .....	Lawrence .....	Kansas.
Brown, J. W. ....	1859 .....	Dansville .....	New York.
Brown, Samuel .....	1858 .....	Edgar County .....	Illinois.
Brown, William B. G. ....	1854, '55, '56, '57, '58 .....	Bedford .....	Pennsylvania.
Brugger, Samuel .....	1855 .....	Stratford .....	New Hampshire.
Buckland, David .....	1856, '57, '58, '59 .....	Fleming .....	Pennsylvania.
Bullock, J. T. ....	1854, '55, '56, '57, '58, '59 .....	Brandon .....	Vermont.
Burrell, J. Ilgen .....	1859 .....	Shelbyville .....	Indiana.
Burt, Henry M. ....	1858, '59 .....	Bellevue .....	Pennsylvania.
Bushnell, Rev. A. ....	1857 .....	Bellevue .....	Nebraska.
Byers, Dr. Robert .....	1855 .....	Nengenenge .....	Africa.
Byers, William N. ....	1859 .....	Kirksville .....	Missouri.
Byram, Ephraim N. ....	1857, '58, '59 .....	Omaha .....	Nebraska.
	1854, '55, '56, '57, '58 .....	Sag Harbor .....	New York.
Calder, John G. ....	1859 .....	Ireland Island .....	Bermuda.
Camp, Benjamin F. ....	1859 .....	Covington .....	Georgia.
Campbell, Dr. W. M. ....	1854, '55, '56, '57, '58, '59 .....	Battle Creek .....	Michigan.
Campbell, John .....	1859 .....	Carrollton .....	Missouri.
Canfield, Dr. Colbert A. ....	1859 .....	Monterey .....	California.
Cantril, Joshua E. ....	1858, '59 .....	Waynesville .....	Illinois.
Canudas, Antonio .....	1857, '58, '59 .....	Guatemala .....	Central America.
Capon, E. ....	1858, '59 .....	Batavia .....	Illinois.
Carpenter, Prof. S. H. ....	1854 .....	Madison .....	Wisconsin.
Carver, Rev. E. W. ....	1854 .....	Red Lake .....	Minnesota.
Carver, Dr. Robert Thadd .....	1855 .....	Friendship .....	Tennessee.
Carpenter, S. O. ....	1854 .....	Wales .....	New York.
Carpenter, Thornton .....	1854 .....	Camden .....	South Carolina.
Carter, Thomas .....	1859 .....	Raleigh .....	North Carolina.
Caswell, Prof. Alexis .....	1854, '55, '56, '57, '58, '59 .....	Providence .....	Rhode Island.
Chadbourne, Prof. P. A. ....	1854 .....	Williamstown .....	Massachusetts.
Chandler, Marine T. W. ....	1857 .....	Falls of St. Croix .....	Wisconsin.
Chandler, Dr. Charles Q. ....	1856 .....	Rocheport .....	Missouri.
Chappellsmith, John .....	1854, '55, '56, '57, '58, '59 .....	New Harmony .....	Indiana.
Chase, Arthur .....	1859 .....	Claremont .....	New Hampshire.
Chase, C. T. ....	1854 .....	Chatham .....	New York.
Chase, T. ....	1859 .....	Marion .....	Ohio.
Chickering, J. W. ....	1855, '56, '57, '58 .....	Ovid .....	New York.
Childs, E. W. ....	1858, '59 .....	Hudson .....	Ohio.
Chorpenning, Dr. Frank .....	1856 .....	Somerset .....	Pennsylvania.
Christian, John .....	1859 .....	Harrisonville .....	Missouri.
Clark, Thomas .....	1858, '59 .....	Beaver Bay .....	Minnesota.
Clark, William P. ....	1858, '59 .....	Montville .....	Ohio.
Clark, Dr. D. ....	1854, '55 .....	Flint .....	Michigan.
Clarke, James T. ....	1856 .....	Mount Solon .....	Virginia.
Clarke, Lawrence, jr. ....	1859 .....	Fort Rae .....	British America.
Clarke, Prof. Ambrose W. ....	1858 .....	Chestertown .....	Maryland.
	1859 .....	Delafield .....	Wisconsin.
Clarkson, Rev. David .....	1859 .....	Fort Riley .....	Kansas.
Cobb, Rev. R. A. ....	1859 .....	Uniontown .....	Alabama.
Cobleigh, D. D., Rev. Nelson E. ....	1859 .....	Lebanon .....	Illinois.
Coffin, Matthew .....	1859 .....	Otsego .....	Michigan.
Coffin, Prof. William .....	1854 .....	Batavia .....	Illinois.
Coffin, Selden J. ....	1855, '56, '57 .....	Easton .....	Pennsylvania.
Cofran, L. B. ....	1857, '58 .....	Oakland .....	Maryland.
Colbrunn, Edward .....	1858 .....	Cleveland .....	Ohio.
	1859 .....	Rockport .....	Ohio.
Colby, E. P. ....	1858, '59 .....	Concord .....	New Hampshire.
Colby, James K. ....	1854, '55 .....	St. Johnsbury .....	Vermont.
Coleman, William .....	1859 .....	Texana .....	Texas.
Collier, Alfred .....	1859 .....	South Groton .....	Massachusetts.
Collier, D. C. ....	1859 .....	Denver City .....	Kansas.
Collier, Prof. George H. ....	1857, '58, '59 .....	Wheaton .....	Illinois.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Comings, G. P.	1856, '57	Palmyra	Missouri.
Comly, John	1854, '57, '58	Byberry	Pennsylvania.
Conklin, Thomas A.	1859	Trenton	Missouri.
Connolly, Henry	1857, '58, '59	Rigolet	Labrador.
Cook, Franklin W.	1859	Bendersville	Pennsylvania.
Cooke, Prof. George	1854	Knoxville	Tennessee.
Cooke, Robert L.	1854, '55, '56, '57, '58	Bloomfield	New Jersey.
Cooper Female Seminary	1856	Dayton	Ohio.
Cornish, John H.	1857, '58, '59	Aiken	South Carolina.
Corse, John M.	1859	Burlington	Iowa.
Cotton, D. B.	1859	Portsmouth	Ohio.
Couch, Samuel	1854, '55, '56, '57, '58	Ashland	Virginia.
Coulter, B. F.	1859	Brownsville	Arkansas.
Covert, A. B.	1859	Farmer	New York.
Coventing, W. B.	1854	Kendallville	Indiana.
Craigie, Dr. W.	1854, '55, '57, '58, '59	Hamilton	Canada.
Crane, Heber	1859	Corunna	Michigan.
Craven, Thomas J.	1856, '57	Newark	Delaware.
Crawford, James	1858	Centre Signal Station	Bermuda.
Crawford, Robert	1856	Newark	Delaware.
Crawford, Prof. W. A.	1854, '55	Newark	Delaware.
Cribbs, J. R.	1859	Westville	Mississippi.
Crisp, John F.	1857, '58	Evansville	Indiana.
Crockett, John M.	1859	Dallas	Texas.
Crookham, George L.	1854, '55	Jackson	Ohio.
Crosby, J. B.	1857, '58, '59	New Buffalo	Michigan.
Cumming, S. J.	1854, '55	Monroeville	Alabama.
Cunningham, J. L.	1859	Bastrop	Texas.
Cunningham, Miss Ardelia, (see Mrs. Ardelia C. King.)	1854, '55, '56, '57 1855, '56	Madison Unionville	Ohio. Ohio.
Currier, Alfred O.	1854, '55, '56, '57, '58	Grand Rapids	Michigan.
Curtis, W. W.	1859	Rocky Run	Wisconsin.
Cutting, Hiram A.	1859	Lunenburg	Vermont.
Dabney, Samuel W.	1856, '57	Horta, Fayal Island	Azores.
Dalton, O. D.	1859	Greenville	Missouri.
Dana, William D.	1854, '55, '56, '57, '58, '59	Perry	Maine.
Darby, Prof. John	1854 1855, '56, '57, '58	Culloden Auburn	Georgia. Alabama.
Darling, Leander A.	1856, '57	Bridgewater	Massachusetts.
Darlington, Fenelon	1854, '55, '56, '57, '58, '59	Pocopson	Pennsylvania.
Davidson, H. M.	1859	Freedom	Ohio.
Davies, James F.	1859	Gainesville	Arkansas.
Davis, Rev. Emerson, D. D.	1854, '55, '56, '57, '58, '59	Westfield	Massachusetts.
Davis, W. E.	1859	Lancaster	Ohio.
Dawson, Dr. John L.	1855, '56, '57, '58	Charleston	South Carolina.
Day, William	1859	Morristown	New York.
Dayton, E. A.	1854, '55, '56, '57, '58, '59	Madrid	New York.
Dayton, J. H.	1859	South Bend	Indiana.
Dayton, Lewis M.	1855 1856 1857, '59	Newark Zanesville Lancaster	Ohio. Ohio. Ohio.
D'Spain, Dr. B. L.	1859	Tarrant	Texas.
Dearing, D. S.	1854	Brookville	Pennsylvania.
De Graeffenried, W. G.	1859	Columbus	Texas.
Dejennett, R.	1859	Greenville	Texas.
Delaney, John, & Sons	1856, '57, '58, '59	St. John's	Newfoundland.
Denig, E. T.	1854	Fort Union	Nebraska.
Denning, William H.	1856, '57, '58, '59	Fishkill Landing	New York.
Dennis, William C.	1854, '55, '56, '57, '58, '59	Salt Ponds	Florida.
Desellem, Jacob M.	1854, '55	Richmond	Ohio.
Dewey, Professor Chester, LL. D.	1856, '57, '58, '59	Rochester	New York.
Dickinson, George C.	1856, '57, '58, '59	Rougemont	Virginia.
Dille, Israel	1853	Newark	Ohio.
Dodd, C. M.	1856	Salem	New Jersey.
Dodge, J. W., & Son	1859	Pomona	Tennessee.
Dodson, B. D.	1859	Wet au Glaize	Missouri.
Dorsey, Edward B.	1858, '59	Chanarcillo	Chili, S. A.
Doughty, Dr. William H.	1858, '59	Augusta	Georgia.
Doyle, L. H.	1859 1859	Otsego Waterloo	Wisconsin. Iowa.
Drummond, Rev. J. H.	1859	Spring Hill	Kansas.
Drysdale, Robert H.	1858	Marlboro	North Carolina.
Du Bois, H. G., Jr.	1859	New Haven	Connecticut.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Dudley, Timothy	1858, '59	Jacksonville	Illinois.
Duffield, Dr. Edward	1856	Hannibal	Missouri.
Duffield, Rev. George	1854, '55, '56	Detroit	Michigan.
Dunkum, William L.	1858	Union Rancho	California.
Durham, W. J.	1856, '57, '58	Racine	Wisconsin.
Easter, Prof. John D.	1857, '58, '59	Athens	Georgia.
Ebert, S.	1859	Germantown	Pennsylvania.
Edwards, Joseph	1854, '55, '56, '57, '58	Chromedale	Pennsylvania.
Edwards, Rev. Tryon, D. D.	1854, '55, '56, '57, '58	New London	Connecticut.
Eggert, John	1856, '57, '58, '59	Berwick	Pennsylvania.
Eldredge, Rev. William V.	1856, '57, '58, '59	Brighton	Illinois.
Elletson, Job	1859	Geneva	New York.
Elliott, Prof. J. Boyd	1855, '56, '57	Port Gibson	Mississippi.
Ellis, Dr. Edwin	1856, '57, '58, '59	Bay City	Wisconsin.
Ellis, D. H.	1856, '57, '59	Crack Whip	Virginia.
	1857, '58	Canton	Massachusetts.
Ellis, Dr. William Y.	1859	Lecompton	Kansas.
Ellsworth, Lewis	1859	Naperville	Illinois.
Ellsworth, Milton S.	1859	Naperville	Illinois.
Engelmann, Dr. George	1854, '55, '56, '59	St. Louis	Missouri.
Epperson, W. T.	1859	Jefferson	Texas.
Ervendberg, Prof. L. C.	1854, '55	New Braunfels	Texas.
	1856	City of Mexico	Mexico.
Evans, John	1859	Fontenelle	Nebraska.
Eveleth, Samuel A.	1854, '55, '56	Windham	Maine.
Ewing, J. M.	1859	Tarrant	Texas.
Fairall, Herman H.	1856	Iowa City	Iowa.
Fairbanks, J. P.	1854	St. Johnsbury	Vermont.
Fairbanks, Franklin	1857, '58, '59	St. Johnsbury	Vermont.
Fairchild, Prof. J. H.	1854, '55, '56, '57	Oberlin	Ohio.
Fallon, John	1856, '57, '58, '59	Lawrence	Massachusetts.
Fauntleroy, H. H.	1856, '57	Montross	Virginia.
Featherston, George W.	1859	Waldron	Arkansas.
Fellows, Henry B.	1857	Sennett	New York.
Felt, Charles W.	1858, '59	Bridgewater	Massachusetts.
Felt, John, jr.	1856	Liberty	New York.
	1854, '56	Colonia Tovar	Venezuela, S. A.
Fendler, Augustus	1858	Caracas	Venezuela, S. A.
	1859	St. Louis	Missouri.
Finley, A. J.	1859	Davenport	Iowa.
Finley, P. F.	1859	Spring Hill	Arkansas.
Finley, Rufus W.	1859	Richmond	Missouri.
Fish, Edmund	1857	Council City	Kansas.
	1858, '59	Burlingame	Kansas.
Fish, Lucian	1859	Burlingame	Kansas.
Fisher, Dr. James C.	1856	Dayton	Ohio.
Fitzgerald, Rev. F.	1854	Thornbury	North Carolina.
Flippin, W. B.	1859	Yellville	Arkansas.
Force, Nathan P.	1859	Farmington	Missouri.
Forke, Rev. J. L.	1856, '57	New Braunfels	Texas.
Fory, John C.	1856, '57, '58, '59	Bellevue	Iowa.
Foster, J.	1859	Centre Signal Station	Bermuda.
Foster, William S.	1859	Montgomery	Alabama.
Frambes, Prof. Oliver S.	1859	Santa Clara	California.
Frantz, Jacob	1854, '55, '56, '57, '58	Paradise	Pennsylvania.
Frazer, James	1856, '57, '59	Mustapha	Virginia.
Freeman, F. N.	1857, '58	Claremont	New Hampshire.
Freeze, G.	1859	Boston	Texas.
French, John R.	1856, '57	Mexico	New York.
	1857, '58, '59	Laconia	New Hampshire.
French, Josiah B.	1857, '58, '59	Lake Village	New Hampshire.
Friedrich, Otto	1858, '59	New Braunfels	Texas.
Friel, P.	1856, '57, '58, '59	Shamokin	Pennsylvania.
Frost, E. C.	1859	Havana	New York.
Frost, Rev. Adolph.	1854, '55, '56	Burlington	New Jersey.
Fry, Joseph	1856, '57	Warrington	Florida.
	1856, '57	Edisto Island	South Carolina.
Fuller, Dr. Edward N.	1857	Mount Pleasant	South Carolina.
Fuller, E. A.	1859	Freedom	Maine.
Gaffney, James O.	1859	San Patricio	Texas.
Gamble, J. W.	1859	Hillsboro	Ohio.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Gantt, Dr. W. H. ....	1856 .....	Pin Oak .....	Texas.
Gardiner, James .....	1857, '58, '59 .....	Union Hill .....	Texas.
Gardiner, R. H. ....	1859 .....	Port La Vaca .....	Texas.
Garland, James G. ....	1855, '56, '57, '58, '59 .....	Gardiner .....	Maine.
Garrison, O. E. ....	1854 .....	Biddeford .....	Maine.
Gay, Thomas .....	1856, '57, '58, '59 .....	Princeton .....	Minnesota.
Geological Surveyors .....	1854 .....	Bellefontaine .....	Wisconsin.
Gibbon, Lardner .....	1856, '57 .....	Port of Spain .....	Trinidad.
Gibbons, Dr. H. ....	1859 .....	Seville .....	Florida.
Gibbons, J. C. ....	1854, '55 .....	San Francisco .....	California.
Gibbs, T. ....	1854 .....	New York .....	New York.
Gibson, R. T. ....	1858, '59 .....	Huntsville .....	Texas.
Gifford, B. R. ....	1854, '55, '56, '57, '58, '59 .....	Whitemarsh Island .....	Georgia.
Gifford, R. R. ....	1856 .....	St Francisville .....	Louisiana.
Giles, F. W. ....	1854, '55 .....	Wood's Hole .....	Massachusetts.
Gilmor, Moses .....	1858 .....	Topeka .....	Kansas.
Gilman, Stephen .....	1855, '57, '58 .....	Jackson .....	Ohio.
Gilman, William H. ....	1858 .....	East Exeter .....	Maine.
Glasco, J. M. ....	1858 .....	Cayuga .....	Kansas.
Glennie, Rev. Alexander .....	1859 .....	Gilmer .....	Texas.
Glover, Eli S. ....	1854, '55, '56, '57, '58, '59 .....	All Saints .....	South Carolina.
Goff, Mrs. Mary A. ....	1857, '58 .....	Hillsborough .....	Georgia.
Gold, T. S. ....	1856 .....	Eagle River .....	Michigan.
Goodman, William R. ....	1854 .....	West Cornwall .....	Connecticut.
Goodnow, Isaac T. ....	1856, '57, '58, '59 .....	Annapolis .....	Maryland.
Gordon, Dr. W. A. ....	1857, '58, '59 .....	Manhattan .....	Kansas.
Gordon, Robert .....	1858, '59 .....	Wausau .....	Wisconsin.
Gorton, J. S. ....	1859 .....	Auburn .....	California.
Goss, B. F. ....	1856 .....	Morrisania .....	New York.
Goss, William K. ....	1859 .....	Neosho Falls .....	Kansas.
Gould, S. A. ....	1856, '57, '58, '59 .....	Border Plains .....	Iowa.
Graham, P. ....	1859 .....	Santa Clara .....	California.
Grant, John .....	1859 .....	Bentonville .....	Arkansas.
Grant, Dr. W. T. ....	1854, '55, '56, '57, '58, '59 .....	Manchester .....	Illinois.
Green, A. R. ....	1858, '59 .....	Thomson .....	Georgia.
Greene, Prof. Dascom .....	1854 .....	Jackson .....	Mississippi.
Gridley, Rev. John .....	1856, '57 .....	Troy .....	New York.
Grinnell, John .....	1856, '57, '58, '59 .....	Kenosha .....	Wisconsin.
Griswold, Prof. T. L. ....	1858 .....	Nolin .....	Kentucky.
Groneweg, Lewis .....	1855, '56 .....	Knoxville .....	Tennessee.
Guest, William E. ....	1854, '55, '56 .....	Germantown .....	Ohio.
Gunn, Donald .....	1858 .....	Dayton .....	Ohio.
Guptill, G. W. ....	1854, '55, '56, '57, '58, '59 .....	Ogdensburg .....	New York.
	1855, '56, '57, '58, '59 .....	Red River Settlement .....	Hudson's Bay Ter.
	1856, '57, '58, '59 .....	Cornish .....	Maine.
Haeuser, Emil .....	1858, '59 .....	New Danemora .....	Wisconsin.
Hahn, Charles .....	1859 .....	Galena .....	Illinois.
Haines, John .....	1858 .....	Reading .....	Pennsylvania.
Haines, William .....	1859 .....	Richmond .....	Indiana.
Hall, Dr Archibald .....	1854, '55, '57 .....	Augusta .....	Georgia.
Hall, Joel .....	1855, '56, '57, '58, '59 .....	Montreal .....	Canada.
Hall, Joseph S. ....	1854, '55, '56, '57, '58 .....	Athens .....	Illinois.
Hall, S. W. ....	1859 .....	Mount Washington .....	New Hampshire.
Hallowell, Benjamin .....	1859 .....	Hartland .....	Maine.
Hamaker, Marion F. ....	1854, '55, '56, '57, '58 .....	Alexandria .....	Virginia.
Hamilton, William .....	1859 .....	Warrenton .....	Missouri.
Hamilton, William H. ....	1857, '58, '59 .....	Bellevue .....	Nebraska.
Hammitt, John W. ....	1859 .....	Raleigh .....	North Carolina.
Hampton, Hannah E. ....	1859 .....	College Hill .....	Ohio.
Hanan, B. P. ....	1859 .....	Dudley .....	Ohio.
Hance, Ebenezer .....	1859 .....	Luray .....	Missouri.
Hanna, G. B. ....	1854, '55, '56, '57, '58, '59 .....	Morrisville .....	Pennsylvania.
Hannaford, Ebenezer .....	1859 .....	Bridgewater .....	Massachusetts.
Hanshaw, Henry E. ....	1855, '56, '57 .....	Cheviot .....	Ohio.
Hanscom, B. F. ....	1854, '55, '56, '57, '58, '59 .....	Frederick .....	Maryland.
Hardy, Harmon F. ....	1856, '57, '58 .....	North Barnstead .....	New Hampshire.
Harkness, William .....	1856 .....	Perryville .....	Arkansas.
Harleston, F. H., under direction of Superintendent of Arsenal Academy.	1854, '55 .....	Fishkill .....	New York.
Harper, George W. ....	1856, '57 .....	Rochester .....	New York.
	1856 .....	Columbia .....	South Carolina.
	1855, '56, '57, '58, '59 .....	Cincinnati .....	Ohio.



## GENERAL LIST OF OBSERVERS.

XXXIII

NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Harper, Prof. L.	1854, '55, '56	Oxford	Mississippi.
Harris, Dr. J. O.	1854, '55, '56, '57, '58, '59	Ottawa	Illinois.
Harrison, Benjamin F.	1856, '57, '58, '59	Wallingford	Connecticut.
Hart, J. H.	1854	Oswego	New York.
Hartt, C. F.	1859	Wolfville	Nova Scotia.
Harvey, J. C.	1859	Nazareth	Pennsylvania.
Hastings, John	1855	Pittsburg, (Marine Hospital)	Pennsylvania.
Hatch & Co.	1855	Jackson	Mississippi.
Hatch, Dr. F. W.	1854, '55	Sacramento	California.
Hatch, N.	1854	Vicksburg	Mississippi.
Hayne, J. B.	1858, '59	Turk's Island	West Indies.
Haywood, Prof. John	1858, '59	Westerville	Ohio.
Heaston, D. J.	1859	Bethany	Missouri.
Heckerman, Rev. Henry	1859	Bedford	Pennsylvania.
Heger, Dr. A.	1855	Pottsville	Pennsylvania.
Heisely, Dr. John	1854, '55, '56, '57, '58, '59	Harrisburg	Pennsylvania.
Hensley, Rev. Prof. J. M.	1857, '58, '59	Windsor	Nova Scotia.
Hering, C. T.	1856, '57, '58, '59	Catharina Sophia, Surinam	South America.
Herrick, F. C.	1855	Bowling Green	Kentucky.
Herrick, James D.	1856, '57, '58	Jefferson	Ohio.
Hester, Lieut. J. W., U. S. N.	1858	Warrington	Florida.
Heyser, William	1858, '59	Chambersburg	Pennsylvania.
Hibberd, A. A.	1857, '58, '59	Burlington	Minnesota.
Hickok, W. O.	1857, '58, '59	Harrisburg	Pennsylvania.
Hieto, J. A.	1858, '59	Cordova	Mexico.
Hill, F. G.	1859	Dallasburg	Ohio.
Hillier, Rev. Spencer L.	1855	Hiram	Ohio.
	1857	Prescott	Wisconsin.
	1857, '58	Wabashaw	Minnesota.
	1859	Brecksville	Ohio.
Himoe, Dr. S. O.	1857, '58	Mapleton	Kansas.
Himoe, John E.	1856, '57	Norway	Wisconsin.
Hiscox, G. D.	1856, '57	Chicago	Illinois.
Hobart, E. F.	1857	Maquoketa	Iowa.
Hobbs, O. T.	1854, '55, '56	Randolph	Pennsylvania.
Hoff, Dr. Josiah W.	1856, '57, '58	Wirt Court-House	Virginia.
Hoffaker, S. S.	1859	Carrollton	Missouri.
Hoffer, Dr. J. R.	1857, '58, '59	Mount Joy	Pennsylvania.
Holcomb, Amasa	1854, '55, '56, '57	Southwick	Massachusetts.
Hollenbeck, D. K.	1856, '57	Perrysburg	Ohio.
Hollenbeck, F.	1854, '55, '58	Perrysburg	Ohio.
Holley, Benjamin T.	1854	Weewokaville	Alabama.
Holmes, E. S.	1858	Lockport	New York.
	1858, '59	Wilson	New York.
Holmes, J. C.	1858, '59	Lansing	Michigan.
Holston, Dr. John G. F.	1854, '55, '56, '57	Zanesville	Ohio.
Hopkins, E. A.	1854	Assumption, Paraguay	South America.
Horner, W. H.	1859	Hornersville	Missouri.
Horr, Dr. Asa	1854, '55, '56, '57, '58, '59	Dubuque	Iowa.
Horton, L. S., (for Dr. Zena Pitcher)	1858, '59	Detroit, (Marine Hospital)	Michigan.
Hotchkiss, Jed	1856, '57, '58	Mossy Creek	Virginia.
	1858, '59	Stribling Springs, (nine miles SW. of Mossy Creek.)	Virginia.
Houghton, George R.	1858, '59	Easton	Pennsylvania.
Houghton, S. W.	1859	Winchester	Tennessee.
House, J. Carroll	1855, '56, '57	Lowville	New York.
House, John C.	1856, '57, '58, '59	Waterford	New York.
How, Prof. H.	1858, '59	Windsor	Nova Scotia.
Howell, Robert.	1857, '58, '59	Nichols	New York.
Hudson, Dr. A. T.	1859	Lyons City	Iowa.
Hull, Aaron B.	1856, '57	Georgetown	Connecticut.
Hunt, Ashley D.	1859	Moulton	Alabama.
Hunt, Dr. Sanford B.	1854	Buffalo	New York.
Hunt, Rev. Daniel	1854, '55, '56, '57, '58, '59	Pomfret	Connecticut.
Huntington, George C.	1859	Kelley's Island	Ohio.
Hurt, Francis W.	1855, '57, '58	Cincinnati	Ohio.
Hyde, Gustavus A.	1854, '55	Norwalk	Ohio.
	1855, '56, '57, '58, '59	Cleveland	Ohio.
Hyde, Rev. T. C. P.	1854	Spencertown	New York.
Ingalls, S. Marshall	1857, '58	Pompey	New York.
Ingersoll, J. D.	1859	Ilion	New York.
Ingram, Dr. John	1854, '55, '56, '57, '58, '59	Savannah	Ohio.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Ives, Edward R. ....	1857, '58, '59. ....	Alligator .....	Florida.
Ives, William .....	1858, '59. ....	Buffalo .....	New York.
Jackman, Prof. A. ....	1856, '57, '58, '59. ....	Norwich .....	Vermont.
Jackson, Dr. A. W. ....	1859 .....	Point Coupee .....	Louisiana.
Jacobs, Prof. M. ....	1854, '55, '56, '57, '58, '59. ....	Gettysburg .....	Pennsylvania.
Jaeger, H. W. ....	1858 .....	Lancaster .....	Ohio.
James, Prof. Charles S. ....	1856, '57, '58, '59. ....	Lewisburg .....	Pennsylvania.
James, Dr. John .....	1854, '55, '56, '57, '58, '59. ....	Upper Alton .....	Illinois.
James, C. C. ....	1857 .....	Hillsborough .....	Ohio.
Jaque, A. ....	1854 .....	Yankeetown .....	Ohio.
Jenkins, J. L. ....	1857 .....	Granville .....	Illinois.
Jennings, Dr. Samuel K. ....	1854, '55, '56, '57. ....	Austin .....	Texas.
	1858, '59. ....	Selma .....	Alabama.
	1859 .....	Orville .....	Alabama.
Jillson, Prof. Benjamin C. ....	1855 .....	Lebanon .....	Tennessee.
Johnson, A. K. ....	1859 .....	Platteville .....	Wisconsin.
Johnson, Dr. Joseph .....	1856, '57, '58, '59. ....	Charleston .....	South Carolina.
Johnson, Enoch D. ....	1857, '58, '59. ....	Jackson .....	Ohio.
Johnson, E. W. ....	1854, '55, '56, '57. ....	Canton .....	New York.
Johnson, Warren .....	1859 .....	Topsham .....	Maine.
Johnston, Dr. William M. ....	1857 .....	Warrenton .....	North Carolina.
	1859 .....	Hernando .....	Mississippi.
Johnston, Prof. John .....	1858, '59. ....	Middletown .....	Connecticut.
Jones, Silas B. ....	1859 .....	Fork Union .....	Virginia.
Julien, Alexis A. ....	1858, '59. ....	Schenectady .....	New York.
Kapp, Ernst .....	1859 .....	Sisterdale .....	Texas.
Kellogg, F. ....	1859 .....	Wheelock .....	Texas.
Kellogg, George J. ....	1859 .....	Janesville .....	Wisconsin.
Kellum, O. A. ....	1855 .....	St. Joseph .....	Minnesota.
Kelsey, Kathalo .....	1859 .....	Great Valley .....	New York.
Kendall, John F. ....	1856 .....	Pompey Hill .....	New York.
Kendall, James E. ....	1856, '57, '58, '59. ....	Poplar Grove .....	Virginia.
Kerr, Prof. W. C. ....	1857, '58, '59. ....	Davidson College .....	North Carolina.
Kersey, Dr. V. ....	1854, '55. ....	Milton .....	Indiana.
Kibbe, Dr. T. R. ....	1859 .....	Downieville .....	California.
Kilpatrick, Dr. Andrew R. ....	1856, '57, '58, '59. ....	Trinity .....	Louisiana.
King, Mrs. Ardelia C., (see Miss Ardelia Cunningham.)	1858, '59. ....	Madison .....	Ohio.
Kirkpatrick, Prof. James A. ....	1854, '55, '56, '57, '58, '59. ....	Philadelphia .....	Pennsylvania.
Kizer, William B. ....	1859 .....	Emerson .....	Missouri.
Knauer, J. ....	1854 .....	Kendallville .....	Indiana.
Knoud, Rev. James .....	1856, '57, '58. ....	Cape Girardeau .....	Missouri.
Kohler, Edward .....	1856, '57, '58, '59. ....	North Whitehall .....	Pennsylvania.
Kowuslar, Miss Ellen .....	1856, '57. ....	Berryville .....	Virginia.
Kownslar, Dr. R. ....	1858 .....	Berryville .....	Virginia.
Landon, Anna S. ....	1857, '58, '59. ....	Eden .....	New York.
Landon, Stephen .....	1856 .....	Eden .....	New York.
Lane, John .....	1859 .....	Monroe Piers .....	Michigan.
Langdon, Laurence A. ....	1854 .....	Falconer .....	New York.
Lapham, Increase A., LL.D. ....	1854, '57, '58, '59. ....	Milwaukee .....	Wisconsin.
Larabee, William H. ....	1859 .....	Greencastle .....	Indiana.
Larkin, E. P. ....	1859 .....	Milwaukee .....	Wisconsin.
Lasselle, Charles B. ....	1857, '58. ....	Logansport .....	Indiana.
Laszlo, Charles. ....	1858, '59. ....	Minatitlan .....	Mexico.
Lathrop, Prof. S. R. ....	1854 .....	Beloit .....	Wisconsin.
Lea, John .....	1855, '56. ....	Cincinnati .....	Ohio.
Lear, O. H. P. ....	1854, '55. ....	Hannibal .....	Missouri.
Lefferts, John .....	1854, '55, '56, '57, '58, '59. ....	Lodi .....	New York.
Leffman, L. ....	1859 .....	Fort Niagara .....	New York.
Leonard, Rev. L. W. ....	1854, '55. ....	Exeter .....	New Hampshire.
Lingow, B. G. ....	1859 .....	Waynesville .....	Missouri.
Little, J. T. ....	1859 .....	Dixon .....	Illinois.
Livesay, Dr. G. W. ....	1854, '55, '56. ....	Gallipolis .....	Ohio.
Lobdell, Mrs. M. J. ....	1856 .....	North Salem .....	New York.
Locke, Samuel .....	1858 .....	Lapham .....	Minnesota.
Lockwood, George P. ....	1859 .....	Wheeling .....	Virginia.
Logan, Dr. Thomas M. ....	1854, '55, '56, '57, '58, '59. ....	Sacramento .....	California.
Lord, W. G. ....	1859 .....	Limington .....	Maine.
Lowndes, Benjamin O. ....	1854, '55, '56, '57, '58, '59. ....	Bladensburg .....	Maryland.
Lowrie, J. R. ....	1854 .....	Warrior's Mark .....	Pennsylvania.
Lukins, J. F. ....	1854 .....	Zanesfield .....	Ohio.



## GENERAL LIST OF OBSERVERS.

XXXV

NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Lull, James S.	1855, '56, '57, '58, '59	Columbus	Mississippi.
Lumpkin, Wm. L.	1859	Tuscumbia	Missouri.
Luemann, John H.	1858, '59	Bardstown	Kentucky.
Lüps, Jacob	1856, '57, '58, '59	Manitowoc	Wisconsin.
Luther, S. M.	1856, '57, '58, '59	Hiram	Ohio.
Lyon, Curtis J.	1858	Williamstown	Massachusetts.
McBeth, Miss Sue	1859	Fairfield	Iowa.
McCarty, H. D.	1856, '57	West Bedford	Ohio.
McCary, Robert	1857, '58, '59	Leavenworth City	Kansas.
McClung, Charles L.	1858, '59	Natchez	Mississippi.
McConnel, Townsend	1859	Troy	Ohio.
McCreedy, Daniel	1856, '57, '58, '59	Pleasant Plain	Iowa.
McDonald, M.	1854, '55, '56, '57, '58, '59	Fort Madison	Iowa.
McDowell, Rev. A.	1854	New Creek Depot	Virginia.
McDowell, W. W.	1856, '57, '58, '59	Murfreesborough	North Carolina.
McElrath, J. J.	1857, '58	Ashville	North Carolina.
McGee, J.	1855	Camden	Arkansas.
MacKee, Rev. Charles B.	1857	Williamstown	Massachusetts.
McKenzie, John M.	1858, '59	Lewinsville	Virginia.
McKewn, W. F., under direction of Superintendent Arsenal Academy.	1859	Georgetown	Dist. of Columbia.
McMillan, Smith B.	1858	Fayette Village	Iowa.
McMullin, F.	1859	Columbia	South Carolina.
McWilliams, Dr. Alexander	1859	East Fairfield	Ohio.
Mack, A. W.	1858	Lapham	Minnesota.
Mack, Robert C.	1858, '59	Leonardtwn	Maryland.
Mackenzie, John	1858, '59	Danvers	Massachusetts.
Mackie, Matthew	1854, '55, '56, '57	Londonerry	New Hampshire.
Magee, Irving	1857, '58, '59	Moose Factory	Hudson Bay Ter.
Magnetic Observatory	1859	Clyde	New York.
Malcolm, William S.	1858	Spencertown	New York.
Malden, J. J.	1855, '56, '57, '58, '59	Toronto	Canada.
Mallinckrodt, Conrad	1855, '56, '57, '58, '59	Oswego	New York.
Mann, William	1858, '59	Thunder Bay Island	Michigan.
Marlow, Col. W. B.	1859	Augusta	Missouri.
Marsh, Charles	1859	Superior	Wisconsin.
Marsh, Charles A. J.	1855	Up Park Camp	Jamaica.
Marshall, Rev. H. B.	1857, '58, '59	Woodstock	Vermont.
Martindale, J. C.	1854	Craftsbury	Vermont.
Mathews, D.	1859	Hartland	Maine.
Mathews, Dr. M. M.	1854	Bustleton	Pennsylvania.
Mathews, Rev. Joseph McD.	1859	Burlington	Wisconsin.
Martin, Dr. Alexander	1859	Rochester	New York.
Martin, Dr. G. A.	1854, '55, '56, '57, '58, '59	Hillsborough	Ohio.
Martin, Richard A.	1859	New Albany	Indiana.
Martin, William	1856	Jacksonport	Arkansas.
Marvin, John W.	1857, '58	Newark	Delaware.
Mason, E. E.	1854, '55, '57, '58	Milford	Delaware.
Mason, Prof. R. Z.	1854, '55, '56, '57, '58, '59	Pittsburg, (Marine Hospital)	Pennsylvania.
Mattison, A.	1859	Winchester	Virginia.
Mauld, Dr. D. W.	1856, '57, '58, '59	Nebraska C'ty	Nebraska.
Mauran, Dr. P. B.	1859	Appleton	Wisconsin.
Maxey, William F.	1857, '58	Paducah	Kentucky.
Mayer, Prof. Alfred M.	1855, '56, '57, '58, '59	Georgetown	Delaware.
Meacham, H. G.	1859	St. Augustine	Florida.
Mead, D. S. B.	1859	Paris	Missouri.
Mead, Thompson	1857, '58, '59	Baltimore	Maryland.
Meehan, Thomas	1858	Evanstown	Illinois.
Menifield, George C.	1854, '55, '56, '57, '58, '59	Augusta	Illinois.
Meriwether, Charles J.	1859	Batavia	Illinois.
Merrill, Dr. Edward	1859	Germantown	Pennsylvania.
Merrill, Rev. Samuel H.	1854, '55	Mishawaka	Indiana.
Metcalf, Dr. John George	1859	Montcalm	Virginia.
Metcalf, Henry	1856, '57, '58	Westwood	Virginia.
Miles, Dr. M.	1854, '55	Trinity	Louisiana.
Millar, John H.	1854, '55	Oldtown	Maine.
Miller, Charles H.	1854, '55, '56, '57, '58, '59	Mendon	Massachusetts.
Miller, Rev. J.	1859	Sackett's Harbor	New York.
Mitchell, Dr. R. W.	1854, '55	Flint	Michigan.
	1859	Wyandotte City	Kansas.
		Gilbert's Trading Post	Nebraska.
		Millersburg	Kentucky.
		Memphis	Tennessee.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Mitchell, E.	1858	St. George's	Bermuda.
Mitchell, Hon. William	1854, '55, '56, '57, '58, '59	Nantucket	Massachusetts.
Moke, James E.	1859	Preston	Texas.
Moore, Albert	1859	Grenada	Mississippi.
Moore, Asa P.	1859	Lisbon	Maine.
Moore, Dr. George Frank	1856, '57, '58, '59	Gaston	North Carolina.
Moore, J. A.	1858	Gaston	North Carolina.
Moore, Joseph	1856, '57, '58, '59	Richmond	Indiana.
Moore, Mahlon	1859	Morrisville	Pennsylvania.
Morehouse, A. W.	1855, '56, '57	Spencertown	New York.
Morrelle, Prof. Daniel	1854, '55	Thornbury	North Carolina.
	1856, '57, '58	Goldsborough	North Carolina.
Morris, Prof. O. W.	1854, '55, '56, '57, '58, '59	New York	New York.
Mowry, George	1857, '58, '59	Somerset	Pennsylvania.
Mulligan, Andrew	1859	Charlotte	New York.
Munger, L. F.	1854	Leroy	New York.
Navy Yard	1854	Memphis	Tennessee.
Neely, Edward B.	1857, '58	St. Joseph's	Missouri.
Nelson, R. J.	1859	Halifax	Nova Scotia.
Nettleton, A.	1854	Lynchburg	Virginia.
Newcomb, J. B.	1858, '59	Elgin	Illinois.
Newton, John	1854, '55	Knox Hill	Florida.
Newton, William H.	1855	Superior	Wisconsin.
Nichols, Charles L.	1859	Newcastle	Maine.
Nicholson, Rev. Joseph John	1859	Spring Hill Institute, near Mobile.	Alabama.
Norton, J. H.	1856, '57	Plainville	New York.
Norvell, F.	1859	Greenwood	Dakota Ter.
Nourse, J. Harvey	1858, '59	Bayfield	Wisconsin.
Odell, Fletcher	1856, '57, '58, '59	Shelburne	New Hampshire.
Odell, Rev. Benjamin F.	1854, '55, '56, '58, '59	Poultney	Iowa.
	1856	Belle Prairie	Minnesota.
	1856, '57	Lake Winnibigoshish	Minnesota.
Offutt, Dr. John J. T.	1857	Capon Bridge	Virginia.
Oliver, John	1858, '59	Ottawa Point	Michigan.
Ormsby, G. S.	1854	College Hill	Ohio.
Orton, James	1855	Williamstown	Massachusetts.
Paddock, James A.	1855, '56, '57, '58, '59	Craftsbury	Vermont.
Paine, Dr. H. M.	1857, '58, '59	Clinton	New York.
Paine, R. T.	1857	Boston	Massachusetts.
Palm, Swante	1857, '58, '59	Austin	Texas.
Palmer, F. B., (for Rev. Dr. Dewey)	1857	Rochester	New York.
Parker, J. D.	1854, '55, '56, '57, '58, '59	Steuben	Maine.
Parker, Joseph	1857, '58, '59	Rupert	Vermont.
Parker, Nathan H.	1856	Clinton	Iowa.
	1856, '57, '58	Camanche	Iowa.
Parsons, B. W.	1859	Bridgewater	Massachusetts.
Parsons, Lemuel H.	1854, '55, '56, '57, '58, '59	Lambertville	New Jersey.
Parvin, Theodore S.	1854, '55, '56, '57, '58, '59	Muscatine	Iowa.
Pashley, Dr. J. S.	1859	Mosinee	Wisconsin.
Patton, Dr. Thomas	1854, '55, '56, '57, '58	Lewisburg	Virginia.
Payne, Dr. John W.	1854	Yorkville	Alabama.
Peabody, Prof. S. H.	1854	Fairfax	Vermont.
Peale, Dr. J. Burd	1858	Reading	Pennsylvania.
Pearce, James Alfred, jr.	1855, '56, '57	Chestertown	Maryland.
Pearson, John	1854, '55	Warrington	Florida.
Peck, Dr. William R.	1857, '58, '59	Bowling Green	Ohio.
Pendleton, Dr. E. M.	1854, '55, '56, '57, '58, '59	Sparta	Georgia.
Perkins, Capt. A. D.	1854, '55	Monroe	Michigan.
Perkins, Dr. H. C.	1854, '55, '56, '57, '58	Newburyport	Massachusetts.
Pernot, Prof. Claudius	1856, '57	Fordham	New York.
Perrault, Edward	1859	Lake George	Michigan.
Perry, William	1859	Cinnaminson	New Jersey.
Peters, Aaron	1859	Zanesville	Ohio.
Petty, McK	1857, '58, '59	Burlington	Vermont.
Phelps, H. E.	1857	Great Salt Lake City	Utah Territory.
Phelps, W. W.	1858, '59	Great Salt Lake City	Utah Territory.
Phillips, J. Howard	1859	Cincinnati	Ohio.
Phillips, Prof. James, D.D.	1854, '55, '56, '57, '58, '59	Chapel Hill	North Carolina.
Phillips, R. C.	1859	Cincinnati	Ohio.
Pickard, Dr. J. L.	1854, '55, '56, '57, '58, '59	Platteville	Wisconsin.
Pitcher, Dr. Zena	1858, '59	Detroit, (Marine Hospital)	Michigan.
Plumb, Dr. Ovid	1854	Salisbury	Connecticut.



## GENERAL LIST OF OBSERVERS.

XXXVII

NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Pickett, John	1859	The Plains	Virginia.
Poe, James H.	1856	Scioto	Ohio.
Pomeroy, F. C.	1856, '57, '58	Portsmouth	Ohio.
Poole, Henry	1855, '56, '57, '58, '59	Milwaukee	Wisconsin.
Porter, Mrs. E. D.	1854	Albion Mines	Nova Scotia.
Porter, Prof. William	1857, '58	Newark	Delaware.
Posey, Dr. John F.	1854, '55, '56, '57, '58, '59	Beloit	Wisconsin.
Potter, Dr. C. D.	1854, '55, '56, '57, '58, '59	Savannah	Georgia.
Pratt, William C., (for Rev. Dr. Dewey)	1859	Adams' Centre	New York.
Prentiss, H. C.	1856	Rochester	New York.
Prescott, Dr. William	1859	Worcester	Massachusetts.
Preston, Rev. N. O.	1854, '55, '56, '57	Concord	New Hampshire.
Purdie, Dr. John R.	1859	Manhattan	Kansas.
Purdot, E.	1854, '55, '56, '57, '58, '59	Smithfield	Virginia.
	1854	Truxillo	Honduras, Central America.
Purmort, Nathaniel	1856, '57, '58	West Enfield	New Hampshire.
Quincy, Walter C.	1856	Peach Grove Lodge	Virginia.
Raffensperger, E. B.	1859	Toledo	Ohio.
Rain, John G.	1859	Omaha	Nebraska.
Ralston, Rev. J. Grier	1854, '55, '56, '57, '58, '59	Norristown	Pennsylvania.
Randall, Robert B.	1859	Crescent City	California.
Rankin, James	1854, '55, '56, '57, '58, '59	Saybrook	Connecticut.
Ravenel, H. W.	1854, '55, '56, '57	Aiken	South Carolina.
Ravenel, T. P.	1854, '56, '58, '59	St. John's	South Carolina.
Ray, Dr. L. G.	1856, '57, '58, '59	Paris	Kentucky.
Rayel, James T.	1859	Kaufman	Texas.
Read, D. E.	1854	St. Mary's	Iowa.
Reed, E. G.	1856	Homer	New York.
Reid, Dr. Robert K.	1854, '56	Stockton	California.
Reid, James M.	1857	Philomath	Georgia.
Reid, Peter	1856, '57, '58	Lake	New York.
Reynolds, Dr. William	1857, '58	Iowa City	Iowa.
Reynolds, W. C.	1858, '59	Kanawha	Virginia.
Rhodes, Dr. John	1859	Hocking Port	Ohio.
Rhodes, W. H. T.	1856	Washington	Texas.
Riblet, J. H.	1856, '57, '58, '59	Pekin	Illinois.
Rice, Henry	1854, '55, '56, '57	North Attleborough	Massachusetts.
Rice, Dr. Frank H.	1856	Worcester	Massachusetts.
Riggs, A. L.	1854	Hazlewood	Minnesota.
Riggs, Rev. S. R.	1854, '55, '56, '57, '58, '59	Hazlewood	Minnesota.
Riker, Walter H.	1856, '57, '58, '59	Saratoga	New York.
Riter, F. G.	1857, '58	Fort Union	Dakota.
Robey, Charles H.	1859	Fredericksburg	Virginia.
Robinson, Rev. E. S.	1854, '55	Garlandsville	Mississippi.
	1858, '59	Paulding	Mississippi.
Rodgers, A. P.	1857, '58	Gallipolis	Ohio.
Rodman, Samuel	1854, '55, '56, '57, '58, '59	New Bedford	Massachusetts.
Rogers, J. S.	1859	Marengo	Illinois.
Rogers, O. P.	1856, '57, '58, '59	Marengo	Illinois.
Root, Dr. Martin N.	1857	Francestown	New Hampshire.
Root, Prof. O.	1856	Clinton	New York.
Ross, Bernard R.	1858, '59	Fort Simpson	British America.
Rossiter, Prof. George R.	1854	Ashland	Virginia.
Royal Engineers	1857	St. George's	Bermuda.
Rucker, B. H.	1856, '57, '58, '59	Washington	Texas.
Ruffner, David L.	1856, '57	Kanawha	Virginia.
Ruffin, Julian C.	1856, '57, '58, '59	Ruthven	Virginia.
Salisbury, Elias O.	1854, '55, '56, '57	Buffalo	New York.
Sanders, B. D.	1858, '59	Cross Creek	Virginia.
Sanford, Prof. S. N.	1854, '55, '56, '57	Granville	Ohio.
Sanford, R. M.	1859	St. George's	Bermuda.
Sanford, Smith	1857, '58	Edinburg	Ohio.
Sanger, Dr. William W.	1855, '56, '57	Blackwell's Island	New York.
Sargent, John S.	1857, '58	Worcester	Massachusetts.
Sartorius, Charles	1854, '55, '56, '57, '58, '59	Mirador	Mexico.
	1858	Vera Cruz	Mexico.
Sartwell, Dr. H. P.	1854, '55, '56, '57, '58, '59	Penn Yan	New York.
Savage, Rev. George S., M. D.	1855, '56, '57, '58, '59	Millersburg	Kentucky.
Saville, Dr. John J.	1857, '58, '59	Sioux City	Iowa.
Sawkins, James G.	1856	Up Park Camp	Jamaica.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Sawyer, George B.	1854, '55	Salmon Falls	New Hampshire.
Sawyer, Henry E.	1854, '55, '56, '57	Great Falls	New Hampshire.
	1857, '58	Concord	New Hampshire.
Schauber, Hubert A.	1859	Schenectady	New York.
Scheeper, E. H. A.	1854, '55, '56	Pella	Iowa.
Schellerly, H. R.	1854	Grand Traverse	Michigan.
Schenck, Dr. W. L.	1856, '57	Franklin	Ohio.
Schlegel, Albert	1854, '55, '56	Taunton	Massachusetts.
Schley, W., jr.	1854	Richmond Hill	Georgia.
Schmidt, Dr. E. R.	1856, '57, '58	Burlington	New Jersey.
Scholfeld, N.	1856, '57, '58	Norwich	Connecticut.
Schreiner, Francis	1854, '55, '56, '57	Moss Grove	Pennsylvania.
Schue, Dr. A.	1856, '57	Madison	Wisconsin.
Schuman, Bruno	1859	Roundtop	Texas.
Scott, Samuel	1859	Worthington	Pennsylvania.
Scriba, Victor	1856	Troy Hill	Pennsylvania.
Seely, J. C., (for Rev. Dr. Dewey)	1858	Rochester	New York.
Selby, Henry	1859	Ontonagon	Michigan.
Sergeant, John T.	1857, '58	Sergeantsville	New Jersey.
Seymour, E.	1856	Racine	Wisconsin.
Shaffer, Dr. J. M.	1855, '56, '57, '58, '59	Fairfield	Iowa.
Shaw, Francis	1857	Plainfield	Massachusetts.
	1855, '56, '57, '58, '59	Bellefontaine	Ohio.
Shaw, Joseph	1856, '57	Sidney	Ohio.
Sheerar, H. M.	1857, '58	Wellsville	New York.
Sheldon, Dan'l.	1859	Forestville	Iowa.
Sheldon, Henry C.	1854	North Scituate	Rhode Island.
Shepherd, Rev. J. Avery	1854	Lake Washington	Mississippi.
	1858, '59	Montgomery	Alabama.
Shields, Rev. Robert	1854, '57, '58	Northwood	Ohio.
Sias, Prof. Solomon	1857, '58, '59	Fort Edward	New York.
	1859	Bonham	Texas.
Siebert, Samuel R.	1856	Cascade Valley	Wisconsin.
Simpson, F. T.	1857	Factory Mills	Georgia.
Simpson, B. F.	1858	Freehold	New Jersey.
Skeen, Wm.	1854, '56	Huntersville	Virginia.
	1857, '58	Meadow Dale	Virginia.
Slaven, James	1859	Union Rancho	California.
Slaven, Jesse B.	1859	Meadow Dale	Virginia.
Slye, Dr. L. C.	1859	Waukesha	Wisconsin.
Small, F. A.	1854	Biddeford	Maine.
Smallwood, Dr. Chas., LL. D.	1854, '55, '56, '57, '58, '59	St. Martin	Canada.
Smedley, John H.	1859	Chromedale	Pennsylvania.
Smith, A. C.	1858, '59	Forest City	Minnesota.
Smith, A. M.	1858, '59	Nassau	Bahamas, W. I.
Smith, Charles B.	1858, '59	Brownville	Nebraska.
Smith, Dr. Edward A.	1854, '55	Worcester	Massachusetts.
Smith, Dr. Geo. O.	1859	Bruce	Illinois.
Smith, Dr. Nathan D.	1859	Washington	Arkansas.
Smith, E. L.	1857	Boston	Massachusetts.
Smith, Isaac H.	1857, '58	Fremont Centre	Illinois.
Smith, J. C.	1857, '58, '59	Northwood	Ohio.
Smith, J. Edwards	1856	Natchez	Mississippi.
Smith, J. Metcalf	1856, '57	McGrawville	New York.
Smith, Hamilton, jr.	1856, '57, '58, '59	Cannelton	Indiana.
Smith, Prof. B. Wilson	1856, '57	Mt. Vernon	Iowa.
Smith, Prof. Wm., D. D.	1856, '57, '58, '59	Cannonsburg	Pennsylvania.
Smith, Rev. Stephen U.	1859	Livingston	Alabama.
Smith, Rufus	1859	North Littleton	New Hampshire.
Smithsonian Institution	1854, '55, '56, '57, '58, '59	Washington	Dist. of Columbia.
Smyser, Dr. H.	1854	Pittsburg, (Oakland Station)	Pennsylvania.
Smyser, Rev. B. R.	1857	Pottsville	Pennsylvania.
Snell, Prof. E. S.	1854, '55, '56, '57, '58, '59	Amherst	Massachusetts.
Snyder, James A.	1858	Fort Snyder	Oregon.
Speer, Dr. Alex'r M.	1858, '59	Pittsburg, (Marine Hospital)	Pennsylvania.
Spence, E. E.	1858, '59	Montross	Virginia.
Spencer, Rev. D. B.	1854	St. Joseph's	Minnesota.
Spooner, Dr. Stillman	1854, '55, '56, '57, '58, '59	Wampsville	New York.
Spooner, E.	1854	Keene	Ohio.
	1859	Fort Gratiot	Michigan.
Squier, Heber	1859	Grand Haven	Michigan.
Stagg, T. G.	1856, '57	Ridge	Maryland.
Stalnaker, J. W.	1859	Lewisburg	Virginia.
Stanford, Col. John R.	1859	Clarksville	Georgia.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Stebbins, George H .....	1858, '59 .....	Portland .....	Oregon.
Steele, Judge Augustus .....	1854, '55, '56, '57, '58, '59 ..	Atsena Otie .....	Florida.
Stephens, J. A .....	1857, '58 .....	Springfield .....	Missouri.
Stephenson, Rev. James .....	1859 .....	St. Mary's City .....	Maryland.
Sterling, Prof. J. W .....	1854, '55, '56, '57, '58, '59 ..	Madison .....	Wisconsin.
Stevens, Dr. R. P .....	1854 .....	Ceres .....	Pennsylvania.
Stewart, Prof. Alexander P .....	1854 .....	Lebanon .....	Tennessee.
Stewart, Prof. Wm. M .....	1854, '55, '56, '57, '58, '59 ..	Glenwood .....	Tennessee.
Stewart, Thomas H .....	1857, '58, '59 .....	Murrysville .....	Pennsylvania.
Strang, James J .....	1854, '55, '56 .....	St. James .....	Michigan.
Streng, L. H .....	1854, '55, '56 .....	Saugatuck .....	Michigan.
	1856 .....	Holland .....	Michigan.
	1856 .....	Newark .....	Michigan.
	1856, '57, '58, '59 .....	Grand Rapids .....	Michigan.
Strickland, L. S .....	1859 .....	Hartland .....	Maine.
Struthers, R. H .....	1857, '58 .....	Lind .....	Wisconsin.
Stuart, Prof. A. P. S .....	1855, '56, '57, '58 .....	Wolfville .....	Nova Scotia.
Stuntz, George R .....	1859 .....	Superior .....	Wisconsin.
Sutherland, Norris .....	1859 .....	Booneville .....	Missouri.
Sutton, George .....	1859 .....	Aurora .....	Indiana.
Sutton, Prof. A .....	1859 .....	Chestertown .....	Maryland.
Swain, Dr. John .....	1854, '55, '56 .....	Ballardsville .....	Kentucky.
	1857, '58, '59 .....	West Urbana .....	Illinois.
Swasey, C. B .....	1859 .....	Tickfaw Station .....	Louisiana.
Swift, Dr. Paul .....	1854, '55, '56, '57, '58, '59 ..	West Haverford .....	Pennsylvania.
Sylvester, E. Ware .....	1859 .....	Lyons .....	New York.
Taylor, Dr. M. K .....	1854 .....	Brooklyn .....	Michigan.
Taylor, Joseph W .....	1856 .....	Plattsburg .....	New York.
Taylor, Lewes B .....	1856, '57, '58, '59 .....	New Orleans .....	Louisiana.
Telegraph and Chronicle .....	1857 .....	Cincinnati .....	Ohio.
Tenbrock, J. W .....	1859 .....	Rockville .....	Indiana.
Tew, Captain C. C., Superintendent Arsenal Academy.	1858 .....	Columbia .....	South Carolina.
Thickstun, T. F .....	1855, '56, '57, '58 .....	Meadville .....	Pennsylvania.
	1859 .....	Chatfield .....	Minnesota.
Thomas, Mrs. Wm. S .....	1859 .....	Carbon Cliff .....	Illinois.
Thompson, Edgar P .....	1857 .....	Albion .....	Illinois.
Thompson, Prof. Zadock .....	1854, '55 .....	Burlington .....	Vermont.
Thompson, Mrs. Phebe .....	1856 .....	Burlington .....	Vermont.
Thornton, Miss E. E .....	1859 .....	Meorestown .....	New Jersey.
Tidswell, Miss Mary Alice .....	1859 .....	Warrenton .....	Missouri.
Tirrell, Dr. Norton Quincy .....	1856, '57, '59 .....	Weymouth .....	Massachusetts.
Titcomb, John S .....	1858 .....	Hillsborough .....	Illinois.
Titus, Henry W .....	1857, '58, '59 .....	Bellport .....	New York.
Titze, Henry A .....	1856, '57, '58, '59 .....	West Salem .....	Illinois.
Tingley, Prof Jos .....	1854 .....	Greencastle .....	Indiana.
Tolman, J. W .....	1857, '58, '59 .....	Winnebago .....	Illinois.
Tompkins, William .....	1859 .....	Germantown .....	New York.
Tourtellot, Dr. L. A .....	1856, '57 .....	Utica .....	New York.
Tracy, James E .....	1859 .....	East Smithfield .....	Pennsylvania.
Travelli, John J .....	1859 .....	Sewickleyville .....	Pennsylvania.
Treat, Samuel W .....	1857, '58, '59 .....	Windham .....	Ohio.
Troy, Dr. Matthew .....	1859 .....	Cahaba .....	Alabama.
Tuck, Dr. W. J .....	1857, '58, '59 .....	Memphis .....	Tennessee.
Tuomey, Prof. M .....	1854 .....	Tuscaloosa .....	Alabama.
Turnbull, Lieut. C. N., Topographical Engineers.	1858 .....	Forestville .....	Michigan.
	1858, '59 .....	Fort Gratiot .....	Michigan.
Turner, A. P .....	1859 .....	Patoka .....	Indiana.
Turner, T. A .....	1859 .....	Springfield .....	Texas.
Tutwiler, Prof. Henry .....	1854, '55, '56, '57, '58, '59 ..	Greene Springs .....	Alabama.
Tweedy, David H .....	1859 .....	Mount Pleasant .....	Ohio.
Twiss, Major Thomas S .....	1859 .....	Deer Creek .....	Nebraska.
Underwood, Col. D .....	1854, '55 .....	Castleton .....	Vermont.
	1857, '58 .....	Menasha .....	Wisconsin.
	1858, '59 .....	Green Bay .....	Wisconsin.
Upshaw, Geo. Wythe .....	1857, '58, '59 .....	Rose Hill .....	Virginia.
Uricoshea, Dr. E .....	1857 .....	Bogota .....	New Granada.
Vagnier, Thomas .....	1858, '59 .....	Notre Dame .....	Indiana.
Van Blascum, James .....	1859 .....	Vassalborough .....	Maine.
Van Buren, Jarvis .....	1859 .....	Clarksville .....	Georgia.
Van Doren, Abram .....	1858, '59 .....	Falmouth .....	Virginia.



NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Van Kirk, W. J. ....	1859. ....	Bolivar. ....	Missouri.
Van Kleek, Rev. R. D. ....	1856, '57, '58, '59. ....	Flatbush. ....	New York.
Van Nostrand, J. ....	1857, '58, '59. ....	Austin. ....	Texas.
Van Vorhes, A. ....	1858. ....	Stillwater. ....	Minnesota.
Verrill, G. W., Jr. ....	1859. ....	Norway. ....	Maine.
Vogel, Charles. ....	1859. ....	Rhineland. ....	Missouri.
Wade, F. S. ....	1859. ....	Cross Roads. ....	Texas.
Wadsworth, A. S. ....	1859. ....	Henrietta. ....	New York.
Wagner, W. H. ....	1857, '58. ....	Fort Thompson. ....	Oregon.
Walker, Mrs. Mary A. ....	1859. ....	Hardinsburg. ....	Kentucky.
Walker, Mrs. Octavia C. ....	1854, '55, '56, '57, '58. ....	Cooper. ....	Michigan.
Wallace, Samuel Jacob. ....	1856, '57. ....	Carthage. ....	Illinois.
Waller, Robert B. ....	1856, '57, '58, '59. ....	Greensborough. ....	Alabama.
Walsh, Stephen. ....	1857, '58. ....	Buchanan. ....	Minnesota.
Ward, Rev. L. F. ....	1857, '58. ....	Medina. ....	Ohio.
Warder, A. A. ....	1858, '59. ....	Avon. ....	Ohio.
Washburn, D. ....	1859. ....	North Bend. ....	Ohio.
Washington, L. ....	1858. ....	Pottsville. ....	Pennsylvania.
Watson, George. ....	1856. ....	Superior. ....	Wisconsin.
Wattles, John O. ....	1859. ....	Woodstown. ....	New Jersey.
Weatherford, John M. ....	1858, '59. ....	Moneka. ....	Kansas.
Webb, Dr. Robert D. ....	1859. ....	Lancaster. ....	Missouri.
Webb, Miss Georgiana. ....	1859. ....	Livingston. ....	Alabama.
Weber, Philip. ....	1859. ....	South Bend. ....	Indiana.
Webster, Prof. N. B. ....	1859. ....	Hermann. ....	Missouri.
Weir, A. D. ....	1854, '56, '57, '58, '59. ....	Portsmouth. ....	Virginia.
Wells, J. Carson. ....	1854. ....	Freeport. ....	Pennsylvania.
Wells, William. ....	1857, '58. ....	Salem. ....	Virginia.
West, Dr. N. P. ....	1859. ....	Stockton. ....	Missouri.
West, Edmund W. ....	1859. ....	Burkeville. ....	Texas.
West, L. W. ....	1854. ....	Huron. ....	Ohio.
West, Silas. ....	1859. ....	Yellville. ....	Arkansas.
Westbrook, Samuel W. ....	1857, '58, '59. ....	Cornish. ....	Maine.
Westmoreland, Dr. J. G. ....	1859. ....	West Green. ....	North Carolina.
Wheeler, B. J. ....	1859. ....	Atlanta. ....	Georgia.
Whelpley, Miss Helen Irene. ....	1855. ....	East Montpelier. ....	Vermont.
Whipple, Capt. A. W. ....	1854, '55, '56, '57, '58, '59. ....	Monroe. ....	Michigan.
Whitaker, Benjamin. ....	1859. ....	Lake George. ....	Michigan.
Whitcomb, L. F. ....	1856, '57, '58. ....	Warsaw. ....	Illinois.
White, Aaron. ....	1857, '58, '59. ....	Florida. ....	Massachusetts.
White, Bela. ....	1856, '57, '58, '59. ....	Cazenovia. ....	New York.
White, Capt. J. B., Superintendent Arsenal Academy. ....	1859. ....	Kanosha. ....	Nebraska.
White, Peter. ....	1859. ....	Columbia. ....	South Carolina.
Whitehead, W. A. ....	1857. ....	Marquette. ....	Michigan.
Whitefield, Edwin. ....	1854, '55, '56, '57, '58, '59. ....	Newark. ....	New Jersey.
Whitner, Benjamin F. ....	1859. ....	Kandotta. ....	Minnesota.
Whittlesey, Charles S. ....	1856, '57, '58, '59. ....	Belair. ....	Florida.
Wickline, Thomas J. ....	1856, '57. ....	Copper Falls Mines. ....	Michigan.
Wieland, Henry. ....	1857. ....	Longwood. ....	Virginia.
Wiessner, J. ....	1859. ....	Beaver Bay. ....	Minnesota.
Wiggin, Andrew. ....	1857, '58. ....	Washington. ....	Dist. of Columbia.
Wilbur, Benjamin F. ....	1859. ....	Stratham. ....	New Hampshire.
Willard, J. F. ....	1856, '57, '58. ....	Monson. ....	Maine.
Williams, Dr. Peter O. ....	1858, '59. ....	Dexter. ....	Maine.
Williams, Prof. Milo G. ....	1854, '55, '56, '57, '58. ....	Janesville. ....	Wisconsin.
Williams, Rev. S. R. ....	1854, '55. ....	Gouverneur. ....	New York.
Willis, Henry. ....	1855, '56. ....	Watertown. ....	New York.
Willis, O. R. ....	1854, '55, '56, '57, '58, '59. ....	Urbana. ....	Ohio.
Wilson, Joseph A. ....	1858, '59. ....	Louisville. ....	Kentucky.
Wilson, Lavalette. ....	1859. ....	Lexington. ....	Kentucky.
Wilson, Prof. J. H. ....	1855, '56, '57, '58, '59. ....	Portland. ....	Maine.
Wilson, Prof. W. C. ....	1857, '58, '59. ....	Freehold. ....	New Jersey.
Wilson, Prof. W. D. ....	1859. ....	Lexington. ....	Missouri.
Wilson, W. W. ....	1856. ....	Williamstown. ....	Massachusetts.
Winchell, Prof. A. ....	1858, '59. ....	College Hill. ....	Ohio.
Winkler, Dr. Carl. ....	1855, '56, '57, '58, '59. ....	Carlisle. ....	Pennsylvania.
Wislizenus, Dr. A. ....	1856. ....	Geneva. ....	New York.
Wood, S. B. ....	1854, '55, '56, '57, '58. ....	Pittsburg, (Oakland Station). ....	Pennsylvania.
	1854, '55, '56, '57. ....	Ann Arbor. ....	Michigan.
	1855, '56, '57, '58, '59. ....	Milwaukee. ....	Wisconsin.
	1857, '58. ....	St. Louis. ....	Missouri.
	1855. ....	Jackson. ....	Ohio.



## GENERAL LIST OF OBSERVERS.

XLI

NAME OF OBSERVER.	DATE OF OBSERVATION.	STATION.	STATE.
Woodard, C. S. ....	1854.....	Beaver Brook .....	New York.
.....	1857, '58.....	Michigan City.....	Indiana.
.....	1859.....	Ypsilanti .....	Michigan.
Woodbridge, William .....	1859.....	Michigan City.....	Indiana.
Woodin, S. F. ....	1856.....	Spencertown .....	New York.
Woodruff, Lum .....	1854, '55, '56 .....	Ann Arbor .....	Michigan.
Woodward, Lewis .....	1856, '57.....	West Concord.....	New York.
Woolsey, Dr. W. W. ....	1856.....	Dubuque .....	Iowa.
Wright, Dr. Daniel F. ....	1857.....	Memphis .....	Tennessee.
Wright, E. M. ....	1857.....	Lapham .....	Minnesota.
Wyman, Almond H. ....	1859.....	North Belgrade .....	Maine.
Wyrick, M. L. ....	1859.....	Cassville .....	Missouri.
Yale, Walter D. ....	1854, '56, '57, '58, '59 .....	Houseville.....	New York.
Yellowby, E. W. ....	1859.....	Webberville .....	Texas.
Yeomans, Wm. H. ....	1856, '57, '58, '59 .....	Columbia.....	Connecticut.
Yoakum, F. L. ....	1858, '59.....	Larissa .....	Texas.
Young, Albert A. ....	1854.....	Hanover .....	New Hampshire.
Young, Prof. Charles A. ....	1858, '59.....	Hudson .....	Ohio.
Young, Dr. J. A. ....	1854, '55, '56, '57 .....	Camden .....	South Carolina.
Young, Jude M. ....	1858, '59.....	West Day.....	New York.
Young, Mrs. Lawrence.....	1854, '55, '56, '57, '58, '59 .....	Springdale.....	Kentucky.
Young, Prof. Ira .....	1854.....	Hanover .....	New Hampshire.
Younger, Armistead .....	1859.....	Buck Horn .....	Arkansas.
Zaepffel, Joseph.....	1857, '58, '59 .....	Morrisania.....	New York.
Zimmerman, Godfrey.....	1859.....	Buffalo.....	New York.
Zumbrock, Dr. A. ....	1855, '56.....	Annapolis .....	Maryland.







# LIST OF STATIONS, ARRANGED BY STATES,

FOR THE

YEARS 1854 TO 1859.

## BRITISH AMERICA.

STATION.	PROVINCE.	STATION.	PROVINCE.
Albion Mines .....	Nova Scotia.	Red River Settlement.....	Hudson Bay Territory.
Fort Rae .....	Hudson Bay Territory.	Rigolet .....	Labrador.
Fort Simpson .....	Hudson Bay Territory.	St. John's .....	Newfoundland.
Halifax .....	Nova Scotia.	St. Martin .....	Canada.
Hamilton .....	Canada.	Stanbridge .....	Canada.
Horton.—(See Wolfville.)		Toronto .....	Canada.
Montreal .....	Canada.	Windsor .....	Nova Scotia.
Moose Factory .....	Hudson Bay Territory.	Wolfville .....	Nova Scotia.

## UNITED STATES.

STATION.	COUNTY.	STATION.	COUNTY.
<b>ALABAMA.</b>		<b>CALIFORNIA.</b>	
Ashville .....	St. Clair.	Auburn .....	Placer.
Auburn .....	Macon.	Crescent City .....	Del Norte.
Cahaba .....	Dallas.	Downieville .....	Sierra.
Carlowville .....	Dallas.	Honcut Creek.—(See Union	
Greene Springs .....	Greene.	Ranche.)	
Greensborough .....	Greene.	Marysville .....	Yuba.
Havana.—(See Greene Springs.)		Monterey .....	Monterey.
Livingston .....	Sumter.	Moquelumne Hill .....	Calaveras.
Mobile .....	Mobile.	Sacramento .....	Sacramento.
Monroeville .....	Monroe.	San Francisco .....	San Francisco.
Montgomery .....	Montgomery.	Santa Clara .....	Santa Clara.
Moulton .....	Lawrence.	Stockton .....	San Joaquin.
Orville .....	Dallas.	Union Rancho .....	Yuba.
Selma .....	Dallas.		
Spring Hill Institute.—(See Mo-		<b>DISTRICT OF COLUMBIA.</b>	
bile.)		Georgetown .....	Washington.
Tuscaloosa .....	Tuscaloosa.	Washington .....	Washington.
Uniontown .....	Perry.		
Wewokaville .....	Talladega.	<b>CONNECTICUT.</b>	
Yorkville .....	Pickens.	Columbia .....	Tolland.
		Georgetown .....	Fairfield.
<b>ARKANSAS.</b>		Lynde Point.—(See Saybrook.)	
Arkadelphia .....	Clark.	Middletown .....	Middlesex.
Bentonville .....	Benton.	New Haven .....	New Haven.
Brownsville .....	Prairie.	New London .....	New London.
Buck Horn .....	Independence.	Norwich .....	New London.
Camden .....	Washita.	Pomfret .....	Windham.
Flippins Barrens.—(See Yellville.)		Salisbury .....	Litchfield.
Gainesville .....	Greene.	Saybrook .....	Middlesex.
Jacksonport .....	Jackson.	Wallingford .....	New Haven.
Perryville .....	Perry.	West Cornwall .....	Litchfield.
Pilot Prairie.—(See Waldron.)			
Spring Hill .....	Hempstead.	<b>DACOTAH.</b>	
Waldron .....	Scott.	Fort Union .....	(Mouth of Yellowstone.)
Washington .....	Hempstead.	Greenwood .....	
Yellville .....	Marion.	Indian Agency.—(See Green-	
		wood.)	



## UNITED STATES—Continued.

STATION.	COUNTY.	STATION.	COUNTY.
<b>DELAWARE.</b>		Manchester .....	Scott.
Georgetown .....	Sussex.	Marengo .....	McHenry.
Milford .....	Kent.	Naperville .....	Du Page.
Newark .....	New Castle.	Open Prairie.—(See Bruce.)	
		Orchard Farm.—(See Pekin.)	
<b>FLORIDA.</b>		Ottawa .....	La Salle.
Alligator .....	Columbia.	Pekin .....	Tazewell.
Atsena Otie .....	Levy.	Peoria .....	Peoria.
Belair .....	Leon.	Piasa Farms.—(See Brighton.)	
Cedar Keys.—(See Atsena Otie.)		Riley .....	McHenry.
Gainesville .....	Alachua.	Sandwich .....	DeKalb.
Hibernia .....	Duval.	South Pass .....	Union.
Jacksonville .....	Duval.	Tiskilwa .....	Bureau.
Key West.—(See Salt Ponds.)		Upper Alton .....	Madison.
Knox Hill .....	Walton.	Warsaw .....	Hancock.
Lake City.—(See Alligator.)		Waynesville .....	DeWitt.
Micanopy .....	Alachua.	West Salem .....	Edwards.
Orange Hill.—(See Knox Hill.)	Washington.	West Urbana .....	Champaign.
Pensacola.—(See Warrington)		Wheaton .....	Du Page.
Pine Land Village.—(See Belair.)		Willow Creek .....	Lee.
St. Augustine .....	St. John's.	Winnebago .....	Winnebago.
Salt Ponds .....	Monroe.	Woodstock .....	McHenry.
Seville .....	Leon.		
Tallahassee.—(See Belair.)		<b>INDIANA.</b>	
Warrington .....	Escambia.	Aurora .....	Dearborn.
		Cannelton .....	Perry.
<b>GEORGIA.</b>		Evansville .....	Vanderburg.
Athens .....	Clarke.	Greencastle .....	Putnam.
Atlanta .....	Fulton.	Greenmount.—(See Richmond.)	
Augusta .....	Richmond.	Kendallville .....	Noble.
Clarksville .....	Habersham.	Lafayette .....	Tipppecanoe.
Covington .....	Newton.	Logansport .....	Cass.
Culloden .....	Monroe.	Madison .....	Jefferson.
Factory Mills .....	Wilkes.	Michigan City .....	Laporte.
Hillsborough .....	Jasper.	Milton .....	Wayne.
La Grange .....	Troup.	Mishawaka .....	St. Joseph.
Philomath .....	Oglethorpe.	New Albany .....	Floyd.
Richmond Hill .....	Richmond.	New Harmony .....	Posey.
Savannah .....	Chatham.	Notre Dame .....	St. Joseph.
Sparta .....	Hancock.	Patoka .....	Gibson.
The Rock .....	Upson.	Richmond .....	Wayne.
Thomaston .....	Upson.	Rockville .....	Parke.
Thomson .....	Columbia.	Shelbyville .....	Shelby.
Washington.—(See Factory Mills.)		South Bend .....	St. Joseph.
Whitemarsh Island .....	Chatham.		
Zebulon .....	Pike.	<b>INDIAN TERRITORY.</b>	
		Fort Gibson .....	
<b>ILLINOIS.</b>		<b>IOWA.</b>	
Albion .....	Edwards.	Bellevue .....	Jackson.
Arispe.—(See Tiskilwa.)		Border Plains .....	Webster.
Athens .....	Menard.	Burlington .....	Des Moines.
Augusta .....	Hancock.	Camanche .....	Clinton.
Aurora .....	Kane.	Clinton .....	Clinton.
Batavia .....	Kane.	Davenport .....	Scott.
Bloomington .....	McLean.	Dubuque .....	Dubuque.
Brighton .....	Maconpin.	Elk Township —(See Poultney.)	
Bruce .....	McDonough.	Fairfield .....	Jefferson.
Carbon Cliff .....	Rock Island.	Fayette Village .....	Fayette.
Carthage .....	Hancock.	Forestville .....	Delaware.
Chicago .....	Cook.	Fort Madison .....	Lee.
Dixon .....	Lee.	Franklin .....	Buchanan.
	Edgar.	Iowa City .....	Johnson.
Edgington .....	Rock Island.	Keokuk .....	Lee.
Elgin .....	Kane.	Lyons City .....	Clinton.
Evanston .....	Cook.	Maquoketa .....	Jackson.
Fremont Centre .....	Lake.	Mount Vernon .....	Linn.
Galena .....	Jo Daviess.	Muscataine .....	Muscataine.
Granville .....	Putnam.	Pella .....	Marion.
Hillsborough .....	Montgomery.	Pleasant Plain .....	Jefferson.
Jacksonville .....	Morgan.	Plum Spring .....	Delaware.
Lebanon .....	St. Clair.		



## UNITED STATES—Continued.

STATION.	COUNTY.	STATION.	COUNTY.
Poultney .....	Delaware.	Monson .....	Piscataquis.
Quasqueton .....	Buchanan.	New Castle .....	Lincoln.
Richland.—(See Forestville.)		North Belgrade .....	Kennebec.
Rossville .....	Allamakee.	Norway .....	Oxford.
St. Mary's .....	Linn.	Oak Grove.—(See Vassalborough.)	
Sioux City .....	Woodbury.	Oldtown .....	Hancock.
Waterloo .....	Black Hawk.	Perry .....	Washington.
KANSAS.		Portland .....	Cumberland.
Burlingame .....	Shawnee.	South Thomaston .....	Lincoln.
Cayuga .....	Atchison.	Steuben .....	Washington.
Celestville.—(See Spring Hill.)		Topsham .....	Sagadahoc.
Council City .....	Shawnee.	Vassalborough .....	Kennebec.
Denver City .....	Arapahoe.	Warren .....	Lincoln.
Fort Riley .....	Riley.	Windham .....	Cumberland.
Lawrence .....	Douglas.	MARYLAND.	
Leavenworth City .....	Leavenworth.	Annapolis .....	Anne Arundel.
Lecompton .....	Douglas.	Baltimore .....	Baltimore.
Manhattan .....	Riley.	Bladensburg .....	Prince George's.
Mapleton .....	Bourbon.	Chestertown .....	Kent.
Moneka .....	Linn.	Frederick .....	Frederick.
Neosho Falls .....	Woodson.	Leitersburg (near) .....	Washington.
Spring Hill .....	Lykins.	Leonardtwn .....	St. Mary's.
Topeka .....	Shawnee.	Lover's Point.—(See Leonardtown.)	
Wyandott City .....	Wyandott.	Oakland .....	Alleghany.
KENTUCKY.		Point Lookout.—(See Ridge.)	
Ballardsville .....	Oldham.	Ridge .....	St. Mary's.
Bardstown .....	Nelson.	St. Ingoes.—(See Ridge.)	
Bowling Green .....	Warren.	St. Mary's .....	St. Mary's.
Danville .....	Boyle.	Schellman Hall, Schellman Hills.— (See Sykesville.)	
Hardinsburg .....	Breckenridge.	Sykesville .....	Carroll.
Lexington .....	Fayette.	MASSACHUSETTS.	
Louisville .....	Jefferson.	Amherst .....	Hampshire.
Millersburg .....	Bourbon.	Barnstable.—(See Wood's Hole.)	
Nolin .....	Hardin.	Boston .....	Suffolk.
Paducah .....	Mount Cracken.	Bridgewater .....	Plymouth.
Paris .....	Bourbon.	Cambridge .....	Middlesex.
Springdale .....	Jefferson.	Canton .....	Norfolk.
LOUISIANA.*		Danvers .....	Essex.
Black River Plantation .....	Catahoula.	Elmwood.—(See Richmond.)	
False River.—(See Point Coupee.)		Falmouth.—(See Wood's Hole.)	
Independence.—(See Tickfaw Sta- tion.)		Florida .....	Berkshire.
Moss Grove Plantation.—(See Trin- ity.)		Lawrence .....	Essex.
New Orleans .....	Orleans.	Mendon .....	Worcester.
Point Coupee .....	Point Coupee.	Nantucket .....	Nantucket.
St. Francisville .....	West Feliciana.	New Bedford .....	Bristol.
Tickfaw Station .....	Livingston.	Newburyport .....	Essex.
Trinity .....	Catahoula.	North Attleborough .....	Bristol.
MAINE.		Plainfield .....	Hampshire.
Belfast .....	Waldo.	Princeton .....	Worcester.
Biddeford .....	York.	Richmond .....	Berkshire.
Blue Hill.—(See Oldtown.)		South Groton .....	Middlesex.
Carmel .....	Penobscot.	Southwick .....	Hampden.
Cornish .....	York.	Springfield .....	Hampden.
Dexter .....	Penobscot.	Taunton .....	Bristol.
East Exeter .....	Penobscot.	Westfield .....	Hampden.
Freedom .....	Waldo.	Weymouth .....	Norfolk.
Fryeburg .....	Oxford.	Williamstown .....	Berkshire.
Gardiner .....	Kennebec.	Wood's Hole .....	Barnstable.
Hartland .....	Somerset.	Worcester .....	Worcester.
Lisbon .....	Androscoggin.	MICHIGAN.	
		Ann Arbor .....	Washtenaw.
		Battle Creek .....	Calhoun.
		Beaver Island.—(See St. James.)	

\* Parishes.



## UNITED STATES—Continued.

STATION.	COUNTY.	STATION.	COUNTY.
Brooklyn.....	Jackson.	Bolivar.....	Polk.
Cooper.....	Kalamazoo.	Boonville.....	Cooper.
Copper Falls Mines.....	Houghton.	Cape Girardeau.....	Cape Girardeau.
Corunna.....	Shiawassee.	Carrollton.....	Carroll.
Detroit.....	Wayne.	Cassville.....	Barry.
Eagle River.....	Houghton.	Dry Ridge.—(See Hannibal.)	
Flint.....	Genesee.	Dundee.....	Franklin.
Forestville.....	Sanilac.	Emerson.....	Marion.
Fort Gratiot.....	St. Clair.	Farmington.....	St. Francis.
Grand Haven.....	Ottawa.	Greenfield.....	Dade.
Grand Rapids.....	Kent.	Greenville.....	Wayne.
Grand Traverse.....	Michilimackinac.	Hannibal.....	Marion.
Holland.....	Ottawa.	Harrisonville.....	Cass.
Lake George.....	Chippewa.	Hermann.....	Gasconade.
Lansing.....	Ingham.	Hornersville.....	Dunklin.
Marquette.....	Marquette.	Jefferson Barracks.....	St. Louis.
Monroe.....	Monroe.	Kirksville.....	Adair.
Newark.....	Gratiot.	Lancaster.....	Schuyler.
New Buffalo.....	Berrien.	Lexington.....	Lafayette.
Ontonagon.....	Ontonagon.	Luray.....	Clark.
Otsego.....	Allegan.	Palmyra.....	Marion.
Ottawa Point.....	Josco.	Paris.....	Monroe.
Port Huron.....	St. Clair.	Prairie Glen Farm.—(See Kirks-	
Romeo.....	Macomb.	ville.)	
St. James.....	Emmet.	Rhineland.....	Montgomery.
St. Mary's River.....	Chippewa.	Richmond.....	Ray.
Saugatuck.....	Allegan.	Rocheport.....	Boone.
Thunder Bay Island.....	Alpena.	St. Joseph.....	Buchanan.
Ypsilanti.....	Washtenaw.	St. Louis.....	St. Louis.
		Springfield.....	Greene.
		Stockton.....	Cedar.
		Toronto.—(See Wet au Glaize.)	
		Trenton.....	Grundy.
		Tuscumbia.....	Miller.
		Warrenton.....	Warren.
		Wet au Glaize.....	Camden.
MINNESOTA.		NEBRASKA.	
Beaver Bay.....	Lake.	Bellevue.....	Sarpy.
Belle Prairie.....	Morrison.	Brownsville.....	Nemaha.
Buchanan.....	St. Louis.	Deer Creek.....	
Burlington.....	Lake.	Elkhorn.....	Douglas.
Cass Lake Mission —(See Lake		Fontenelle.....	Dodge.
Winnibigoshish.)		Fort Pierre.....	(On the Missouri river.)
Chatfield.....	Fillmore.	Fort Union.....	(Mouth of Yellowstone.)
Forest City.....	Meeker.	Gilbert's Trading Post.....	
Hazlewood.....	Rice.	Kanosha.....	Cass.
Kandotta.....	Stearns.	Nebraska City.....	Otoe.
Lac qui Parle.—(See Hazlewood.)		Omaha.....	Douglas.
Lake Winnibigoshish.....	Pembina.	Pioneer Grove.—(See Omaha.)	
Lapham.....	Pembina.		
Princeton.....	Benton.		
Red Lake.....	Pembina.		
Red Wing.....	Goodhue.		
St. Anthony's Falls.....	Hennepin.		
St. Joseph.....	Pembina.		
Stillwater.....	Washington.		
Wabashaw.....	Wabashaw.		
MISSISSIPPI.		NEW JERSEY.	
Columbus.....	Lowndes.	Bloomfield.....	Essex.
Garlandville.....	Jasper.	Burlington.....	Burlington.
Grenada.....	Yalobusha.	Cinnaminson.....	Burlington.
Hernando.....	De Soto.	Freehold.....	Monmouth.
Jackson.....	Jackson.	Lambertville.....	Hunterdon.
Lake Washington.....	Washington.	Moorestown.....	Burlington.
Natchez.....	Adams.	Morristown.....	Morris.
Oxford.....	Lafayette.	Newark.....	Essex.
Paulding.....	Jasper.	New Brunswick.....	Middlesex.
Port Gibson.....	Clairborne.	Salem.....	Salem.
Vicksburg.....	Warren.	Sand Brook.—(See Sergeantsville.)	
Westville.....	Simpson.	Sergeantsville.....	Hunterdon.
		Woodstown.....	Salem.
MISSOURI.		NEW HAMPSHIRE.	
Augusta.....	St. Charles.	Barnstead —(See North Barnstead.)	
Bethany.....	Harrison.	Claremont.....	Sullivan.



## UNITED STATES—Continued.

STATION.	COUNTY.	STATION.	COUNTY.
Concord .....	Merrimack.	Oswego .....	Oswego.
Exeter .....	Rockingham.	Ovid .....	Seneca.
Francestown .....	Hillsborough.	Penn Yan .....	Yates.
Great Falls .....	Straford.	Philipstown —(See Beverly.)	
Hanover .....	Grafton.	Pine Hill.—(See Buffalo.)	
Iaconia .....	Belknap.	Plainville .....	Onondaga.
Lake Village .....	Belknap.	Plattsburg .....	Clinton.
Londonderry .....	Rockingham.	Pompey .....	Onondaga.
Manchester .....	Hillsborough.	Rochester .....	Monroe.
Mount Washington .....	Coos.	Sackett's Harbor .....	Jefferson.
North Barnstead .....	Belknap.	Sag Harbor .....	Suffolk.
North Littleton .....	Grafton.	Saratoga .....	Saratoga.
Salmon Falls .....	Stapleford.	Schenectady .....	Schenectady.
Shelburne .....	Coos.	Sennett .....	Cayuga.
Stratford .....	Coos.	Smithville .....	Jefferson.
Stratham .....	Rockingham.	Spencertown .....	Columbia.
West Enfield .....	Grafton.	Townsendville.—(See Lodi )	
NEW YORK.		Troy .....	Rensselaer.
Adams Centre .....	Jefferson.	Utica .....	Oneida.
Angelica .....	Alleghany.	Wales .....	Erie.
Baldwinsville .....	Onondaga.	Wampsville .....	Madison.
Beaver Brook .....	Sullivan.	Waterford .....	Saratoga.
Bellport .....	Suffolk.	Watertown .....	Jefferson.
Beverly .....	Putnam.	Wellsville .....	Alleghany.
Blackwell's Island .....	New York.	West Concord .....	Erie.
Brown Cottage.—(See Eden.)		West Day .....	Saratoga.
Buffalo .....	Erie.	West Farms.—(See Morrisania.)	
Canton .....	St. Lawrence.	Wilson .....	Niagara.
Cazenovia .....	Madison.	NORTH CAROLINA.	
Charlotte .....	Monroe.	Ashville .....	Buncombe.
Chatham .....	Columbia.	Chapel Hill .....	Orange.
Clinton .....	Oneida.	Davidson College .....	Mecklenburg.
Clyde .....	Wayne.	Gaston .....	Northampton.
Covert.—(See Lodi.)		Goldsborough .....	Wayne.
Dansville .....	Livingston.	Green Plains.—(See Gaston.)	
Eden .....	Erie.	Jackson.—(See Thornbury.)	
Falconer .....	Chautauque.	Marlborough .....	Pitt.
Farmer.—(See Lodi.)		Murfreesborough .....	Hertford.
Fishkill .....	Dutchess.	Raleigh .....	Wake.
Flatbush .....	Kings.	Thornbury .....	Northampton.
Flushing .....	Queens.	Warrenton .....	Warren.
Fordham .....	Westchester.	West Green .....	Guilford.
Fort Edward .....	Washington.	OHIO.	
Fort Niagara .....		Arcola.—(See Unionville.)	
Geneva .....	Ontario.	Avon .....	Lorain.
Germantown .....	Columbia.	Belle Centre.—(See Northwood )	
Gouverneur .....	St. Lawrence.	Bellefontaine .....	Logan.
Great Valley .....	Cattaraugus.	Berea .....	Cuyahoga.
Havana .....	Schuyler.	Bowling Green .....	Wood.
Henrietta .....	Monroe.	Brecksville .....	Cuyahoga.
Homer .....	Cortland.	Cheviot .....	Hamilton.
Hopewell.—(See Wilson )		Cincinnati .....	Hamilton.
Houseville .....	Lewis.	Cleveland .....	Cuyahoga.
Ilion .....	Herkimer.	College Hill .....	Hamilton.
Lake .....	Washington.	Collingwood .....	Lucas.
Leroy .....	Genesee.	Cunningham's Island.—(See Kel-	
Liberty .....	Sullivan.	ley's Island.)	
Lockport .....	Niagara.	Dallasburg .....	Warren.
Lodi .....	Seneca.	Dayton .....	Montgomery.
Lowville .....	Lewis.	Dudley .....	Hardin.
Lyons .....	Wayne.	East Fairfield .....	Columbiana.
Madrid .....	St. Lawrence.	Edinburg .....	Portage.
McGrawville .....	Cortland.	Elk Run Township.—(See East	
Mexico .....	Oswego.	Fairfield.)	
Morrisania .....	Westchester.	Franklin .....	Warren.
New York .....	New York.	Freedom .....	Portage.
Nichols .....	Tioga.	Gallipolis .....	Gallia.
North Salem .....	Westchester.		
Ogdensburg .....	St. Lawrence.		



## UNITED STATES—Continued.

STATION.	COUNTY.	STATION.	COUNTY.
Geneva Hall.—(See Northwood.)		Bustleton.....	Philadelphia.
Germantown.....	Montgomery.	Byberry.....	Philadelphia.
Granville.....	Licking.	Cannonsburg.....	Washington.
Hillsborough.....	Highland.	Carlisle.....	Cumberland.
Hiram.....	Portage.	Ceres.....	McKean.
Hocking Port.....	Athens.	Chambersburg.....	Franklin.
Hudson.....	Summit.	Chromedale.....	Delaware.
Huron.....	Erie.	Easton.....	Northampton.
Iberia.....	Morrow.	East Smithfield.....	Bradford.
Jackson.....	Jackson.	Fleming.....	Centre.
Jackson.....	Monroe.	Freeport.....	Armstrong.
Jefferson.....	Ashtabula.	Germantown.....	Philadelphia.
Keene.....	Coshocton.	Gettysburg.....	Adams.
Kelley's Island.....	Erie.	Harrisburg.....	Dauphin.
Lancaster.....	Fairfield.	Kingsley's.—(See Moss Grove.)	
Madison.....	Lake.	Lewisburg.....	Union.
Marietta.....	Washington.	Lima.—(See Chromedale.)	
Marion.....	Marion.	Linden.....	Lycoming.
Medina.....	Medina.	Meadville.....	Crawford.
Montville.....	Medina.	Media.—(See Chromedale.)	
Mount Pleasant.....	Jefferson.	Morrisville.....	Bucks.
Mount Union.....	Stark.	Moss Grove.....	Crawford.
Newark.....	Licking.	Mount Joy.....	Lancaster.
New Lisbon.....	Columbiana.	Murraysville.....	Westmoreland.
Northwood.....	Hamilton.	Nazareth.....	Northampton.
North Bend.....	Logan.	Norristown.....	Montgomery.
Norwalk.....	Huron.	North Whitehall.....	Lehigh.
Oberlin.....	Loraine.	Oakland Station.—(See Pittsburg.)	
Perrysburg.....	Wood.	Paradise.....	Lancaster.
Pine Fork of Short creek.—(See Mount Pleasant.)		Philadelphia.....	Philadelphia.
Portsmouth.....	Scioto.	Pittsburg.....	Alleghany.
Ravenna.—(See Freedom.)		Pleasant Ridge.—(See Bendersville.)	
Richmond.....	Jefferson.	Pocopson.....	Chester.
Ripley.....	Brown.	Pottsville.....	Schuylkill.
Rockport.....	Cuyahoga.	Randolph.....	Crawford.
Savannah.....	Ashland.	Reading.....	Berks.
Scioto.....	Scioto.	Sewickleyville.....	Alleghany.
Sharonville.....	Hamilton.	Shamokin.....	Northumberland.
Sidney.....	Shelby.	Somerset.....	Somerset.
Toledo.....	Lucas.	Sugar Grove.....	Warren.
Troy.....	Miami.	Tarentum.....	Alleghany.
Unionville.....	Lake.	Troy Hill.....	Alleghany.
Urbana.....	Champaign.	Warrior's Mark.....	Huntington.
Welshfield.....	Geauga.	West Haverford.....	Delaware.
West Bedford.....	Coshocton.	Westtown.....	
Westerville.....	Franklin.	Worthington.....	Armstrong.
Windham.....	Portage.	Youngsville.....	Warren.
Yankeetown.....	Darke.		
Zanesfield.....	Logan.		
Zanesville.....	Muskingum.		
OREGON.		RHODE ISLAND.	
Fort Snyder.....	Thompson Pass.	Acquidneset.....	Washington.
Fort Thompson.....		East Greenwich.—(See Acquidneset.)	Washington.
Fort Vancouver.....		North Scituate.....	Providence.
Oregon City.....	Clackamas.	Providence.....	Providence.
Portland.....	Multnomah.		
Salem.....	Marion.	SOUTH CAROLINA.*	
PENNSYLVANIA.		Aiken.....	Barnwell.
Altoona.....	Blair.	All Saints Parish.....	Georgetown.
Bedford.....	Bedford.	Black Oak.—(See St. John's Berkley)	
Bellefonte.....	Centre.	Camden.....	Kershaw.
Bendersville.....	Adams.	Charleston.....	Charleston.
Berwick.....	Columbia.	Columbia.....	Richland.
Brookville.....	Jefferson.	Edgefield.....	Edgefield.
		Edisto Island.....	Colleton.
		Mount Pleasant.....	Laurens.
		St. John's Berkley Parish.....	Charleston.
		Waccamaw.—(See All Saints.)	



## UNITED STATES—Continued.

STATION.	COUNTY.	STATION.	COUNTY.
<b>TENNESSEE.</b>		<b>VIRGINIA.</b>	
Clarksville.—(See Glenwood.)		Alexandria .....	Alexandria.
Friendship .....	Dyer.	Ashland.—(See Buffalo )	
Glenwood .....	Montgomery.	Berryville .....	Clark.
Greenville.—(See Walnut Grove.)		Buffalo .....	Putnam.
Knoxville .....		Capon Bridge .....	Hampshire.
La Grange .....	Fayette.	Charlottesville.—(See Montview.)	
Lebanon .....	Wilson.	Cobham Depot.—(See Rouge-	
Memphis .....	Shelby.	mont.)	
Pomona .....	Cumberland.	Crack Whip .....	Hardy.
University Place .....	Franklin.	Crichton's Store .....	Brunswick.
Walnut Grove .....	Greene.	Cross Creek .....	Brooke.
Winchester .....	Franklin.	Diamond Grove.—(See Crichton's	
		Store )	
<b>TEXAS.</b>		Falmouth .....	Stafford.
Austin .....	Travis.	Fork Union .....	Fluvanna.
Bastrop .....	Bastrop.	Fredericksburg .....	Spottsylvania.
Bonham .....	Fannin.	Garysville .....	Prince George.
Boston .....	Bowie.	Genito.—(See Crichton's Store )	
Burkeville .....	Newton.	Hartwood —(See Falmouth )	
Columbus .....	Colorado.	Hill Grove.—(See Fork Union.)	
Cross Roads .....	Williamson.	Holliday's Cove .....	Hancock.
Dallas .....	Dallas.	Huntersville .....	Pocahontas.
Gilmer .....	Upshur.	Kanawha .....	Kanawha.
Goliad .....	Goliad.	Kanawha Salines —(See Poplar	
Gonzales .....	Gonzales.	Grove.)	
Greenville .....	Hunt.	Lewinsville .....	Fairfax.
Helena .....	Karnes.	Lewisburg .....	Greenbrier.
Huntsville .....	Walker.	Longwood .....	Rockbridge.
Jefferson .....	Cass.	Lynchburg .....	Campbell.
Kaufman .....	Kaufman.	Meadow Dale .....	Highland.
Larissa .....	Cherokee.	Montcalm .....	Albemarle.
New Braunfels .....	Comal.	Montross .....	Westmoreland.
New Wied.—(See New Braunfels.)		Mont View .....	Albemarle.
Pin Oak .....	Fayette.	Mossy Creek .....	Augusta.
Port La Vaca .....	Calhoun.	Mount Solon .....	Augusta.
Preston .....	Grayson.	Mustapha .....	Wood
Roundtop .....	Fayette.	New Creek Depot .....	Hampshire.
San Patricio .....	San Patricio.	New England.—(See Mustapha.)	
Sisterdale .....	Blanco.	Peach Grove Lodge .....	Doddridge.
Springfield .....	Limestone.	Peach Lawn.—(See Falmouth.)	
Tarrant .....	Hopkins.	Pennsboro'.—(See Peach Grove	
Texana .....	Jackson.	Lodge )	
Union Hill .....	Washington.	Point Pleasant .....	Mason.
Washington .....	Washington.	Poplar Grove .....	Kanawha.
Webberville .....	Travis.	Portsmouth .....	Norfolk.
Wheelock .....	Robertson.	Richmond —(See Westwood )	
Woodborough.—(See Preston.)		Rose Hill .....	Essex.
		Rougemont .....	Albemarle.
		Ruthven .....	Prince George.
		Salem .....	Roanoke.
		Sistersville .....	Tyler.
		Smithfield .....	Isle of Wight.
		Stribling Springs .....	Augusta.
		The Plains .....	Fauquier.
		Trout Run Valley.—(See Crack	
		Whip )	
		Wardensville.—(See Crack Whip )	
		Wellsburg —(See Cross Creek.)	
		West Union.—(See Peach Grove	
		Lodge.)	
		Westwood .....	Henrico.
		Wheeling .....	Ohio.
		Winchester .....	Frederick.
		Wirt Court House .....	Wirt.
		Woodbourne.—(See Garyville.)	
		<b>WISCONSIN.</b>	
		Appleton .....	Outagamie
		Bay City .....	La Pointe.



## UNITED STATES—Continued.

STATION.	COUNTY.	STATION.	COUNTY.
Bayfield .....	La Pointe.	Milwaukee .....	Milwaukee.
Bellevue .....	Marquette.	Mosinee .....	Marathon.
Beloit .....	Rock.	Nashata Lake.—(See Delafield.)	
Black River Falls Iron Works.— (See New Danemora.)		New Danemora .....	Jackson.
Burlington .....	Racine.	New London .....	Waupaca.
Cascade Valley .....	Buffalo.	Norway .....	Racine.
Ceresco .....	Fond du Lac.	Otsego .....	Columbia.
Chegoigan Bay.—(See Bay City.)		Pardeeville .....	Columbia.
Delafield .....	Waukesha.	Plattsville .....	Grant.
Green Bay .....	Brown.	Prescott .....	Pierce.
Janesville .....	Rock.	Racine .....	Racine.
Kenosha .....	Kenosha.	Rocky Run .....	Columbia.
Lake Mills .....	Jefferson.	St. Croix .....	Polk.
Lind .....	Waupaca.	Springdale.—(See Pardeeville.)	
Madison .....	Dane.	Superior .....	Douglas.
Menasha .....	Winnebago.	Waukesha .....	Waukesha.
		Wausau .....	Marathon.

## MEXICO AND CENTRAL AMERICA.

STATION.	COUNTRY.	STATION.	COUNTRY.
Cordova .....	Mexico.	Mirador .....	Mexico.
Guatemala .....	Guatemala.	Truxillo .....	Honduras.
Mexico .....	Mexico.	Vera Cruz .....	Mexico.
Minatitlan .....	Mexico.		

## WEST INDIES AND OTHER ISLANDS.

Centre Signal Station .....	Bermuda.	St. Georges .....	Bermuda.
Horta .....	Azores.	Shelby Bay .....	Bermuda.
Ireland Island .....	Bermuda.	Turk's Island .....	Bahamas.
Nassau .....	Bahamas.	Up Park Camp .....	Jamaica.
Port of Spain .....	Trinidad.		

## SOUTH AMERICA.

Assumption .....	Paraguay.	Catharina Sophia, Surinam .....	Dutch Guiana.
Barbacoas .....	New Granada.	Chanacillo .....	Chili.
Bogota .....	New Granada.	Colonia Tovar .....	Venezuela.
Caracas .....	Venezuela.		

## EASTERN CONTINENT.

Jerusalem .....	Palestine.	Nengenenge .....	Africa.
Mosul .....	Mesopotamia.		



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REDUCTIONS

OF

METEOROLOGICAL OBSERVATIONS

FOR THE YEAR 1854.

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# NO. 1.—LIST OF STATIONS AND OBSERVERS, 1854.\*

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fed		
Aiken, S. C.....	33 32	81 34	565	8	H. W. Rivenel.
Albion Mines, Nova Scotia.....	45 34	62 42	128	3	Henry Poole.
Alexandria, Va.....	38 48	77 01	56	12	Benj. Hallowell and others.
All Saints, S. C.....	31 40	79 17	20	2	Rev. A. Glennie.
Amherst, Mass.....	42 22	72 34	267	12	Prof. E. S. Snell.
Angelica, N. Y.....	42 15	78 01	1,500	8	Dr. E. M. Alba.
Ann Arbor, Mich.....	42 15	83 30	—	12	L. Woodruff.
Ann Arbor, Mich.....	42 16	83 44	891	12	Prof. A. Winchell.
Ashland, Va.....	38 38	81 57	—	12	Prof. Geo. R. Rossiter and Sam'l Couch.
Assumption, Paraguay, S. A.....	25 16 S	57 45	—	6	E. A. Hopkins, United States Consul.
Athens, Ill.....	39 52	89 56	—	12	Joel Hall.
Augusta Ill.....	40 12	90 45	—	12	Dr. S. B. Mead.
Augusta, Ga.....	33 28	81 54	—	7	W. Haines.
Austin, Texas.....	30 20	97 46	—	12	Dr. S. K. Jennings.
Baldwinsville, N. Y.....	43 04	76 41	—	12	John Bowman.
Ballardsville, Ky.....	38 24	85 31	—	10	Dr. John Swain.
Barbacoas, New Grenada, S. A.....	8 30	79 00	55	1	E. L. Berthoud.
Batavia, Ill.....	41 48	88 23	—	8	Prof. Wm. Coffin.
Battle Creek, Mich.....	42 20	85 01	—	12	Dr. W. M. Campbell.
Beaver Brook, N. Y.....	41 20?	74 50?	700?	10	C. S. Woodard.
Bedford, Pa.....	40 01	78 30	—	11	Samuel Brown.
Beilefontaine, Wis.....	43 40	89 15	—	8	Thomas Gay.
Beloit, Wis.....	42 30	89 04	750	12	Prof. S. K. Lathrop, Prof. W. Porter, and others.
Beverly, N. Y.....	41 23	74 02	180	11	Thos. B. Arden.
Biddeford, Me.....	43 29	70 27	41	2	Jas. G. Garland and F. A. Small.
Bladensburg, Md.....	38 57	76 58	—	1	B. O. Lowmides.
Bloomfield, N. J.....	40 49	74 11	120	12	Robert L. Cook.
Brandon, Vt.....	43 45	73 08	—	12	D. Buckland.
Brooklyn, Mich.....	42 06	83 36	1,020	3	Dr. M. K. Taylor.
Brookville, Pa.....	41 12	79 08	—	6	D. S. Dearing.
Buffalo, N. Y.....	42 50	79 33	606	2	Dr. Sanford B. Hunt.
Buffalo, N. Y.....	42 50	79 33	561	1	W. D. Allen.
Buffalo, N. Y.....	42 50	79 33	—	11	E. O. Salisbury.
Burlington, N. J.....	40 61	74 55	26	12	Rev. Adolph Frost.
Burlington, Vt.....	44 29	73 11	346	12	Prof. Zadock Thompson.
Bustleton, Pa.....	40 65	75 01	—	1	J. C. Martindale.
Byberry, Pa.....	40 06	74 58	—	8	John Comly.
Camden, S. C.....	34 17	80 33	275	12	Thornton Carpenter and J. A. Young.
Canton, N. Y.....	44 38	76 15	304	12	E. W. Johnson.
Carmel, Maine.....	44 47	69 00	175	12	John J. Bell.
Castleton, Vt.....	43 34	73 09	—	12	D. Underwood.
Cedar Keys, Fla.....	29 08	83 03	—	12	Judge Augustus Steele.
Ceres, Pa.....	42 00	78 25	1,440	3	Dr. R. P. Stevens.
Ceresco, Wis.....	43 50	88 57	917	6	Miss Mary E. Baker.
Chapel Hill, N. C.....	35 54	79 17	—	12	Prof. James Phillips.
Chatham, N. Y.....	42 26	73 30	—	5	C. T. Chase.
College Hill, Ohio, (Farmers' College).....	39 10?	84 25?	—	11	Prof. R. S. Bosworth and G. S. Ormsby.
Colonia Tovar, Venezuela, S. A.....	10 26	67 20	6,500	1	A. Fendler.
Columbia, S. C.....	33 57	81 07	—	1	—
Concord, N. H.....	43 12	71 29	374	12	Dr. Wm. Prescott.
Cooper, Mich.....	42 40	85 31	—	6	Mrs. O. C. Walker.
Craftsbury, Vt.....	44 40	72 29	1,100	9	Charles A. J. Marsh.
Crichton's Store, Va.....	37 20?	77 50?	—	12	Lieut. B. F. Astrop.
Culloden, Ga.....	32 51	84 13	825	6	Prof. John Darby.
Danville, Ky.....	37 40	84 31	950	12	O. Beatty.
Detroit, Mich.....	42 24	83 06	620	12	Rev. Geo. Duffield.
Dubuque, Iowa.....	42 29	90 50	550	12	Dr. Asa Horr.
Exeter, N. H.....	42 58	70 55	—	12	Rev. L. W. Leonard.
Fairfax, Vt.....	44 39	72 58	—	1	Prof. S. H. Peabody.
Falconer, N. Y.....	42 05	79 10	—	3	Lawrence A. Langdon.
Fishkill, N. Y.....	41 34	74 18	42	12	William Harkness.

\* For the different names by which in some cases the same place is designated by the observers see the General List of Stations in the introduction.



No. 1.—LIST OF STATIONS AND OBSERVERS, 1854—Continued.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	<i>Fect.</i>		
Flint, Mich.....	42 58	83 39	.....	12	Drs. Clarke and Miles.
Fort Madison, Iowa.....	40 37	91 28	.....	12	D. McCready.
Fort Pierre, Neb.....	44 23	100 11	.....	5	F. Behmer.
Fort Union, Neb.....	48 15	103 15	.....	6	E. T. Denig.
Frederick, Md.....	39 24	77 18	.....	12	Henry E. Haushew.
Freeport, Pa.....	40 30	79 41	1,000	5	A. D. Weir.
Fryeburg, Me.....	44 03	71 00	.....	12	George W. Burrows.
Gallipolis, Ohio.....	39 00	82 01	520	10	D. G. W. Livezey.
Garlandville, Miss.....	32 23	89 20	.....	12	Rev. E. Robinson.
Geneva Hall, Ohio.....	40 30	83 51	.....	4	R. Shields.
Germantown, Ohio.....	39 30	84 20	720	12	L. Groneweg.
Gettysburg, Pa.....	39 51	77 15	.....	12	Prof. M. Jacobs.
Glenwood, Tenn.....	36 28	87 13	481	12	W. M. Stewart.
Gouverneur, N. Y.....	44 25	75 35	.....	12	Dr. P. O. Williams.
Grand Rapids, Mich.....	43 00	86 00	743	8	Alfred E. Currier.
Grand Traverse, Mich.....	44 56	85 30	.....	2	H. R. Schellerly.
Granville, Ohio.....	40 04	82 34	.....	10	Prof. S. N. Sanford.
Great Falls, N. H.....	43 18	70 52	250	6	H. E. Sawyer.
Greencastle, Ind.....	39 39	86 46	.....	2	Prof. Jos. Tingley.
Greene Springs, Ala.....	32 50	89 46	.....	5	Prof. H. Tutwiler.
Halifax, Nova Scotia (a).....	44 39	63 36	.....	12	
Hamilton, Canada West.....	43 15	79 56	.....	12	Dr. W. Craigie.
Hannibal, Mo.....	39 44	91 23	.....	12	O. H. P. Lear.
Hanover, N. H., (Dartmouth College).....	43 42	72 17	530	12	Prof. Ira Young and Albert A. Young.
Harrisburg, Pa.....	40 16	76 50	.....	12	Dr. J. Heisely.
Hillsborough, Ohio.....	39 13	83 30	1,000	12	Rev. J. M. D. Matthews.
Houseville, N. Y.....	43 40	75 32	.....	1	W. D. Yale.
Huntersville, Va.....	39 30	80 01	2,640	3	W. S. Kern.
Huntsville, Texas.....	30 41	95 29	.....	2	
Huron, Ohio.....	41 25	82 40	.....	5	Edmund W. West.
Jackson, Miss.....	32 00	90 00	.....	5	A. R. Green.
Jackson, Ohio.....	39 07	82 30	700	11	Rev. L. Crookham.
Jacksonville, Fla.....	30 15	82 00	14	12	Dr. A. S. Baldwin.
Janesville, Wis.....	42 42	89 09	768	12	J. F. Willard.
Jefferson Barracks, Mo.....	38 37	90 16	482	12	
Keene, Ohio.....	40 23	81 53	.....	1	E. Spooner.
Kendallville, Ind.....	40 28	85 13	975	8	J. Knauer and W. B. Coventing.
Keokuk, Iowa.....	40 25	91 21	.....	5	Dr. J. E. Ball and Mrs. Ida E. Ball.
Key West, Fla.....	24 33	81 48	4	12	Wm. C. Dennis.
Knox Hill, Pa.....	30 30	86 01	148	12	John Newton.
Knoxville, Tenn.....	35 59	83 54	1,000	12	Prof. Geo. Cooke.
Lac qui Parle, Minn.....	45 00	95 30	.....	5	Rev. S. R. and A. L. Riggs.
Lafayette, Ind.....	40 25	86 49	620	2	A. H. Bixby.
Lake Washington, Miss.....	33 00	91 06	.....	7	Rev. J. A. Shepherd.
Lambertville, N. J.....	40 23	74 56	.....	12	L. H. Parsons.
Lebanon, Tenn.....	36 15	86 15	.....	3	Prof. A. P. Stewart.
Leroy, N. Y.....	42 57	78 07	.....	5	L. F. Munger.
Lewisburg, Va.....	37 49	80 28	.....	12	Dr. Thomas Patton.
Lima, Pa.....	39 55	75 25	196	12	Joseph Edwards.
Lodi, N. Y.....	42 37	76 53	.....	12	John Lefferts.
Logansport, Ind.....	40 45	86 25	.....	2	E. L. Berthoud.
Londonderry, N. H.....	42 53	71 20	.....	12	Robert C. Mack.
Lowville, N. Y.....	43 46	75 18	.....	2	Ira R. Adams.
Lynchburg, Va.....	36 30	79 07	575	7	A. Nettleton.
Madison, Ind.....	.....	.....	.....	2	C. Barnes.
Madison, Ohio.....	41 55	81 06	725	1	Miss Ardella Cunningham.
Madison, Wis.....	43 05	89 25	892	9	Profs. S. H. Carpenter and S. K. Sterling.
Madrid, N. Y.....	44 43	75 33	280	9	E. A. Dayton.
Manchester, Ill.....	39 33	90 35	723	5	John Grant.
Manchester, N. H.....	42 59	71 28	300	12	Hon. S. N. Bell.
Marietta, Ohio.....	39 25	81 29	.....	11	Prof. J. W. Andrews.
Memphis, Tenn.....	35 06	90 08	.....	10	Navy Yard.
Mendon, Mass.....	42 06	71 34	.....	12	Dr. John G. Metcali.

(a) From meteorological papers of British Board of Trade.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1854—Continued.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fed.		
Millersburg, Ky.....	38 40	84 27	804	9	Rev. J. Miller.
Milton, Ind.....	39 47	85 02	800	12	Dr. V. Kersey.
Milwaukie, Wis.....	43 04	87 57	593	11	I. A. Lapham.
Mirador, Mexico.....	19 50	96 25	3,500	12	Carl Sartorius.
Monroe, Mich.....	41 56	83 22	590	12	H. Whelpley.
Monroe, Mich.....	41 59	83 24	-----	1	Capt. A. D. Perkins.
Monroeville, Ala.....	31 33	87 25	-----	12	S. J. Cumming.
Montcalm, Va.....	38 05	78 21	450	6	C. S. Meriwether.
Morrisville, Pa.....	40 12	74 53	30	12	Ebenezer Hance.
Moss Grove, Pa.....	41 40	79 51	-----	11	F. Schreiner.
Mosul, Mesopotamia, Asia.....	36 22	43 14 E.	-----	12	
Mount Vernon, Ohio.....	40 25	82 31	-----	5	F. A. Benton
Muscatine, Iowa.....	41 26	91 05	586	12	T. S. Parvin.
Nantucket, Mass.....	41 17	70 06	30	12	Hon. Wm. Mitchell.
Newark, Del., (Delaware College).....	39 38	75 47	120	2	Prof. W. A. Crawford.
Newark, N. J.....	40 45	74 10	-----	7	W. A. Whitehead.
New Bedford, Mass.....	41 39	70 56	90	12	Samuel Rodman.
Newburyport, Mass.....	42 49	70 53	-----	11	Dr. H. C. Perkins.
New Creek Depot, Va.....	39 25	79 00	-----	3	M. McDonald.
New Harmony, Ind.....	38 08	87 09	320	12	John Chappelsmith.
New London, Conn.....	41 22	72 09	90	12	Rev. T. Edwards, D. D.
New Orleans, La.....	29 57	90 00	-----	11	Dr. E. H. Barton.
New Wied, Texas.....	29 42	98 15	-----	12	Prof. J. C. Ervendberg.
New York city, N. Y.....	40 42	74 01	55	12	J. C. Gibbons.
New York city, N. Y., (D. & D. Inst.).....	40 43	74 05	159	12	Prof. O. W. Morris.
Norristown, Pa.....	40 08	75 19	153	12	Rev. J. G. Ralston.
North Attleboro', Mass.....	41 52	71 23	175	12	Henry Price.
North Scituate, R. I.....	41 50	71 34	300	5	Henry C. Sheldon.
Norwalk, Ohio.....	41 13	82 43	-----	3	Gustavus A. Hyde.
Oberlin, Ohio.....	41 20	82 15	800	12	Professor J. H. Fairchild.
Ogdensburg, N. Y.....	44 43	75 26	-----	2	W. E. Guest.
Oldtown, Maine.....	44 48	68 45	137	4	Rev. Samuel H. Merrill.
Oswego, N. Y.....	43 25	76 35	-----	5	J. H. Hart.
Ottawa, Ill.....	41 20	88 47	-----	12	Dr. J. O. Harris.
Oxford, Miss.....	34 20	89 25	300	3	Professor L. Harper.
Paradise, Pa.....	40 00	76 03	-----	12	Jacob Franz.
Pella, Iowa.....	41 30	92 55	-----	8	E. H. A. Scheeper.
Penn Yan, N. Y.....	42 42	77 11	740	12	Dr. H. P. Sartwell.
Perry, Maine.....	45 00	67 06	100	11	William D. Dana.
Perrysburg, Ohio.....	41 39	83 40	-----	10	F. Hollenbeck.
Pittsburg, Pa., (Oakland Station).....	40 32	80 02	850	12	W. W. Wilson and Dr. H. Smyser.
Pittsburg, Pa., (Marine Hospital).....	40 32	80 02	850	7	W. Martin.
Platteville, Wis.....	42 45	90 00	-----	12	Dr. J. L. Pickard.
Philadelphia, Pa.....	39 57	75 11	53	12	Professor J. A. Kirkpatrick.
Pocopson, Pa.....	39 54	75 37	218	11	F. Darlington.
Pomfret, Conn.....	41 52½	72 00	1,000	12	Rev. Daniel Hunt.
Portsmouth, Va.....	36 50	76 19	30	3	Professor N. B. Webster.
Poultney, Iowa.....	42 40	91 21	-----	12	Dr. Benjamin F. Odell.
Princeton, Mass.....	42 28	71 53	1,113	12	Hon. John Brooks.
Providence, R. I.....	41 49	71 25	120	6	Professor A. Caswell.
Quasqueton, Iowa.....	42 23	91 43	888	11	Dr. E. C. Bidwell.
Randolph, Pa.....	41 28	80 10	1,720	5	O. T. Hobbs.
Red Lake, Min.....	48 30	95 30	-----	2	Rev. E. W. Carver.
Richmond, Ind.....	39 48	84 41	-----	12	W. W. Austin.
Richmond, Mass.....	42 24	73 20	-----	12	William Bacon.
Richmond, Ohio.....	40 20	81 01	-----	8	J. M. Deselle.
Richmond Hill, Ga.....	33 30	82 01	275	1	W. Schley, jr.
Sacramento, Cal.....	38 34	121 40	130	12	Dr. Thomas M. Logan.
Sacramento, Cal.....	38 34	121 40	-----	1	Dr. F. W. Hatch.
Sag Harbor, N. Y.....	41 00	72 20	40	12	E. N. Byram.
St. Anthony's Falls, Min.....	45 00	93 15	820	8	Dr. C. L. Anderson.
St. James, Mich.....	45 44	85 27	598	11	James J. Strang.
St. John's, N. C.....	33 10?	79 40?	-----	12	S. P. Ravenel.
St. Johnsbury, Vt.....	44 30	74 01	-----	12	J. P. Fairbank and J. K. Colby.
St. Joseph's, Min.....	48 55	98 00	-----	9	Rev. D. B. Spencer.



## No 1.—LIST OF STATIONS AND OBSERVERS, 1854—Continued.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
St. Louis, Mo.....	38 37	90 16	482	12	Dr. George Engelmann.
St. Martin's, Canada East.....	45 32	73 36	118	12	Dr. Charles Smallwood.
St. Mary's, Iowa.....	41 00	95 45	1,200	2	D. E. Read.
Salisbury, Conn.....	42 00	73 18	737	12	Dr. Ovid Plumb.
Salmon Falls, N. H.....	43 30	71 00	-----	12	G. B. Sawyer.
San Francisco, Cal.....	38 00	122 00	-----	12	Dr. H. Gibbons.
Saugatuck, Mich.....	42 30?	85 50?	-----	11	L. H. Streng.
Savannah, Ga.....	32 05	81 07	42	12	Dr. John F. Posey.
Savannah, Ohio.....	41 12	82 31	-----	10	Dr. John Ingram.
Saybrook, Conn.....	41 16	72 20	10	10	James Rankin.
Schellman Hall, Md.....	39 23	76 57	700	12	Miss Harriott M. Baer.
Smithfield, Va.....	37 00	76 40	-----	6	Dr. John R. Purdie.
Smithville, N. Y.....	44 00	76 01	-----	5	J. E. Breed.
South Thomaston, Maine.....	44 06	69 12	-----	1	Joshua Bartlett.
Southwick, Mass.....	42 02	72 51	265	12	Amasa Holcomb.
Sparta, Ga.....	33 17	83 09	550	12	Dr. E. M. Pendleton.
Spencertown, N. Y.....	43 19	73 41	800?	4	Rev. T. C. P. Hyde.
Springdale, Ky.....	38 07	85 24	570	12	Mrs. Lawrence Young.
Springfield, Mass.....	42 06	72 35	199	12	Lucius C. Allin.
Steuben, Maine.....	44 44	67 50	50	12	J. D. Parker.
Stockton, Cal.....	37 57	121 14	-----	12	Dr. Robert K. Reid.
Sugar Grove, Pa.....	42 00	79 20	1,450	5	W. O. Blodget.
Taunton, Mass.....	41 49	71 09	-----	8	Albert Schlegel.
The Rock, Ga.....	32 52	184 23	833	9	Dr. James Anderson.
Thornbury, N. O.....	36 20	77 21	-----	6	Rev. D. Morelle and Rev. F. Fitzgerald.
Troy, N. Y.....	42 44	73 37	58	8	Professor E. H. Allen.
Truxillo, Honduras, Central America.....	15 54	86 00	80	6	E. Purdot.
Tuscaloosa, Ala.....	33 12	87 28	245?	8	Professor M. Tuomey and Geo. Benagh.
Upper Alton, Ill.....	39 00	89 36	-----	11	Dr. John James.
Urbana, Ohio.....	40 06	83 43	1,015	12	Professor M. G. Williams.
Vicksburg, Miss.....	32 22	90 56	-----	2	N. Hatch.
Wales, N. Y.....	42 46	78 37	-----	1	S. O. Carpenter.
Wampsville, N. Y.....	43 04	75 50	500	12	Dr. S. Spooner.
Warrington, Florida.....	30 21	87 16	12	12	John Pearson.
Warrior's Mark, Pa.....	40 39	78 14	-----	5	J. R. Lowrie.
Washington, D. C.....	38 53	77 01	40	10	Smithsonian Institution.
West Cornwall, Conn.....	41 50	73 21	1,000	12	T. S. Gold.
Westfield, Mass.....	42 06	72 44	-----	1	Rev. E. Davis, D. D.
West Haverford, Pa.....	40 00	75 21	-----	12	Dr. Paul Swift.
Wewokaville, Ala.....	33 20?	86 00?	-----	2	Benjamin T. Holley.
Whitemarsh Island, Ga.....	32 00	81 00	18	12	R. P. Gibson.
Williamstown, Mass., (Williams Col.).....	42 43	71 13	725	4	Professor P. A. Chadbourne and others.
Winchester, Va.....	39 15	78 10	-----	10	John W. Marvin.
Windham, Maine.....	43 49	70 17	-----	6	Samuel A. Eveleth.
Wood's Hole, Mass.....	41 40	70 17	25	-----	R. R. Gifford.
Worcester, Mass.....	42 16	71 48	536	12	Dr. Edward A. Smith.
Yankeetown, Ohio.....	40 00	84 32	700	2	A. Jaque.
Yorkville, Ala.....	33 30	88 17	-----	4	Dr. John W. Payne.
Youngsville, Pa.....	41 50	79 20	1,185	4	Dr. A. C. Blodget.
Zanesfield, Ohio.....	40 22	83 38	-----	1	J. F. Lukins.
Zanesville, Ohio.....	39 58	82 29	700	7	Dr. J. G. F. Holston.

## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1854.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Nova Scotia.....Albion Mines (a).....	29.89	30	7 a. m.	30.61	14	2 and 9.	29.02
Halifax.....	30.02	30		30.50	14		29.10
Canada East.....St. Martin's.....	29.49	25	7 and 9.	30.05	12	9 p. m.	28.54
Canada West.....Hamilton (b).....	29.67		9 p. m.	30.20		7 and 9.	29.00
Maine.....Biddeford (c).....	30.04	25	Sunset.	30.59	21	1½ & ss.	29.39
Carmel (d).....	29.64	29	9 p. m.	30.29	13	2 p. m.	28.94
South Thomaston.....	29.20	26	9 p. m.	29.57	1	9 p. m.	28.48
New Hampshire.....Concord.....	29.66	29	7 and 9.	30.27	12	9 p. m.	28.90
Hanover.....	29.47		9 p. m.	30.06		9 p. m.	28.66
Manchester.....	30.06	29	9 p. m.	30.67	12	9 p. m.	29.37
Vermont.....Burlington.....	29.61	25	2 p. m.	30.28	12	9 p. m.	28.73
St. Johnsbury.....	29.26	29	7 a. m.	29.85	12	9 p. m.	28.48
Massachusetts.....Amherst.....	29.81	29	9 p. m.	30.39	21	2 p. m.	29.18
Barnstable.....	29.57	29	9 p. m.	30.18	21	2 p. m.	28.90
Nantucket.....	30.09	8	9 p. m.	30.80	12	9 p. m.	29.10
New Bedford.....	30.40	3	7 a. m.	30.67	1	2 p. m.	29.66
Newburyport.....	30.03	29	9 p. m.	30.66	12	9 p. m.	29.33
North Attleboro'.....	29.88	29	2 p. m.	30.48	21	2 p. m.	29.18
Princeton.....	28.81	29	9 p. m.	29.38	3	2 p. m.	28.10
Southwick.....	30.03	29	9 p. m.	30.67	31	2 p. m.	29.17
Worcester.....	29.49	29	9 p. m.	30.05	21	2 p. m.	28.84
Rhode Island.....North Scituate.....	29.70	29	9 p. m.	30.27	12	9 p. m.	29.00
Providence.....	29.87	29	Sunrise.	30.47	20	1 p. m.	29.20
Connecticut.....Pomfret.....	28.92	29	7 a. m.	29.42		9 p. m.	28.16
New York.....Beaver Brook (e).....	29.05	25	Noon.	29.52	12	Night.	28.37
Canton.....	29.46	25	7 a. m.	30.10	12	9 p. m.	28.55
Lowville (f).....	28.94	25	7 a. m.	29.51	12	1½ p. m.	28.34
Madrid.....	29.67	23	7 a. m.	30.99	13	9 p. m.	28.06
N. Y. city. [Deaf and Dumb Institution].....	29.98	29	7 a. m.	30.53	12	9 p. m.	29.36
Oswego (g).....	30.02	25	7 a. m.	30.85	12	9 p. m.	28.80
Penn Yan (h).....	29.20		2 p. m.	29.67		2 and 9.	28.41
Sag Harbor.....	29.85	25	2 p. m.	30.46	12	9 p. m.	(i) 29.23
Troy.....	30.04	29	7 a. m.	30.66	12	9 p. m.	29.26
New Jersey.....Bloomfield.....	29.94	25	2 p. m.	(j) 30.44	30	2 p. m.	29.00
Burlington (g).....	30.13	25	2 p. m.	30.58	12	2 p. m.	29.55
Lambertville.....	30.07	25	2 p. m.	30.56	12	9 p. m.	29.41
Newark (k).....	30.09		7 a. m.	30.60		7 a. m.	29.50
Pennsylvania.....Bedford.....	29.15	23	9 p. m.	29.70	12	2 p. m.	28.40
Byberry.....	30.02	29	7 a. m.	30.57	12	2 p. m.	29.34
Gettysburg.....	29.50	29	2 p. m.	29.97	12	2 p. m.	28.74
Harrisburg.....	29.80	29	9 p. m.	30.27	12	2 p. m.	29.04
Lima.....	29.95	29	7 a. m.	30.46	12	2 p. m.	29.23
Morrisville (g).....	30.17	29	7 a. m.	30.65	12	2 p. m.	29.45
Norristown.....	29.96	29	2 p. m.	30.69	12	2 p. m.	29.28
Philadelphia.....	30.01	29	7 a. m.	30.47	12	9 p. m.	(l) 29.46
Pittsburg, [Marine Hospital] (m).....	29.02	23	9 a. m.	29.56	12	3 p. m.	28.24
Pittsburg, [Marine Hospital] (n).....	29.03			29.45			28.31
Pittsburg, [Oakland Station].....	28.96	23	2 p. m.	29.46	12	7 a. m.	28.31
Sagar Grove.....	28.09	23	2 p. m.	28.58	12	2 p. m.	27.37
Maryland.....Frederick.....	29.82	23	9 p. m.	30.28	12	2 p. m.	28.97
Dist. of Columbia.....Washington (o).....	30.23	25	7 a. m.	30.58	12	2 p. m.	29.21
Virginia.....Alexandria.....	30.15	29	7 a. m.	30.60	12	2 p. m.	29.36
Portsmouth (g).....	29.62		7 a. m.	30.20		2 p. m.	28.60
North Carolina.....Chapel Hill.....	29.60	23	2 p. m.	30.07	12	2 p. m.	(p) 29.05
Thornbury.....	30.17	24	7 a. m.	30.64	13	9 p. m.	29.65

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and p. m.

(c) Observations taken at 7 a. m., 1½ p. m., and sunset.

(d) Observations omitted from the 3d to the 6th of the month.

(e) Observations taken at morning, noon, and night.

(f) Observations taken at 7 a. m., 1½ p. m., and 9 p. m.

(g) Not corrected for temperature.

(h) Observations taken at sunrise, 2 p. m., and sunset.

(i) Same height at 2 p. m. on the 21st.

(j) Same height at 9 p. m. on the 29th.

(k) Observations taken at 7 a. m. and 3 p. m.

(l) Same height at 7 a. m. on the 21st.

(m) Observations taken at 9 a. m., 3 p. m., and 9 p. m.

(n) Observations taken at sunrise.

(o) Observations very incomplete.

(p) Same height at 7 a. m. on the 14th.



No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1854.—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
South Carolina.....Camden.....	30.01	24	7 a. m.	30.48	12	7 and 2.	29.36
Georgia.....Culloden.....	29.52	11	2 p. m.	29.95	20	2 p. m.	29.20
.....Savannah.....	30.19	23, 24	7 and 9.	30.61	12	7 p. m.	29.60
.....Sparta.....	29.52	24	7 a. m.	29.90	12	7 a. m.	29.03
.....The Rock (a).....	29.37			29.73			29.00
Florida.....Jacksonville.....	30.25	23	9 p. m.	30.62	12	7 a. m.	29.80
.....Key West (b).....	29.92	2	2 p. m.	30.14	12	7 a. m.	29.70
.....Knox Hill.....	30.01	23	7 and 9.	30.41	11	2 p. m.	29.45
.....Warrington (c).....	30.13	23	7 a. m.	30.54	11	9 p. m.	29.53
Alabama.....Tuscaloosa.....	29.96	23	7 a. m.	30.51	11	9 p. m.	29.33
Louisiana.....New Orleans.....	29.98	23	7 a. m.	30.36	11	2 p. m.	29.35
Texas.....New Wied (d).....	27.84		2 p. m.	28.32		2 p. m.	27.45
Tennessee.....Glenwood.....	29.67	23	7 a. m.	30.35	11	9 p. m.	28.91
.....Knoxville.....	28.78	23	2 p. m.	29.65	12	2 p. m.	28.19
.....Lebanon.....	29.58	23	7 a. m.	30.25	11	9 p. m.	28.92
.....Memphis.....	29.58	23	7 and 2.	30.14	11	9 p. m.	29.01
Kentucky.....Ballardsville.....	29.11	23	2 p. m.	29.92	12	7 a. m.	28.41
.....Springdale.....	29.43	6	9 p. m.	29.94	12	7 a. m.	28.82
Ohio.....College Hill.....	29.11	23	7 a. m.	29.78	12	7 a. m.	28.33
.....Germantown.....	29.27	23	7 a. m.	29.96	20	2 p. m.	28.58
.....Granville.....	29.02	23	7 a. m.	29.59	12	7 a. m.	28.24
.....Hillsborough.....	28.91	23	2 p. m.	29.52	12	7 a. m.	28.15
.....Marietta.....	29.35	23	7 a. m.	29.85	31	9 p. m.	28.05
.....Oberlin.....	29.11	23	7 a. m.	29.67	12	7 a. m.	28.33
.....Urbana.....	28.84			29.35			28.13
.....Zanesville.....	29.12	25	9 p. m.	29.89	20	2 p. m.	28.43
Michigan.....Detroit (e).....	29.56	23	8 a. m.	30.13	12	2 p. m.	28.76
Indiana.....Greencastle (f).....	29.21	23	7 a. m.	29.87	12	7 a. m.	28.53
.....Milton.....	29.09	23	2 p. m.	29.64	20	2 p. m.	28.46
.....New Harmony.....	29.78	23	7 a. m.	30.46	20	7 and 9. (g)	29.14
Illinois.....Upper Alton.....	29.54	23	7 a. m.	30.35	12	9 p. m.	29.01
Missouri.....St. Louis.....	29.57	23	7 a. m.	30.26	20	7 a. m.	28.88
Wisconsin.....Beloit.....	29.20	23	7 a. m.	29.77	12	2 p. m.	28.60
.....Madison.....	28.96	19	2 p. m.	(h) 29.63	12	2 p. m.	28.37
Iowa.....Dubuque.....	29.37	6	7 a. m.	30.00	12	9 p. m.	28.70
.....Muscatine.....	29.57	22	9 p. m.	30.15	12	2 and 9.	29.00
.....Quasqueton (i).....	29.08	22	9 p. m.	29.66	12	9 p. m.	28.46
California.....Sacramento [Logan].....	30.11?			30.45			29.70
.....Stockton.....	29.62		7, 2, 9	29.87		7 a. m.	29.12
South America.....Assumption, Paraguay (j).....	29.56	14	8 a. m.	(k) 30.00	7	4 p. m.	29.15
.....Assumption, Paraguay (l).....	29.54	14	8 a. m.	29.77	3	4 p. m.	29.28

(a) Observations taken in the morning.

(b) Not corrected for temperature. Observations at 7 a. m. and 2 p. m.

(c) Observations taken at sunrise, noon, and sunset.

(d) Not corrected for temperature. Observations at 2 p. m.

(e) Observations at 8 a. m., 2 p. m., and 9 p. m.

(f) Observations incomplete.

(g) Same height on the 11th.

(h) Same height at 2 p. m. on the 26th.

(i) No observation on the 4th, 5th, 6th, and 7th.

(j) Aneroid. Observations taken at 8 a. m., 12 m., 4 p. m., and 9 p. m.

(k) Same height on the 14th at 12 m.

(l) Observations taken at 8 a. m., 12 m., 4 p. m., and 9 p. m.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1854.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Nova Scotia	Albion Mines	29.88	23	7 a. m.	30.67	23	9 p. m.	29.68
	Halifax (a)	30.01	20		30.52	9		29.15
Canada East	St. Martin's	29.54	25	2 p. m.	30.07	8	9 p. m.	28.90
Canada West	Hamilton (b)	29.73	27	9 p. m.	30.20	8	9 p. m.	29.13
Maine	Biddeford (c)	29.98	25	9 p. m.	30.61	24	7 a. m.	29.06
	Carmel	29.68	25	9 p. m.	30.37	9	7 a. m.	28.94
	Steuben	30.04	25	9 p. m.	30.81	1	9 p. m.	29.07
New Hampshire	Concord	29.66	25	9 p. m.	30.30	9	7 a. m.	29.00
	Hanover	29.50	25	9 p. m.	30.08	9	7 a. m.	28.81
	Manchester	30.07	25	9 p. m.	30.70	9	7 a. m.	29.45
Vermont	Burlington	29.72	25	2 p. m.	30.29	1	2 p. m.	(d) 29.06
	St. Johnsbury	29.29	25	9 p. m.	29.86	1	2 p. m.	28.68
Massachusetts	Amherst	29.80	25	9 p. m.	30.44	9	7 a. m.	29.17
	Barnstable	29.54	25	9 p. m.	30.20	9	7 a. m.	28.83
	Nantucket	30.05	25	9 p. m.	30.70	21	7 a. m.	29.56
	New Bedford	30.22	25	9 p. m.	30.64	2	2 p. m.	30.03
	Newburyport	30.01	25	9 p. m.	30.73	9	7 a. m.	29.30
	North Attleboro'	29.87	25	9 p. m.	30.53	9	7 a. m.	29.17
	Princeton	28.81	25	9 p. m.	29.45	9	7 a. m.	28.21
	Southwick (e)	30.05	25	9 p. m.	30.65	9	7 a. m.	29.44
	Worcester	29.47	25	2 p. m.	30.08	9	7 a. m.	28.86
Rhode Island	North Scituate	29.67	25	9 p. m.	30.32	9	7 a. m.	29.02
	Providence (f)	29.85	25	10 p. m.	30.47	9	Sunrise.	29.18
Connecticut	Pomfret	28.76	25	9 p. m.	29.51	9	7 a. m.	28.31
New York	Beaver Brook	29.09		9 p. m.	29.57		9 p. m.	28.54
	Canton	29.52	25	7 and 2.	30.07	8	9 p. m.	28.83
	Lowville (g)	29.01	25	7 a. m.	29.50	26	9½ p. m.	28.43
	Madrid	29.78	25	2 p. m.	30.32	8	9 p. m.	29.05
	New York city, [D. and D. Inst.]	29.93	25	9 p. m.	30.44	8	9 p. m.	29.39
	Oswego (c)	30.09	25	2 p. m.	30.75	1	2 p. m.	29.30
	Penn Yan (h)	29.19		2 p. m. & sunset.	29.62		Sunset.	28.59
	Sag Harbor	29.84	25	2 p. m.	30.45	9	7 a. m.	29.16
	Troy	30.06	25	7 a. m.	30.63	8	9 p. m.	29.39
New Jersey	Bloomfield	29.90	25	2 p. m.	30.43	8	9 p. m.	29.34
	Burlington (c)	30.18	25	2 and 9.	(i) 30.50	26	2 p. m.	(j) 29.60
	Lambertville	30.04	28	2 p. m.	30.55	9	7 a. m.	(k) 29.55
	Newark (l)	30.04	25	5 p. m.	30.58	26	5 p. m.	29.54
Pennsylvania	Bedford	29.16	28	7 a. m.	29.56	8	9 p. m.	28.66
	Byberry	29.98	28	7 a. m.	30.51	2	2 p. m.	(k) 29.43
	Gettysburg	29.46	28	7 a. m.	29.94	26	2 p. m.	28.92
	Harrisburg	29.78	28	7 a. m.	30.24	26	2 p. m.	29.23
	Lima	29.90	28	7 a. m.	30.39	1	2 p. m.	29.39
	Morrisville (c)	29.73	7	7 a. m.	(m) 30.60		7, 2, & 9.	29.60
	Norristown	29.95	28	7 a. m.	30.52	2	2 p. m.	(k) 29.39
	Philadelphia	29.94	28	7 a. m.	30.40	2	2 p. m.	29.43
	Pittsburg, [Marine Hospital] (n)	29.00	28	7 a. m.	29.41	26	2 p. m.	28.43
	Pittsburg, [Oakland Station]	28.97	27	9 p. m.	29.35	26	2 p. m.	28.38
	Sugar Grove (o)	28.13	27	2 p. m.	28.60	26	2 p. m.	27.63
Maryland	Frederick	29.77	28	7 a. m.	30.26	26	2 p. m.	29.20
Dist. of Columbia	Washington (p)	30.07	28	7 a. m.	30.56	2	2 p. m.	29.52
Virginia	Alexandria	30.07	28	7 a. m.	30.58	2	2 p. m.	29.52
	Portsmouth	29.74	24	7 a. m.	30.08	16	9 p. m.	29.40
North Carolina	Chapel Hill	29.59	28	7 a. m.	29.93	20	9 p. m.	29.14
	Thornbury	30.10	28	7 a. m.	30.55		2 p. m.	29.43

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations at 9 a. m. and 9 p. m.

(c) Not corrected for temperature.

(d) Same height at 2 p. m. on the 27th.

(e) Observations omitted from 14th to 18th inclusive.

(f) Observations taken at sunrise, 9 p. m., and 10 p. m.

(g) Observations taken at 7 a. m., 1½ p. m., and 9 p. m.

(h) Observations taken at sunrise, 2 p. m., and sunset.

(i) Same height at 7 a. m. and at 2 p. m. on the 28th.

(j) Same height at 7 a. m. on the 27th.

(k) Same height at 9 p. m. on the 8th.

(l) Observations taken at 7 a. m. and 5 p. m.

(m) Same height at 9 p. m. on the 25th and at 7 a. m. on the 28th.

(n) Observations taken at sunrise, 9 a. m., 3 p. m. and 9 p. m.

(o) Imperfect.

(p) Observations at 7 a. m. and 2 p. m.



No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1854—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
South Carolina.....Camden.....	29.95	18	7 a. m.	30.34	20	2 p. m.	29.41
Georgia.....Culloden.....	29.38	17	9 p. m.	29.70	20	2 p. m.	28.88
.....Savannah.....	30.13	17	9 p. m.	30.46	20	2 p. m.	29.62
.....Sparta.....	29.48	18	7 a. m.	29.80	20	2 p. m.	29.04
.....The Rock (a).....	29.40			29.60			29.00
Florida.....Jacksonville.....	30.18	17	9 p. m.	30.46	26	2 p. m.	29.41
.....Key West (b).....	29.88	28	2 p. m.	30.09	8	2 p. m.	29.68
.....Knox Hill.....	29.95	17	9 p. m.	30.26	25	2 p. m.	29.56
.....Warrington (c).....	30.10	14	Sunset.	30.54	8	Sunset.	29.67
Louisiana.....New Orleans.....	29.91	28	2 p. m.	30.16	25	2 p. m.	29.39
Texas.....New Wied (d).....	27.93?	17	2 p. m.	28.10	25	2 p. m.	27.60
Kentucky.....Ballardsville.....	29.00	17	2 p. m.	29.50	26	7 a. m.	28.45
.....Springdale.....	29.44	17	7 a. m.	29.90	26	7 a. m.	28.77
Tennessee.....Glenwood.....	29.60	17	7 a. m.	30.11	26	7 a. m.	28.97
.....Knoxville.....	29.10	27	2 p. m.	29.84	20	2 p. m.	28.52
.....Lebanon.....	29.52	17	7 a. m.	29.95	26	7 a. m.	28.89
.....Memphis.....	29.50	17	2 p. m.	29.87	25	9 p. m.	28.96
Ohio.....College Hill.....	29.07	17	7 a. m.	(e) 29.51	26	7 a. m.	28.45
.....Germantown.....	29.24	17	7 a. m.	29.70	26	2 p. m.	28.59
.....Granville.....	28.97	27	9 p. m.	29.40	26	2 p. m.	28.35
.....Hillsborough.....	28.89	17	7 a. m.	29.31	26	2 p. m.	28.27
.....Marietta.....	29.33	17	7 a. m.	29.68	26	7 a. m.	28.73
.....Oberlin.....	29.11	23	7 a. m.	29.53	26	2 p. m.	28.55
.....Urbana.....	28.83			29.25			28.25
Michigan.....Beaver Brook.....	29.05	25	9 p. m.	29.52	26	9 p. m.	28.57
.....Detroit (f).....	29.63	23	7 a. m.	30.05	8	2 p. m.	29.04
Indiana.....Greencastle (g).....	29.17	17	7 a. m.	29.64	1	2 and 9. (h)	28.71
.....Milton.....	29.06	27	9 p. m.	29.49	26	2 p. m.	28.42
.....New Harmony.....	29.70	17	2 p. m.	30.21	26	2 p. m.	29.04
Illinois.....Upper Alton.....	29.47	17	7 a. m.	29.97	26	2 p. m.	29.02
Missouri.....St. Louis.....	29.50	16	9 p. m.	29.89	26	2 p. m.	29.01
Wisconsin.....Beloit.....	29.19	17	7 a. m.	29.66	12	2 p. m.	28.61
.....Madison.....	29.01	22	9 p. m.	29.46	9	2 p. m.	28.53
.....Milwaukie (i).....	29.39	17	7 a. m.	29.84	9	2 p. m.	28.87
Iowa.....Dubuque.....	29.31	22	9 p. m.	29.82	12	2 p. m.	28.80
.....Muscatine.....	29.56	17	7 a. m.	30.01	12	2 and 9.	29.04
.....Quasqueton.....	29.10	17	7 a. m.	29.57	12	2 p. m.	28.54
California.....Sacramento, [Logan].....	30.17			30.40			29.70
.....Stockton (j).....	29.56		2 and 9.	29.80		9 p. m.	29.20
South America.....Assumption, Paraguay (k).....	29.55	22	8 a. m.	29.77	11	4 p. m.	29.29
.....Assumption, Paraguay (l).....	29.60	22	8 a. m.	29.95	19	4 p. m.	29.20

(a) Observations taken in the morning.

(b) Not corrected for temperature. Observations at 7 a. m. and 2 p. m.

(c) Observations taken at sunrise, noon, and sunset.

(d) Observations at 2 p. m.

(e) Same height at 7 a. m. on the 23d.

(f) Observations at 8 a. m., 2 p. m., and 9 p. m.

(g) No observation after the 23d.

(h) Same height on the 12th.

(i) No observation before the 15th.

(j) Observations taken at 8 a. m., 2 p. m., and 8 p. m.

(k) Observations taken at 8 a. m., 12 m., 4 p. m., and 9 p. m.

(l) Aneroid. Observations taken at 8 a. m., 12 m., 4 p. m., and 9 p. m.

## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1854.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Nova Scotia.....	Albion Mines.....	29.69	31	2 p. m.	30.44	18	9 p. m.	28.80
	Halifax (a).....	29.82	14		30.50	26		29.00
Canada East.....	St. Martin's.....	29.32	21	7 a. m.	29.79	16	2 p. m.	28.63
Canada West.....	Hamilton (b).....	29.61		9 a. m.	30.10		9 p. m.	29.06
Maine.....	Carmel (c).....	29.55	31	7 a. m.	30.10	24	9 p. m.	28.83
	Steuben.....	29.91	31	2 p. m.	30.52	18	7 a. m.	28.97
New Hampshire.....	Concord.....	29.51	30	7 a. m.	30.01	17	9 p. m.	28.83
	Hanover.....	29.32	30	7 a. m.	29.82	18	2 p. m.	28.63
	Manchester.....	29.91	30	7 a. m.	(d) 30.39	18	7 a. m.	29.27
Vermont.....	Burlington.....	29.49	30	7 a. m.	29.98	17	9 p. m.	28.73
	St. Johnsbury.....	29.14	30	7 a. m.	29.65	17	9 p. m.	28.43
Massachusetts.....	Amherst.....	29.66	30	7 a. m.	30.12	17	9 p. m.	28.89
	Nantucket.....	29.93	30	9 p. m.	30.35	17	7 a. m.	29.33
	New Bedford.....	29.79	1	7 a. m.	30.43	16	9 p. m.	29.15
	Newburyport.....	29.86	30	7 a. m.	30.37	16	2 p. m.	29.22
	North Attleboro'.....	29.71	30	7 a. m.	30.18	16	9 p. m.	29.09
	Princeton (e).....	28.70	30	7 a. m.	29.13	24	2 p. m.	28.10
	Southwick (f).....	29.87	30	7 a. m.	30.32	16	9 p. m.	29.15
	Worcester.....	29.33	30	7 a. m.	29.77	16	9 p. m.	28.65
	North Scituate.....	29.53	30	7 a. m.	30.00	16	2 p. m.	28.81
	Providence (g).....	29.70	30	10 p. m.	30.17	17	10 p. m.	28.88
Connecticut.....	Pomfret.....	28.78	30	7 a. m.	29.22	17	9 p. m.	28.20
New York.....	Beaver Brook (h).....	28.94	29	7 a. m.	29.33	17	9 p. m.	28.31
	Canton.....	29.33	29	2 and 9.	29.82	8	2 p. m.	? 28.26
	Madrid.....	29.55	30	9 p. m.	30.96	17	9 p. m.	28.04
	New York city (i).....	29.92		Sunrise	30.37		Sunset?	29.19
	New York city, (10 p. m.).....	29.94			30.55			29.40
	New York city, [D. & D. Inst.].....	29.83	21	7 a. m.	30.24	17	9 p. m.	29.07
	Oswego (j).....	29.91	11	9 p. m.	30.80	8	2 p. m.	29.10
	Penn Yan (k).....	29.10		2 p. m.	29.58		Sunset.	28.46
	Sag Harbor.....	29.63	12	7 a. m.	30.12	16	9 p. m.	29.00
	Troy.....	29.89	30	7 a. m.	30.36	16	2 p. m.	29.16
New Jersey.....	Bloomfield.....	29.80	12	7 a. m.	(l) 30.21	16	2 p. m.	29.20
	Burlington (j).....	29.96	1	7 a. m.	30.35	17	9 p. m.	29.30
	Lambertville.....	29.94	29	9 p. m.	30.33	17	9 p. m.	29.25
Pennsylvania.....	Bedford.....	29.00	29	7 a. m.	29.49	17	9 p. m.	28.40
	Byberry.....	29.87	21	7 a. m.	30.29	17	9 p. m.	29.10
	Gettysburg.....	29.41	29	7 a. m.	29.84	17	9 p. m.	28.67
	Harrisburg.....	29.67	29	7 a. m.	30.13	17	9 p. m.	29.05
	Lima.....	29.78	2	7 a. m.	(m) 30.23	17	9 p. m.	29.05
	Morrisville (j).....	30.04	29	7, 2, & 9.	(n) 30.45		9 p. m.	29.30
	Norristown.....	29.82	29	7 a. m.	30.29	17	9 p. m.	29.27
	Philadelphia.....	29.85	29	7 a. m.	30.26	17	9 p. m.	29.15
	Pittsburg, [Marine Hospital] (o).....	28.91	29	3 p. m.	29.36	17	9 p. m.	28.35
	Pittsburg, (observations at sunrise).....	28.92			29.33			28.44
	Pittsburg, [Oakland Station].....	28.87	29	7 a. m.	29.29	17	2 p. m.	28.37
	Sugar Grove.....	28.11	28	2 p. m.	28.77	17	2 p. m.	27.48
	Warrior's Mark (p).....	28.76	29	7 a. m.	29.24	17	9 p. m.	28.15
Maryland.....	Frederick.....	29.66	21	7 a. m.	30.08	16	2 p. m.	29.09
Dist. of Columbia.....	Washington (q).....	29.97	29	9 p. m.	30.49	10	2 p. m.	29.48
Virginia.....	Alexandria.....	29.98	29	7 a. m.	30.48	17	9 p. m.	29.36
	Portsmouth (j).....	29.76	29	7 a. m.	30.05	4	2 p. m.	29.44
North Carolina.....	Chapel Hill.....	29.50	29	2 p. m.	29.88	16	2 p. m.	29.14
	Thornbury.....	29.99	29	7 a. m.	30.48	17	9 p. m.	29.42
South Carolina.....	Camden.....	29.87	29	7 a. m.	30.27	17	9 p. m.	29.44
Georgia.....	Culloden.....	29.40	5	7 a. m.	29.55	31	2 p. m.	28.93

(a) Observations taken at 6 a. m., and 8 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) Five days omitted—13th to 19th inclusive.

(d) Same height at 7 a. m. on the 31st.

(e) Observations omitted on the 1th, and 14th to the 17th.

(f) Imperfect.

(g) Observations taken at sunrise, 2 p. m., and 10 p. m.

(h) Observations taken at 7 a. m., noon, and 7 p. m.

(i) Observations taken at sunrise, noon, sunset, and 10 p. m.

(j) Not corrected for temperature.

(k) Observations taken at sunrise, 2 p. m., and sunset.

(l) Same height at 7 a. m. on the 30th.

(m) Same height at 7 a. m. on the 29th.

(n) Same height at 7 a. m. on the 30th.

(o) Observations at 9 a. m., 3 p. m., and 9 p. m.

(p) For the last 24 days of the month only.

(q) Observations at 9 a. m. and 2 p. m.



No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1854—Continued.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			
			DATE.		HEIGHT.	DATE.		HEIGHT.	
			Day.	Hour.		Day.	Hour.		
		<i>Inches.</i>				<i>Inches.</i>			
Georgia.....	Savannah.....	30.07	29	7 a. m.	30.43	23	2 p. m.	29.71	
	Sparta.....	29.41	1	7 a. m.	29.72	17	9 p. m.	29.06	
	The Rock (a).....	29.27			29.56			29.00	
Florida.....	Cedar Keys (b).....	29.85	29	2 p. m.	30.07	31	9 p. m.	29.63	
	Jacksonville.....	30.12	1	7 a. m.	30.42	24	9 p. m.	29.40	
	Key West (c).....	29.87	29	2 p. m.	30.02	26	7 a. m.	29.68	
	Knox Hill.....	29.91	1	7 a. m.	(d) 30.15	25	2 p. m.	29.66	
	Warrington (e).....	30.17	1	Sunset.	30.60	25	Sunset.	29.81	
Louisiana.....	New Orleans.....	29.81	5	9 p. m.	30.07	9	2 p. m.	29.55	
Texas.....	New Wied (f).....	27.87	10	2 p. m.	28.12	8	2 p. m.	27.45	
Tennessee.....	Glenwood.....	29.54	19	7 a. m.	29.94	31	2 p. m.	29.12	
	Knoxville.....	29.03	19	2 p. m.	29.38	17	2 p. m.	28.58	
	Lebanon.....	29.44	19	7 a. m.	29.85	10	7 a. m.	28.99	
	Memphis.....	29.44	11	7 and 2.	29.76	31	2 p. m.	29.00	
Kentucky.....	Ballardsville.....	29.03	19	7 a. m.	29.45	8	2 p. m.	28.67	
	Springdale.....	29.37	28	2 p. m.	29.74	17	2 p. m.	28.96	
Ohio.....	College Hill (g).....	29.05	19	7 a. m.	29.45	17	2 p. m.	28.53	
	Germantown.....	29.16	19	7 a. m.	29.63	17	2 p. m.	28.64	
	Granville.....	28.91	29	7 a. m.	29.36	17	2 p. m.	28.32	
	Hillsborough.....	28.80	19	7 a. m.	29.25	17	2 p. m.	28.30	
	Marietta.....	29.26	29	9 p. m.	29.69	17	2 p. m.	28.71	
	Oberlin.....	29.04	28	2 p. m.	29.49	17	2 p. m.	28.41	
	Urbana.....	28.79			29.20			28.32	
Michigan.....	Detroit.....	29.51	29	7 a. m.	29.99	8	7 a. m.	28.81	
Indiana.....	Milton.....	29.00	28	9 p. m.	29.41	17	2 p. m.	28.46	
	New Harmony.....	30.27	19	7 a. m.	30.09	8	2 p. m.	29.16	
Illinois.....	Upper Alton.....	29.46	19	7 a. m.	29.88	7	9 p. m.	28.98	
Missouri.....	St. Louis.....	29.45	19	7 a. m.	29.92	7	9 p. m.	28.96	
Wisconsin.....	Beloit.....	29.12	13	2 p. m.	29.99	2	2 p. m.	28.59	
	Cresco.....	28.94	21	2 p. m.	29.59	23	9 p. m.	28.31	
	Madison.....	28.92	28	7 a. m.	29.43	2	2 p. m.	28.32	
	Milwaukee.....	29.29	28	9 p. m.	29.82	8	7 a. m.	(h) 28.74	
	Dubuque.....	29.26	2	7 a. m.	29.82	15	2 p. m.	28.81	
Iowa.....	Muscatine.....	29.47	28	7 and 2.	29.95	2	2 p. m.	28.96	
	Quasqueton.....	29.01	12	2 p. m.	29.77	2	2 p. m.	28.46	
California.....	Sacramento, [Logan].....	30.05			30.40			29.85	
	Stockton (i).....	29.52		2 and 8.	29.85		2 and 8.	29.22	
South America.....	Assumption, Paraguay.....	29.56	22	7 a. m.	29.70	11	2 p. m.	29.38	
	Assumption, Paraguay (j).....	29.66	22	7 a. m.	30.00	11	2 p. m.	(k) 29.30	

(a) Observations taken in the morning.

(b) For the last 14 days of the month only.

(c) Not corrected for temperature. Observations at 7 a. m. and 2 p. m.

(d) Same height at 7 a. m. on the 27th.

(e) Observations at sunrise, noon, and sunset.

(f) Observations at 2 p. m.

(g) +.027 for capillarity.

(h) Same height at 2 p. m. on the 15th.

(i) Observations taken at 8 a. m., 2 p. m., and 8 p. m.

(j) Aneroid.

(k) Same height on the 11th at 9 p. m.

## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1854.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Nova Scotia	Halifax (a)	29.97	3	-----	30.40	15	-----	29.30
Canada East	St. Martin's	29.44	14	7 a. m.	29.94	1	7 a. m.	28.95
Canada West	Hamilton (b)	29.72	-----	9 a. m.	30.18	-----	9 p. m.	29.25
Maine	Carmel (c)	29.60	3	7 a. m.	30.21	26	9 p. m.	29.18
	Steuben	30.03	3	7 a. m.	30.60	1	9 p. m.	29.59
New Hampshire	Concord	29.61	3	7 a. m.	30.24	10	2 p. m.	29.13
	Hanover	29.44	3	7 a. m.	30.02	10	2 p. m.	28.94
	Manchester	30.02	7	7 a. m.	30.63	10	2 p. m.	29.50
Vermont	Burlington	29.62	14	7 a. m.	30.17	26	9 p. m.	29.13
	St. Johnsbury	29.26	3	7 a. m.	29.83	1	2 and 9. (d)	28.74
Massachusetts	Amherst	29.73	3	7 a. m.	30.39	26	9 p. m.	29.25
	Nantucket	29.97	3	2 p. m.	30.60	10	2 p. m.	29.28
	New Bedford	29.90	3	7 a. m.	30.52	10	2 p. m.	29.28
	Newburyport	28.77	3	7 a. m.	30.60	10	2 p. m.	29.41
	North Attleboro'	29.81	3	7 a. m.	30.43	10	2 p. m.	29.22
	Princeton	28.77	3	7 a. m.	29.39	10	2 p. m.	28.27
	Southwick	29.97	3	7 a. m.	30.58	10	2 p. m.	29.45
	Worcester	29.43	3	7 a. m.	30.05	10	2 p. m.	28.94
Rhode Island	North Scituate	29.62	3	7 a. m.	30.25	10	2 p. m.	29.04
	Providence (e)	29.79	3	Sunrise.	30.39	10	2 p. m.	29.24
Connecticut	Pomfret	28.87	3	7 and 2.	29.45	27	7 and 2.	28.55
New York	Beaver Brook	29.01	3	7 a. m.	29.60	10	7 a. m.	28.49
	Beaver Brook (f)	29.01	3	6 a. m.	29.59	10	12 and 7.	28.54
	Canton	29.45	3	7 a. m.	29.98	1	7 a. m.	28.91
	Madrid	30.43	3	9 p. m. (g)	30.29	1	7 a. m.	29.12
	New York city (h)	29.95	-----	Sunrise.	30.65	-----	12 m.	29.37
	New York city, (sunset)	29.95	-----	-----	30.56	-----	-----	29.44
	N. Y. city, [Deaf and Dumb Institution]	29.88	3	2 p. m.	30.55	10	2 p. m.	29.34
	Penn Yan (i)	29.19	-----	2 p. m.	29.67	-----	2 p. m.	28.40
	Sag Harbor	29.71	3	2 p. m.	30.34	10	2 p. m.	29.15
	Troy	29.98	3	7 a. m.	30.63	10	2 p. m.	29.43
New Jersey	Bloomfield	29.87	3	7 a. m.	30.52	10	7 a. m.	29.39
	Burlington (j)	29.85	3	2 p. m.	30.60	10	9 p. m.	29.50
	Lambertville	29.95	3	2 p. m.	30.61	10	2 p. m.	29.46 (k)
Pennsylvania	Bedford	29.10	3	7 a. m.	29.62	10	7 a. m.	28.59
	Byberry	29.89	3	7 a. m.	30.58	10	2 p. m.	29.30
	Gettysburg	29.42	3	7 a. m.	30.05	10	2 p. m.	28.83
	Harrisburg	29.69	3	7 a. m.	30.34	10	9 p. m.	29.10
	Lima	29.81	3	7 a. m.	30.50	10	2 p. m.	29.20
	Morrisville	30.06	3	7 a. m.	30.70	10	2 p. m.	29.50
	Norristown	29.89	3	7 a. m.	30.58	10	2 p. m.	29.28
	Philadelphia	29.87	3	2 p. m.	30.52	10	2 p. m.	29.25
	Pittsburg, [Marine Hospital] (l)	28.94	3	9 a. m.	29.48	10	9 a. m.	28.43
	Pittsburg, (sunrise)	28.95	-----	-----	29.40	-----	-----	28.42
	Pittsburg, [Oakland Station]	28.87	3	7 a. m.	29.41	27	7 a. m.	28.46
	Sugar Grove	28.16	3	7 a. m.	28.63	10	7 a. m.	27.64
	Warrior's Mark	28.83	3	7 a. m.	29.43	10	2 p. m.	28.30
Maryland	Frederick	29.68	3	7 a. m.	30.36	11	2 p. m.	29.10
Dist. of Columbia	Washington (m)	30.00	3	7 a. m.	30.69	10	7 a. m.	29.46
Virginia	Alexandria	29.97	3	7 a. m.	30.62	10	2 p. m.	29.40
North Carolina	Chapel Hill	29.49	3	7 a. m.	30.04	10	2 p. m.	29.06
	Thornbury	29.96	3	2 p. m.	30.57	10	2 p. m.	29.42
South Carolina	Camden	29.83	3	7 a. m.	30.39	10	2 and 9.	29.11
Georgia	Culloden	29.34	3	2 p. m.	29.81	15	9 p. m.	28.90
	Savannah	30.03	3	7 a. m.	30.58	16	2 p. m.	29.52

(e) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) Observations omitted from the 3d to the 6th.

(d) Same height at 9 p. m. on the 3d.

(e) Observations taken at sunrise, 2 p. m., and 10 p. m.

(f) Observations taken at 6 a. m., noon, and 7 p. m.

(g) Same height at 7 a. m. on the 14th.

(h) Observations taken at sunrise, noon, sunset, and 10 p. m.

(i) Observations taken at sunrise, 2 p. m., and sunset.

(j) Not corrected for temperature.

(k) Same height at 9 p. m. on the 10th.

(l) Observations taken at 9 a. m., 3 p. m. and 9 p. m.

(m) Observations taken at 7 a. m. and 2 p. m.



No. 5.—BAROMETER, CORRECTED TO 32° F, APRIL, 1854—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Georgia.....Sparta.....	29.39	8	7 a. m.	29.89	16	7 a. m.	28.98
.....The Rock (a).....	29.25			29.50			28.85
Florida.....Cedar Keys.....	29.85	3	2 p. m.	30.27	16	9 p. m.	29.51
.....Jacksonville.....	30.08	3	2 p. m.	30.57	16	2 p. m.	29.62
.....Key West (b).....	29.81	3	2 p. m.	30.09	16	7 a. m.	29.62
.....Knox Hill (c).....	29.96	3	7 a. m.	30.40	27	2 p. m.	29.63
.....Warrington (d).....	30.04	3	2 p. m.	30.56	15	9 p. m.	29.69
Louisiana.....New Orleans.....	29.84	3	7 a. m.	30.32	1	7 a. m.	29.80
Texas.....New Wied (e).....	27.82	2	2 p. m.	28.10	3	2 p. m.	27.42
Tennessee.....Glenwood.....	29.53	3	7 a. m.	30.26	27	7 a. m.	29.12
.....Knoxville.....	29.02	3	7 a. m.	29.60	17	7 a. m.	28.21
.....Memphis.....	29.43	2	7 a. m.	29.97	26	9 p. m.	29.03
Kentucky.....Ballardsville.....	29.03	3	7 a. m.	29.57	27	7 a. m.	28.65
.....Springdale.....	29.38	3	7 a. m.	29.92	26	9 p. m.	28.97
Ohio.....College Hill.....	29.02	3	7 a. m.	29.55	9	9 p. m.	28.60
.....Germantown.....	29.19	3	7 and 9.	29.73	9	9 p. m.	28.75
.....Granville.....	28.94	3	7 a. m.	29.49	10	7 a. m.	28.48
.....Hillsborough.....	28.85	7	7 a. m.	29.39	10	7 a. m.	28.47
.....Marietta.....	29.22	3	7 a. m.	29.74	10	7 a. m.	28.75
.....Oberlin.....	29.09	3	7 a. m.	29.62	10	7 a. m.	(f) 28.67
.....Urbana.....	28.83			29.24			28.40
Michigan.....Detroit (g).....	29.56	3	8 a. m.	29.99	26	2 p. m.	29.10
Indiana.....Milton.....	29.06	3	7 a. m.	29.47	27	7 a. m.	28.60
.....New Harmony.....	29.64	2	7 a. m.	30.15	9	2 p. m.	29.17
Illinois.....Upper Alton.....	29.42	1	9 p. m.	29.98	28	7 a. m.	28.83
Missouri.....St. Louis.....	29.43	2	7 a. m.	29.98	26	2 p. m.	28.91
Wisconsin.....Beloit.....	29.12	28	7 a. m.	29.69	26	2 p. m.	28.61
.....Madison.....	28.99	28	9 p. m.	29.53	26	2 p. m.	28.46
.....Milwaukee.....	29.48	28	2 p. m.	29.87	26	2 p. m.	28.86
Iowa.....Dubuque.....	29.28	28	7 a. m.	29.87	26	2 p. m.	28.75
.....Muscatine.....	29.47	28	2 p. m.	29.96	26	9 p. m.	29.00
.....Quasqueton.....	29.04	28	7 a. m.	29.60	10	9 p. m.	28.12
California.....Sacramento, [Logan].....	30.04			30.45			29.85
.....Stockton (h).....	29.49		8 and 8.	29.75		2 p. m.	29.25
South America.....Assumption, Paraguay.....	29.56	21	7 a. m.	29.80	1	9 p. m.	29.27
.....Assumption, Paraguay (i).....	29.61	21	7 a. m.	30.03	1	2 p. m.	(k) 29.10

(a) Observations taken in the morning.

(b) Not corrected for temperature. Observations taken at 7 a. m. and 2 p. m.

(c) Observations omitted from the 6th to the 18th.

(d) Observations taken at sunrise, 12 m., and sunset.

(e) Not corrected for temperature. Observations taken at 2 p. m.

(f) Same height at 9 p. m. on the 26th.

(g) Observations taken at 8 a. m., 2 p. m., and 9 p. m.

(h) Observations taken at 8 a. m., 2 p. m., and 8 p. m.

(i) Aneroid.

(k) Same height at 9 p. m. on the 1st.

## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1854.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Nova Scotia.....Halifax (a).....	30.01	25	-----	30.50	7	-----	28.95
Canada East.....St. Martin's.....	29.74	23	7 a. m.	30.09	10	2 p. m.	29.50
Canada West.....Hamilton (b).....	29.64	23	9 p. m.	30.00	17	9 p. m.	29.30
Maine.....Carmel.....	29.62	14	2 p. m.	30.36	7	7 a. m.	29.01
.....Steuben.....	29.99	14	7 a. m.	30.56	6	7 a. m.	29.17
New Hampshire.....Concord.....	29.57	14	7 a. m.	30.00	7	2 p. m.	29.17
.....Hanover.....	29.38	13	9 p. m.	29.85	6	9 p. m.	29.00
.....Manchester.....	29.95	14	7 a. m.	30.42	7	2 p. m.	29.57
Vermont.....Burlington.....	29.55	23	7 a. m.	29.93	5	9 p. m.	29.21
.....St. Johnsbury.....	29.18	13	7 a. m.	29.63	-----	2 p. m.	28.90
Massachusetts.....Amherst.....	29.69	13	9 p. m.	30.11	7	2 p. m.	29.34
.....Nantucket.....	29.98	13	2 and 9.	30.38	6	9 p. m.	29.51
.....New Bedford.....	29.85	13	9 p. m.	30.29	7	2 p. m.	29.43
.....Newburyport.....	29.90	13	9 p. m.	30.37	7	2 p. m.	29.50
.....North Attleboro'.....	29.75	13	9 p. m.	30.23	7	2 p. m.	29.33
.....Princeton.....	28.78	12	7 a. m.	29.38	7	2 p. m.	28.38
.....Southwick, (imperfect).....	29.92	13	9 p. m.	(c) 30.35	7	2 p. m.	29.63
.....Worcester.....	29.39	13	9 p. m.	29.81	7	2 p. m.	29.00
Rhode Island.....North Scituate.....	29.60	13	9 p. m.	30.10	7	2 p. m.	29.19
.....Providence (d).....	29.76	13	10 p. m.	30.19	7	2 p. m.	29.30
Connecticut.....Pomfret.....	28.87	13	9 p. m.	29.37	6	2 p. m.	28.55
New York.....Beaver Brook.....	28.99	13	2 and 9.	29.34	5	2 p. m.	28.63
.....Beaver Brook (e).....	28.96	13	12 m. & 7½ p. m.	29.44	6	12 m.	28.68
.....Canton.....	29.40	23	7 a. m.	29.78	10	9 p. m.	29.13
.....Madrid.....	29.62	23	7 a. m.	30.06	10	2 p. m.	29.21
.....New York city (f).....	29.93	-----	12 m.	30.36	-----	10 p. m.	29.52
.....New York city, (sunset).....	29.93	-----	-----	30.32	-----	-----	29.56
.....New York city, [Deaf and Dumb Ins.].....	29.84	13	9 p. m.	30.30	3	9 p. m.	29.47
.....Penn Yan (g).....	29.18	-----	2 p. m., Sunset.	29.48	-----	Sunset.	28.91
.....Sag Harbor.....	29.67	13	9 p. m.	30.12	3	2 p. m.	29.33
.....Troy.....	29.92	23	7 a. m.	30.30	5	9 p. m.	29.63
New Jersey.....Bloomfield.....	29.81	14	7 and 2.	(h) 30.21	3	9 p. m.	29.40
.....Burlington (i).....	29.91	13	2 p. m.	30.26	3	9 p. m.	29.62
.....Lambertville.....	29.94	23	2 p. m.	30.28	3	9 p. m.	29.65
.....Newark (j).....	29.96	-----	5 p. m.	30.55	-----	5 p. m.	29.60
Pennsylvania.....Bedford.....	29.04	23	7 a. m.	29.38	30	2 p. m.	28.87
.....Brookville (k).....	29.78	23	6 a. m., 12 m.	29.06	17	6 p. m.	28.43
.....Gettysburg.....	29.36	23	2 p. m.	29.66	30	2 p. m.	29.11
.....Harrisburg.....	29.65	13	7 a. m.	29.94	30	2 p. m.	29.45
.....Lima.....	29.78	23	7 a. m.	30.14	3	2 and 9.	29.52
.....Morrisville (l).....	30.03	13	7, 2, & 9.	(m) 30.35	-----	9 p. m.	29.70
.....Norristown.....	29.83	13	7 a. m.	(n) 30.20	3	2 p. m.	29.54
.....Philadelphia.....	29.85	13	9 p. m.	30.15	-----	9 p. m.	29.58
.....Pittsburg, [Marine Hospital] (o).....	28.92	22	9 p. m.	(p) 29.22	17	3 p. m.	28.45
.....Pittsburg, (sunrise).....	28.93	23	Sunrise.	29.25	17	-----	28.58
.....Pittsburg, [Oakland Station].....	28.86	22	9 p. m.	29.15	17	2 p. m.	28.47
.....Sugar Grove.....	28.11	23	7 a. m.	28.48	17	2 p. m.	27.72
.....Warrior's Mark.....	28.81	22	9 p. m.	29.09	17	2 p. m.	28.58
Maryland.....Frederick.....	29.65	23	7 a. m.	29.99	30	2 p. m.	29.37
Dist. of Columbia, Washington (q).....	29.96	23	7 a. m.	30.30	30	2 p. m.	29.74
Virginia.....Alexandria.....	29.96	23	7 a. m.	30.26	30	2 p. m.	29.73

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) Same height at 7 a. m. on the 14th.

(d) Observations taken at 6 a. m., 2 p. m., and 10 p. m.

(e) Observations taken at 5½ a. m., noon, and 7½ p. m.

(f) Observations taken at sunrise, noon, sunset, and 10 p. m.

(g) Observations taken at sunrise, 2 p. m., and sunset.

(h) Same height at 3 p. m. on the 13th.

(i) Not corrected for temperature.

(j) Observations taken at 7 a. m. and 5 p. m.

(k) Not corrected for temperature. Observations taken at 6 a. m., noon, and 6 p. m.

(l) Not corrected for temperature.

(m) Same height at 7 a. m. and 2 p. m. on the 23d; at 7 a. m. on the 24th.

(n) Same height at 7 a. m. on the 23d.

(o) Observations taken at 9 a. m., 3 p. m., and 9 p. m.

(p) Same height at 9 a. m. on the 23d.

(q) Observations taken at 7 a. m. and 2 p. m.



No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1854—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
North Carolina.....Chapel Hill.....	29.45	24	7 a. m.	29.67	31	7 a. m.	29.28
.....Thornbury.....	29.97	13	7 a. m.	30.18	6	9 p. m.	29.71
South Carolina.....Camden.....	29.81	1	7 a. m.	30.05	7	9 p. m.	29.60
Georgia.....Culloden.....	29.28	1	7 a. m.	29.56	7	2 p. m.	29.06
.....Savannah.....	29.99	1	7 a. m.	30.22	7	2 p. m.	29.77
.....Sparta.....	29.32	1	7 a. m.	29.58	7	2 p. m.	29.18
Florida.....Cedar Keys.....	29.77	22	9 p. m.	29.99	7	7, 2, 9	29.60
.....Jacksonville.....	29.99	-----	7 a. m.	30.22	6	2 p. m.	29.87
.....Key West (a).....	29.75	15	2 p. m.	29.87	8	7 a. m.	(b)29.63
.....Knox Hill.....	29.81	1	7 a. m.	30.03	6	9 p. m.	29.61
.....Warrington (c).....	29.91	1	12 m.	30.19	11	Sunset.	29.70
Louisiana.....New Orleans.....	29.72	1	2 and 9.	29.97	6	2 p. m.	(d)29.58
Texas.....Austin (e).....	27.32	-----	-----	27.90	-----	-----	27.40
.....New Wied (e).....	27.32	18	2 p. m.	(f)27.90	12	-----	27.40
Tennessee.....Glenwood.....	29.45	1	7 a. m.	29.73	16	9 p. m.	29.04
.....Knoxville.....	28.82	1	7 a. m.	29.20	17	7 a. m.	28.62
.....Memphis.....	29.23	1	7 a. m.	29.57	16	9 p. m.	28.97
Kentucky.....Ballardsville.....	29.01	2	2 p. m.	29.30	17	7 a. m.	28.54
.....Springdale.....	29.32	23	7 a. m.	29.55	17	7 a. m.	28.83
Ohio.....College Hill.....	28.99	22	7 a. m.	(g)29.24	17	7 a. m.	28.49
.....Germantown.....	29.14	-----	7 a. m.	29.43	-----	7 a. m.	28.62
.....Granville.....	28.91	22	9 p. m.	(g)29.21	17	2 p. m.	28.42
.....Hillsborough.....	28.83	23	7 a. m.	29.08	17	7 a. m.	28.35
.....Marietta.....	29.19	12	7 a. m.	29.34	18	7 a. m.	28.00
.....Oberlin.....	29.07	23	7 a. m.	29.40	17	2 p. m.	28.50
.....Urbana.....	28.81	-----	-----	29.09	-----	-----	28.32
Michigan.....Detroit (h).....	29.49	23	8 p. m.	29.87	17	2 p. m.	28.89
Indiana.....Milton.....	28.98	23	7 a. m.	29.26	17	7 a. m.	28.37
.....New Harmony.....	29.56	22	2 p. m.	29.81	16	9 p. m.	29.07
Illinois.....Upper Alton.....	29.34	11	9 p. m.	29.70	16	9 p. m.	28.66
Missouri.....St. Louis.....	29.33	22	7 a. m.	29.63	17	7 a. m.	28.84
Wisconsin.....Beloit.....	29.03	23	7 a. m.	29.38	17	7 a. m.	28.35
.....Madison.....	28.85	23	7 a. m.	29.23	13	7 a. m.	28.45
.....Milwaukee.....	29.25	23	7 a. m.	29.63	17	7 a. m.	28.60
Iowa.....Dubuque.....	29.16	22	2 p. m.	29.50	17	7 a. m.	28.46
.....Muscatine.....	29.38	22	7 a. m.	29.70	17	7 a. m.	28.74
.....Quasqueton.....	28.61	22	2 p. m.	29.27	16	9 p. m.	28.36
California.....Sacramento, [Logan].....	30.02	-----	-----	30.28	-----	-----	29.00
.....Stockton (i).....	29.44	-----	8 p. m.	29.85	-----	8, 2, 8.	29.30
South America.....Assumption, Paraguay.....	29.61	15	9 p. m.	29.79	7	2 p. m.	29.20
.....Assumption, Paraguay (k).....	29.69	15	7 a. m.	30.07	7	7 a. m.	29.15

(a) Not corrected for temperature. Observations at 7 a. m. and 2 p. m.

(b) Same height at 7 a. m. on the 22d.

(c) Observations taken at sunrise, noon, and sunset.

(d) Same height at 7 a. m. on the 13th.

(e) Not corrected for temperature. Observations at 2 p. m.

(f) Same height on the 19th.

(g) Same height at 7 a. m. on the 23d.

(h) Observations taken at 8 a. m., 2 p. m., and 9 p. m.

(i) Observations taken at 8 a. m., 2 p. m., and 8 p. m.

(k) Aneroid.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1854.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Nova Scotia ----- Halifax (a) -----	29.90	7		30.50	10		29.15
Canada East ----- St. Martin's -----	29.79	17	7 a. m.	30.13	9	7 a. m.	29.50
Canada West ----- Hamilton (b) -----	29.65		9 a. m.	29.96	7	9 a. m.	29.37
Maine ----- Carmel -----	29.50	1	7 a. m.	29.83	8	9 p. m.	29.17
----- Steuben -----	29.96	1	7 a. m.	30.24	15	2 p. m.	28.91?
New Hampshire ----- Concord -----	29.54	1	7 a. m.	(c) 29.86	8	9 p. m.	29.23
----- Hanover -----	29.36	2	7 a. m.	29.74	8	9 p. m.	29.08
----- Manchester -----	29.93	1	7 and 2.	(c) 30.22	8	2 p. m.	29.65
Vermont ----- Burlington -----	29.55	2	7 a. m.	29.87	9	7 a. m.	29.29
----- Fairfax -----	29.36	17	7 a. m.	29.64	28	2 p. m.	29.15
----- St. Johnsbury -----	29.20	1	7 a. m.	29.51	9	7 a. m.	28.93
Massachusetts ----- Amherst -----	29.67	1	7 a. m.	29.98	8	2 p. m.	29.37
----- Nantucket -----	29.92	1	2 and 9.	30.18	8	2 p. m.	29.61
----- New Bedford (d) -----	29.92	1	9 p. m.	30.17	8	2 p. m.	29.62
----- Newburyport -----	29.88	1	7 a. m.	30.19	8	2 and 9.	29.62
----- North Attleboro' -----	29.73	1	7 a. m.	30.02	8	2 p. m.	29.42
----- Princeton -----	28.78	1	7 a. m.	29.06	7	9 p. m.	28.25
----- Southwick (e) -----	29.89	1	2 p. m.	30.17	9	2 p. m.	29.61
----- Worcester -----	29.37	1	7 a. m.	29.66	24	2 p. m.	29.11
Rhode Island ----- North Scituate -----	29.57	1	9 p. m.	29.85	8	2 p. m.	29.26
----- Providence (f) -----	29.72	1	6 a. m.	30.01	8	2 p. m.	29.37
Connecticut ----- Pomfret -----	28.85	2	7 a. m.	29.12	8	2 and 9.	28.60
New York ----- Beaver Brook -----	28.99	2	7 a. m.	29.29	8	2 p. m.	29.69
----- Beaver Brook (g) -----	28.99	2	5½ a. m.	29.28	8	7½ a. m.	28.65
----- Buffalo, [Allen] (h) -----	28.89	1	2 p. m.	29.40	6	2 p. m.	28.00
----- Canton -----	29.38	2	2 p. m.	29.73	9	9 p. m.	29.07
----- Madrid -----	29.61	1	7 a. m.	30.00	30	7 a. m.	29.31
----- New York city -----	29.91		2 p. m.	30.21		2 p. m.	29.52
----- New York city, [Deaf and Dumb Inst.] -----	29.83	1	9 p. m.	30.10	8	2 p. m.	29.53
----- Penn Yan (i) -----	29.19		2 p. m.	29.53		2 p. m.	28.85
----- Sag Harbor -----	29.62	1	9 p. m.	29.94	8	2 p. m.	29.33
----- Troy -----	29.88	1	7 a. m.	30.23	8	9 p. m.	29.56
New Jersey ----- Bloomfield -----	29.79	1	9 p. m.	30.11	8	9 p. m.	29.49
----- Burlington (j) -----	29.76	1	9 p. m.	30.05	8	2 p. m.	29.45
----- Lambertville -----	29.93	1	9 p. m.	30.16	8	2 p. m.	(k) 29.67
----- Newark (l) -----	29.92		7 a. m.	30.20		7 a. m.	29.38
Pennsylvania ----- Bedford -----	29.05	2	7 a. m.	29.34	8	2 p. m.	28.75
----- Brookville (m) -----	28.81	1	12 m.	(n) 29.06	8	5 and 12.	28.50
----- Gettysburg -----	29.36	2	7 a. m.	29.66	8	2 p. m.	29.00
----- Harrisburg -----	29.65	2	7 a. m.	29.95	8	2 p. m.	29.29
----- Lima -----	29.77	6	7 a. m.	30.06	8	2 p. m.	29.50
----- Morrisville (d) -----	29.02	2	7 a. m.	30.35	8	7 and 2.	29.75
----- Norristown -----	29.83	1	9 p. m.	30.14	8	2 p. m.	29.51
----- Philadelphia -----	29.82	3	7 a. m.	30.10	8	2 p. m.	29.55
----- Pittsburg, [Marine Hospital] (o) -----	28.92	1	Sunrise.	29.25	7	3, 9 p. m.	28.58
----- Pittsburg, (sunrise) -----	28.94			29.25			28.60
----- Pittsburg, [Oakland Station] -----	28.90	2	7 a. m.	29.18	7	7 a. m.	(p) 28.56
----- Warrior's Mark -----	28.83	2	7 a. m.	29.13	8	2 p. m.	28.53
Maryland ----- Frederick -----	29.61	2	7 a. m.	29.95	8	2 p. m.	29.23
Dist. of Columbia ----- Washington (q) -----	29.94	1	7 a. m.	30.24	8	2 p. m.	29.57
Virginia ----- Alexandria -----	29.95	2	7 a. m.	30.24	8	2 p. m.	29.59
----- Montcalm (r) -----	28.41	26	7 a. m.	28.53	30	2 p. m.	28.27
North Carolina ----- Chapel Hill -----	29.41	2	7 a. m.	29.63	8	7 a. m.	29.10
----- Thornbury -----	29.94	1	9 p. m.	30.19	8	2 p. m.	29.64

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) Same height at 7 a. m. on the 2d.

(d) Not corrected for temperature.

(e) Observations taken at 7 a. m. and 2 p. m.

(f) Observations taken at 6 a. m., 3 p. m., and 10 p. m.

(g) Observations taken at 5½ a. m., 12 m., and 7½ p. m.

(h) Not corrected for temperature, and observed for only one place of decimals. Observations at 2 p. m.

(i) Observations taken at sunrise, 2 p. m., and sunset.

(j) Corrected by open air thermometer.

(k) Same height at 9 p. m. on the 8th.

(l) Observations taken at 7 a. m. and 5 p. m.

(m) Observations made at 5 a. m., 12 m., and 7 p. m.

(n) Same height at 12 m. on the 2d.

(o) Observations taken at 9 a. m., 3 p. m., and 9 p. m.

(p) Same height at 7 a. m. on the 8th.

(q) Observations taken only at 7 a. m. and 2 p. m.

(r) From 21 observations in the latter part of the month.



No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1854—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
South Carolina.....Camden.....	29.79	2	2 p. m.	29.93	8	2 p. m.	29.57
Georgia.....Culloden.....	29.31	11	7 a. m.	29.48	7	2 p. m.	29.02
.....Savannah.....	29.98	27	7 a. m.	30.14	2	2 p. m.	29.76
.....Sparta.....	29.34	2	7 a. m.	29.47	7	2 p. m.	29.15
Florida.....Cedar Keys.....	29.80	28	7 a. m.	29.92	1	9 p. m.	(a) 29.69
.....Jacksonville.....	30.01	10	9 p. m.	30.15	6	2 p. m.	29.82
.....Key West (b).....	29.80	11	2 p. m.	(c) 29.89	7	7 a. m.	29.70
.....Knox Hill.....	29.83	27	7 a. m.	29.95	7	2 p. m.	29.66
.....Warrington (d).....	29.91	27	12 m.	30.08	7	Sunset.	29.77
Alabama.....Tuscaloosa.....	29.77	28	7 a. m.	29.95	7	2 and 9.	29.56
Louisiana.....New Orleans (e).....	29.74	11	7, 2, 9	(f) 29.84	7	2 p. m.	29.65
Texas.....New Wied (g).....	27.72	2	2 a. m.	27.80	2	2 p. m.	27.62
Tennessee.....Glenwood.....	29.51	28	7 a. m.	29.70	7	2 p. m.	29.23
.....Knoxville.....	29.00	27	7 a. m.	29.20	7	9 p. m.	28.74
.....Memphis.....	29.39	28	7 a. m.	29.56	6	2 p. m.	(h) 29.24
Kentucky.....Ballardsville.....	29.03	2	7 a. m.	29.24	7	2 p. m.	28.73
.....Springdale.....	29.36	2	7 a. m.	29.59	7	2 p. m.	29.04
Ohio.....College Hill.....	29.00	2	7 a. m.	29.24	7	7 a. m.	28.67
.....Germantown.....	26.16	2	7 a. m.	29.44	7	2 p. m.	28.81
.....Granville.....	28.93	2	7 a. m.	29.21	7	2 p. m.	28.56
.....Hillsborough.....	28.83	1	9 p. m.	29.07	7	2 p. m.	28.51
.....Marietta.....	29.20	2	7 a. m.	29.47	7	9 p. m.	28.89
.....Oberlin.....	29.07	2	7 a. m.	29.38	7	9 p. m.	28.70
.....Perrysburg (i).....	29.31	25	7 a. m.	29.46	8	7 a. m.	28.94
.....Urbana.....	28.87	2	7 a. m.	29.07	7	9 p. m.	28.53
Michigan.....Ann Arbor, [Winchell].....	29.02	2	7 a. m.	29.37	7	9 p. m.	28.64
.....Detroit (j).....	29.49	1	7 a. m.	(k) 29.84	7	9 p. m.	29.07
Indiana.....Milton.....	29.02	1	9 p. m.	29.30	7	2 p. m.	28.67
.....New Harmony.....	29.61	2	2 p. m.	29.83	7	7 a. m.	29.32
Illinois.....Upper Alton.....	29.41	2	7 a. m.	29.65	6	9 p. m.	29.12
Missouri.....St. Louis.....	29.41	2	7 a. m.	29.65	6	9 p. m.	29.15
Wisconsin.....Beloit.....	29.11	7	7 a. m.	29.49	29	2 p. m.	28.83
.....Madison.....	28.96	1	7 a. m.	29.39	6	2 p. m.	28.65
.....Milwaukie.....	29.30	1	7 a. m.	29.70	29	2 p. m.	29.03
Iowa.....Dubuque.....	29.25	1	7 a. m.	29.61	6	2 p. m.	28.94
.....Muscatine.....	29.47	1	7 a. m.	29.76	20	7 a. m.	29.23
.....Quasqueton.....	29.02	2	7 a. m.	29.35	20	7 a. m.	28.71
California.....Sacramento, [Hatch] (l).....	29.95	2	7 a. m.	30.22	8	8 p. m.	29.90
.....Sacramento, [Logan].....	30.03	2	7 a. m.	29.65	8	8 p. m.	29.30
.....Stockton (m).....	29.47	2	7 a. m.	29.91	8	2 and 9.	29.55
South America.....Assumption, Paraguay.....	29.77	11	2 and 9.	(n) 29.91	8	2 and 9.	29.55

(a) Same height at 2 p. m. on the 8th.

(b) Not corrected for temperature. Observations at 7 a. m. and 2 p. m.

(c) Same height at 2 p. m. on the 27th.

(d) Observations taken at sunrise, noon, and sunset.

(e) No observations after 16th.

(f) Same height at 7 a. m. on the 12th.

(g) Very incomplete, and not corrected for temperature. Observations at 2 p. m.

(h) Same height at 2 p. m. on the 7th.

(i) Observations taken at 7 a. m. and 1 and 9 p. m., for the last 23 days only.

(j) Observations at 8 a. m., 2 p. m., and 9 p. m.

(k) Same height at 7 a. m. on the 2d.

(l) Observations taken at sunrise, noon, and 10 p. m.

(m) Observations taken at 8 a. m., 2 p. m., and 8 p. m.

(n) Same height at 7 a. m. and 2 p. m. on the 12th and 15th.

## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1854.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Nova Scotia ----- Halifax (a) -----	30.60	23	-----	30.50	5	-----	29.50
Canada East ----- St. Martin's -----	29.92	13	7 a. m.	30.21	4	2 p. m.	29.55
Canada West ----- Hamilton (b) -----	29.76	-----	9 a. m.	29.94	-----	9 and 9.	29.50
Maine ----- Carmel (c) -----	29.60	13	9 p. m.	(d) 29.85	5	7 p. m.	29.29
----- Steuben -----	30.03	14	7 a. m.	(e) 30.27	5	2 and 9.	29.69
New Hampshire ----- Concord -----	29.64	14	7 a. m.	29.88	4	9 p. m.	29.34
----- Hanover -----	29.45	-----	9 p. m.	29.70	-----	9 p. m.	29.15
----- Manchester -----	30.02	2	9 p. m.	30.26	4	2 and 9.	29.74
Vermont ----- Burlington -----	29.61	13	9 p. m.	(f) 29.87	4	9 p. m.	29.32
----- St. Johnsbury -----	29.27	-----	7 and 2.	29.50	-----	7 a. m.	29.00
Massachusetts ----- Amherst -----	29.76	13	7 a. m.	(g) 29.99	4	2 p. m.	29.49
----- Nantucket -----	30.02	13	2 and 9.	30.21	5	7 a. m.	29.76
----- New Bedford -----	30.04	13	9 p. m.	30.24	5	7 and 2.	29.79
----- Newburyport -----	29.99	13	2 p. m.	30.23	5	7 and 2.	29.70
----- North Attleboro' -----	29.69	2	7 a. m.	(h) 30.05	30	7 a. m.	29.38
----- Princeton -----	28.90	13	9 p. m.	29.10	4	9 p. m.	28.64
----- Southwick (i) -----	29.99	-----	7 a. m.	30.20	-----	2 p. m.	29.77
----- Worcester -----	29.46	16	7 a. m.	29.70	4	9 p. m.	29.22
Rhode Island ----- Providence (j) -----	29.82	13	10 p. m.	30.02	5	6 a. m.	29.56
Connecticut ----- Pomfret -----	28.95	13	2 and 9.	(k) 29.13	4	9 p. m.	28.71
----- Pomfret, (sunrise) -----	28.98	-----	-----	29.18	-----	-----	28.85
New York ----- Beaver Brook (l) -----	29.08	28	5 a. m.	29.27	4	7½ p. m.	28.89
----- Canton (m) -----	29.47	13	7 a. m.	29.71	4	2 and 9.	29.20
----- Madrid -----	29.70	2	7 a. m.	29.91	4	2 p. m.	(n) 29.42
----- New York city (o) -----	30.00	-----	Sunrise.	30.21	-----	10 p. m.	29.79
----- New York city, (sunset) -----	29.99	-----	-----	30.15	-----	-----	29.79
----- New York city, [Deaf and Dumb Ins.] -----	29.90	28	7 a. m.	30.12	4	2 p. m.	29.69
Penn Yan (p) -----	29.29	-----	Sunrise.	29.49	-----	2 and 8.	29.10
----- Sag Harbor -----	29.71	13	9 p. m.	(q) 29.90	5	2 p. m.	29.48
----- Spencertown (r) -----	28.04	1	2 p. m.	28.54	5	2 p. m.	27.68
----- Troy -----	29.96	13	7 a. m.	30.23	4	9 p. m.	29.71
New Jersey ----- Bloomfield -----	29.88	2	7 a. m.	30.05	4	2 p. m.	29.70
----- Burlington -----	29.81	28	7 a. m.	30.02	5	2 p. m.	29.64
----- Lambertville -----	30.03	28	7 a. m.	30.18	5	2 p. m.	29.89
----- Newark (s) -----	30.02	-----	5 p. m.	30.31	-----	5 p. m.	29.80
Pennsylvania ----- Bedford -----	29.13	13	7 a. m.	29.31	20	9 p. m.	(t) 28.99
----- Brookville -----	28.81	13	7 a. m.	28.96	25	2 and 9.	(u) 28.64
----- Gettysburg -----	29.44	2	7 a. m.	29.61	5	2 p. m.	29.28
----- Harrisburg -----	29.75	28	7 a. m.	29.91	5	2 p. m.	29.60
----- Lima -----	29.86	28	7 a. m.	30.05	5	2 p. m.	29.69
----- Morrisville (v) -----	30.10	2	7 and 2.	(w) 30.25	4	2 and 9.	(x) 29.95
----- Norristown -----	29.91	28	7 a. m.	30.11	20	9 p. m.	29.73
----- Philadelphia -----	29.91	28	7 a. m.	30.12	5	2 p. m.	29.71
----- Pittsburg, [Marine Hospital] (y) -----	29.00	28	9 a. m.	29.19	25	3 and 9.	28.84
----- Pittsburg, (sunrise) -----	28.98	28	-----	29.18	5	-----	28.85
----- Pittsburg, [Oakland Station] -----	28.99	28	7 a. m.	29.16	25	2 p. m.	28.80
----- Warrior's Mark -----	28.92	28	7 a. m.	29.09	5	2 p. m.	28.77
Maryland ----- Frederick -----	29.69	28	7 a. m.	29.87	5	2 p. m.	29.51
Dist. of Columbia, Washington (z) -----	30.04	28	7 a. m.	30.21	5	2 p. m.	29.85
Virginia ----- Alexandria -----	30.02	28	7 a. m.	30.20	5	2 p. m.	29.86
----- Montcalm (aa) -----	28.38	2	7 a. m.	28.58	19	7 a. m.	28.19

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) No observations during the last five days.

(d) Same height at 7 a. m. on the 14th.

(e) Same height at 7 a. m. on the 22d.

(f) Same height at 7 a. m. on the 14th.

(g) Same height at 7 a. m. on the 28th.

(h) Same height at 9 p. m. on the 13th.

(i) Only one observation at 9 p. m., that was on the 13th; barom. 30.18.

(j) Observations taken at 6 a. m., 2 p. m., and 10 p. m.

(k) Same height at 7 a. m. on the 28th.

(l) Observations taken at 5 a. m., noon, and 7½ p. m.

(m) Observations first 18 days only.

(n) Same height at 2 p. m. on the 29th.

(o) Observations taken at sunrise, noon, sunset, and 10 p. m.

(p) Observations taken at sunrise, 2 p. m., and sunset.

(q) Same height at 7 a. m. on the 28th.

(r) Observations on first seven days only.

(s) Observations taken at 7 a. m. and 5 p. m.

(t) Same height at 2 and 9 p. m. on the 25th.

(u) Same height at 7 a. m. on the 26th.

(v) Barometer not corrected for temperature.

(w) Same height at 2 and 9 p. m. on the 13th; 9 p. m. on the 27th, and 2 p. m. on the 28th.

(x) Same height at 7 a. m., 2 and 9 p. m. on the 5th, and 2 and 9 p. m. on the 20th.

(y) Observations taken at 9 a. m., 3 p. m., and 9 p. m.

(z) Observations taken at 7 a. m. and 2 p. m. Imperfect.

(aa) Imperfect.



No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1854.—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
North Carolina...Chapel Hill.....	29.46	28	9 p. m.	29.58	11	2 p. m.	29.35
Thornbury (a).....	30.00	2	7 a. m.	30.17	10	2 p. m.	(b) 29.89
South Carolina...Camden.....	29.89	28	2 and 9.	30.02	20	2 p. m.	29.78
Georgia.....Savannah.....	30.07	28	7 a. m.	30.21	10	2 p. m.	29.86
Sparta.....	29.40	27	9 p. m.	29.54	12	2 p. m.	29.27
Florida.....Cedar Keys.....	29.87	31	7 and 2.	30.02	12	7 a. m.	29.71
Jacksonville.....	30.11	30	7 and 9.	30.26	11	2 p. m.	29.92
Key West (c).....	29.83	31	2 p. m.	29.99	20	7 a. m.	29.76
Knox Hill.....	29.90	31	7 a. m.	30.12	12	7 a. m.	29.68
Warrington(d).....	29.99	31	12 m.	30.19	12	Sunset.	29.87
Alabama.....Tuscaloosa.....	29.84	31	9 p. m.	30.04	20	2 and 9.	29.72
Mississippi.....Vicksburg.....	29.76	17	7 and 2.	(e) 29.86	-----	9 p. m.	29.62
Louisiana.....New Orleans.....	29.91	31	2 p. m.	30.10	12	2 p. m.	29.79
Tennessee.....Glenwood.....	29.58	31	7 a. m.	29.74	25	2 p. m.	29.43
Knoxville.....	29.08	31	7 a. m.	29.27	18	9 p. m.	28.88
Memphis.....	29.45	17	2 p. m.	29.58	1	7 a. m.	29.34
Kentucky.....Ballardsville.....	29.12	27	7 a. m.	29.29	25	2 p. m.	28.97
Springdale.....	29.43	27	7 a. m.	29.60	25	2 p. m.	29.24
Ohio.....College Hill, (incomplete).....	29.09	27	7 a. m.	29.26	25	2 p. m.	28.87
Germantown.....	29.25	-----	7 a. m.	29.45	-----	2 p. m.	29.05
Hillsborough.....	28.94	27	7 a. m.	29.12	25	9 p. m.	28.73
Marietta.....	29.27	27	7 a. m.	29.43	20	9 p. m.	29.15
Oberlin.....	29.16	12	2 p. m.	(f) 29.36	25	2 p. m.	28.92
Perryburg.....	29.41	27	7 a. m.	29.62	25	7 a. m.	29.12
Urbana.....	28.99	-----	-----	29.17	-----	-----	28.79
Michigan.....Ann Arbor, [Winchell].....	29.12	27	7 a. m.	29.34	25	7 and 2.	28.84
Detroit (g).....	29.60	12	9 p. m.	(h) 29.76	25	2 p. m.	29.29
Indiana.....Milton.....	29.09	27	9 p. m.	29.27	25	2 p. m.	28.87
New Harmony.....	29.67	27	7 a. m.	29.79	25	2 p. m.	29.46
Illinois.....Upper Alton.....	29.48	10	7 a. m.	29.68	25	7 a. m.	29.25
Missouri.....St. Louis.....	29.48	10	7 a. m.	(i) 29.66	25	7 a. m.	29.25
Wisconsin.....Beloit.....	29.20	12	7 a. m.	29.41	24	9 p. m.	28.96
Ceresco.....	29.12	12	7 a. m.	29.38	28	9 p. m.	28.87
Milwaukee.....	29.38	12	7 a. m.	29.61	25	7 and 2.	29.13
Iowa.....Dubuque.....	29.34	10	7 a. m.	29.69	25	7 a. m.	29.14
Muscatine.....	29.55	12	7 a. m.	29.71	24	9 p. m.	29.22
Quasqueton.....	29.08	9	7 a. m.	29.35	24	9 p. m.	28.79
California.....Sacramento, [Hatch] (j).....	29.92	-----	-----	-----	-----	-----	-----
Sacramento, [Logan].....	30.08	-----	-----	30.13	-----	-----	29.85

(a) No observations taken after the 25th.

(b) Same height at 2 p. m. on the 20th.

(c) Barometer not corrected for temperature. Obs. at 7 a. m. and 2 p. m.

(d) Observations taken at sunrise, noon, and sunset.

(e) Same height at 7 a. m. on the 28th.

(f) Same height at 7 a. m. on the 27th.

(g) Observations at 8 a. m., 2 and 9 p. m. No obs. at 9 p. m. after 17th.

(h) Same height at 7 a. m. on the 13th, and at 7 a. m. on the 27th.

(i) Same height at 7 a. m. on the 27th.

(j) Observations taken at sunrise, noon, and 10 p. m.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1854.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
Nova Scotia.....Halifax (a).....	29.96	30		22	29.50
Canada East.....St. Martin's.....	29.91	9	7 a. m.	6	2 p. m.
Canada West.....Hamilton (b).....	29.74		9 p. m.		9 a. m.
Maine.....Carmel (c).....	29.65	29	7 a. m.	15	2 p. m.
	29.99	28	9 p. m.	2	7 a. m.
New Hampshire.....Concord.....	29.64	29	7 a. m.	13	9 p. m.
	29.44		7 a. m.		2 p. m.
	29.52	29	2 p. m.	2	2 p. m.
	30.01	29	7 a. m.	2	2 p. m.
Vermont.....Burlington.....	29.60	9	7 a. m.	6	2 p. m.
	29.24	20	7 a. m.	2	7 a. m.
Massachusetts.....Amherst.....	29.76	29	7 a. m.	13	2 p. m.
	30.01	28	9 a. m.	4	9 p. m.
	30.02	29	7 a. m.	4	2 p. m.
	29.98	29	7 a. m.	2	2 p. m.
	29.60	29	7 a. m.	2	2 p. m.
	28.86	29	7 a. m.	22	2 p. m.
	29.98		7 a. m.		2 p. m.
	29.46	29	7 a. m.	4	2 p. m.
Rhode Island.....Providence (h) (imperfect).....	29.81	28	10 p. m.	6	10 p. m.
Connecticut.....Pomfret.....	28.94	28	9 p. m.	4	2 p. m.
New York.....Beaver Brook (k).....	29.09	29	5 a. m.	4	12 m.
	29.44	9	7 a. m.	6	2 p. m.
	30.02		Sunrise.		3 p. m.
	30.02				
	30.01				
	29.89	29	7 a. m.	4	2 p. m.
	29.28		2 p. m.		Sunrise.
	29.70	28	9 p. m.	4	2 p. m.
	29.97	29	7 a. m.	4	2 p. m.
New Jersey.....Bloomfield.....	29.86	28	9 p. m.	4	2 p. m.
	29.84	29	7 and 9.	4	2 p. m.
	30.03	29	2 p. m.	4	2 p. m.
	30.02	29	7 a. m.	4	5 p. m.
Pennsylvania.....Bedford.....	29.15	29	7 and	4	7 and 2.
	28.79	29	7 a. m.	4	7 a. m.
	29.94	29	7 a. m.	4	2 p. m.
	29.44	29	7 a. m.	4	2 p. m.
	29.75	29	7 a. m.	4	2 p. m.
	29.86	29	7 a. m.	4	2 p. m.
	30.10	29	2 and 9.	4	9 p. m.
	29.93	29	7 a. m.	4	2 p. m.
	29.95	30	7 a. m.	4	2 p. m.
	28.98	29	7 a. m.	4	2 p. m.
Maryland.....Frederick.....	29.69	29	7 a. m.	4	2 p. m.
Virginia.....Alexandria.....	30.02	29	7 a. m.	4	2 p. m.
	29.21	29	7 a. m.	15	2 p. m.
North Carolina.....Chapel Hill.....	29.46	1	2 p. m.	4	2 p. m.
South Carolina.....Camden.....	29.87	1	9 p. m.	4	2 p. m.
Georgia.....Savannah.....	30.06	24	7 a. m.	4	2 and 9.
	29.41	1	7 a. m.	4	7 a. m.
	29.40				
Florida.....Cedar Keys.....	29.88	12	2 p. m.	7, 2, 9	29.82
	30.10	12	7 a. m.	5	2 p. m.

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) Observations for the first nine days omitted.

(d) Same height at 2 p. m. on the 13th.

(e) Same height at 9 a. m. on the 29th.

(f) Same height at 9 p. m. on the 13th.

(g) Observations at 7 a. m. and 2 p. m.

(h) Observations taken at 6 a. m., 2 p. m., and 10 p. m.

(i) Same height at 6 a. m. on the 29th.

(j) Same height at 9 p. m. on the 13th.

(k) Observations taken at 5 a. m., noon, and 7 p. m.

(l) Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

(m) Observations taken at noon.

(n) Observations taken at sunset.

(o) Observations taken at sunrise, 2 p. m., and sunset.

(p) Observations taken at 7 a. m. and 5 p. m.

(q) Not corrected for temperature.

(r) Same height at 7 a. m. on the 30th.

(s) Observations taken in the morning.

(t) Same height at 2 and 9 p. m. on the 13th, and at 2 p. m. on the 14th.



No. 2 —BAROMETER, CORRECTED TO 32° F., AUGUST, 1854—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida.....	29.86	1	2 p. m.	29.95	30	7 a. m.	(b) 29.78
.....	29.89	1	7 a. m.	30.04	5	2 p. m.	29.78
.....	29.96	1	12 m.	30.12	8	Sunset.	29.85
Alabama.....	29.83	1	7 a. m.	30.01	8	2 p. m.	29.72
Louisiana.....	29.90	1	2 p. m.	30.07	29	2 p. m.	29.83
Texas.....	28.67	1	7 a. m.	28.84	16	9 p. m.	28.59
Tennessee.....	29.58	1	7 a. m.	29.71	10	2 p. m.	29.46
.....	29.08	1	7 a. m.	29.22	4	2 p. m.	28.91
.....	29.45	1	7 a. m.	29.59	9	9 p. m.	(f) 29.37
Kentucky.....	29.11	1	7 a. m.	29.24	3	2 p. m.	29.01
.....	29.40	1	7 a. m.	29.53	3	9 p. m.	29.26
Ohio.....	29.07	8	7 a. m.	29.19	3	9 p. m.	28.91
.....	29.25	-----	7 a. m.	29.46	-----	2 p. m.	29.12
.....	28.91	8	7 a. m.	29.09	3	9 p. m.	28.76
.....	29.26	8	7 a. m.	29.37	3	2 p. m.	29.12
.....	29.15	8	7 a. m.	29.32	3	9 p. m.	28.96
.....	29.40	8	1 p. m.	29.63	3	9 p. m.	29.21
.....	28.97	-----	-----	29.06	-----	-----	28.80
.....	29.10	8	7 a. m.	29.23	4	2 p. m.	28.93
Michigan.....	29.11	8	7 a. m.	29.33	3	9 p. m.	28.95
.....	29.54	8	7 a. m.	29.70	9	2 p. m.	29.35
Indiana.....	29.09	9	2 p. m.	29.17	3	2 p. m.	28.94
.....	29.66	1	7 a. m.	29.76	10	2 p. m.	29.52
Illinois.....	29.47	8	7 a. m.	29.60	11	9 p. m.	29.31
Missouri.....	29.48	8	7 a. m.	29.61	9	9 p. m.	29.31
Wisconsin.....	29.21	8	7 a. m.	29.41	9	9 p. m.	29.05
.....	29.15	7	7 a. m.	29.38	5	2 p. m.	28.97
.....	29.40	-----	7 and 2.	29.60	-----	2 p. m.	29.22
Iowa.....	29.37	7	7 a. m.	29.60	9	2 p. m.	29.19
.....	29.53	8	7 a. m.	29.72	12	7 a. m.	29.37
.....	29.11	7	7 a. m.	29.32	12	7 a. m.	28.91
California.....	29.94	-----	-----	-----	-----	-----	-----
.....	30.05	-----	-----	30.20	-----	-----	29.80
.....	29.40	-----	8, 2, 9	29.55	-----	8 a. m.	29.20
Central America.....	28.97	-----	-----	29.06	-----	-----	28.80
South America.....	29.60	12	7 and 2.	29.94	6	2 p. m.	29.41

(a) Observations at 7 a. m. and 2 p. m. Not corrected for temperature.

(b) Same height at 7 a. m. on the 31st.

(c) First 18 days of the month.

(d) Observations taken at sunrise, noon, and sunset.

(e) Not corrected for temperature.

(f) Same height at 2 and 9 p. m. on the 10th, and 2 p. m. on the 11th.

(g) Observations at 9 p. m. omitted after the 14th.

(h) Observations taken at 7 a. m., 1 p. m., and 9 p. m.

(i) For the first five days of the month no observations at 9 p. m., and not corrected for temperature.

(j) Observations taken at sunrise, noon, and 10 p. m.

(k) Observations at 8 a. m., 2 p. m., and 9 p. m.

(l) Not corrected for temperature.

## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1854.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
		Inches.	Day.	Hour.	Inches.	Day.	Hour.	Inches.
Nova Scotia.....	Halifax (a).....	30.01	1	-----	30.50	20	-----	29.42
Canada East.....	St. Martin's.....	29.95	17	7 a. m.	30.38	19	9 p. m.	29.53
Canada West.....	Hamilton (b).....	29.77	-----	9 a. m.	30.15	-----	9 p. m.	29.44
Maine.....	Carmel.....	29.67	22	7 a. m.	30.12	20	7 a. m.	28.94
	Steuben.....	30.09	22	7 a. m.	30.52	20	7 a. m.	? 29.35
New Hampshire.....	Concord.....	29.72	22	7 a. m.	30.13	20	7 a. m.	29.20
	Hanover.....	29.52	-----	9 p. m.	29.98	-----	7 a. m.	29.00
	Great Falls.....	29.58	22	2 p. m.	30.01	3	2 p. m.	28.90
	Manchester.....	30.08	22	7 and 9.	30.57	20	7 a. m.	29.68
Vermont.....	Burlington.....	29.67	30	7 a. m.	30.08	20	7 a. m.	29.13
	St. Johnsbury.....	29.32	22	2 p. m.	29.70	10	9 p. m.	28.89
Massachusetts.....	Amherst.....	29.84	22	2 p. m.	30.24	20	7 a. m.	29.40
	Nantucket.....	30.08	22	9 p. m.	30.49	20	7 a. m.	29.65
	New Bedford.....	30.10	22	9 p. m.	30.49	20	7 a. m.	29.66
	Newburyport.....	30.06	22	2 p. m.	30.48	20	7 a. m.	29.51
	North Attleboro'.....	29.91	22	9 p. m.	30.37	20	7 a. m.	29.43
	Princeton.....	28.94	22	2 p. m.	29.34	20	7 a. m.	28.47
	Southwick (c).....	30.08	-----	7 a. m.	30.44	-----	7 a. m.	29.66
	Williamstown.....	29.43	30	7 a. m.	29.76	5	7 a. m.	29.02
	Worcester.....	29.53	22	9 p. m.	29.90	19	9 p. m.	29.20
Rhode Island.....	Providence (d).....	29.88	22	10 p. m.	30.31	19	10 p. m.	29.59
Connecticut.....	Pomfret.....	29.00	22	2 p. m.	29.36	20	7 a. m.	28.59
New York.....	Beaver Brook (e).....	29.14	22	12 m.	29.50	20	5½ a. m.	28.79
	Canton.....	29.52	30	7 a. m.	29.92	19	9 p. m.	29.08
	Madrid.....	29.78	17	7 a. m.	30.28	19	9 p. m.	29.26
	New York city (f).....	30.08	-----	10 p. m.	30.49	-----	3 p. m.	29.67
	New York city, (noon).....	30.08	-----	-----	30.46	-----	-----	29.74
	New York city, (sunset).....	30.07	-----	-----	30.49	-----	-----	29.69
	New York city, [Deaf and Dumb Inst].....	29.98	17	7 a. m.	30.39	9	2 p. m.	29.61
	Penn Yan (g).....	29.32	-----	2 p. m.	29.71	-----	Sunrise.	29.02
	Sag Harbor.....	29.79	22	9 p. m.	30.25	20	7 a. m.	29.37
New Jersey.....	Bloomfield.....	29.95	22	9 p. m.	30.36	20	7 a. m.	29.50
	Burlington.....	29.91	22	9 p. m.	30.34	20	7 a. m.	29.59
	Lambertville.....	30.11	22	9 p. m.	30.44	19	9 p. m.	29.79
Pennsylvania.....	Bedford.....	29.19	22	7 a. m.	29.58	5	2 and 9.	28.87
	Brookville.....	28.83	22	2 p. m.	29.20	5	2 and 9.	28.50
	Byberry.....	30.02	22	9 p. m.	30.43	10	2 p. m.	29.58
	Gettysburg.....	29.50	22	7 and 2.	29.87	10	7 a. m.	29.06
	Harrisburg.....	29.81	22	2 p. m.	30.19	10	7 a. m.	29.41
	Lima.....	29.94	22	7 and 9.	30.32	10	2 p. m.	29.51
	Morrisville (h).....	30.16	22	7, 2, 9.	(i) 30.50	10	2 p. m.	29.80
	Norristown.....	30.00	22	9 p. m.	30.41	9	2 p. m.	29.56
	Philadelphia.....	30.00	23	7 a. m.	30.39	10	2 p. m.	29.66
	Pittsburg, [Oakland Station].....	29.03	22	7 a. m.	29.40	10	2 p. m.	28.56
Maryland.....	Frederick.....	29.76	22	7 a. m.	30.17	10	7 a. m.	29.32
Virginia.....	Alexandria.....	30.10	22	7 a. m.	30.52	10	7 a. m.	29.53
	Montcalm (j).....	28.51	22	2 p. m.	29.11	10	2 p. m.	? 27.97
North Carolina.....	Chapel Hill.....	29.50	23	7 a. m.	29.83	-----	7 and 2.	29.06
South Carolina.....	Camden.....	29.89	17	7 a. m.	30.24	5	2 p. m.	29.37
Georgia.....	Savannah.....	30.02	22	9 p. m.	30.35	8	2 p. m.	29.04
	Sparta.....	29.41	22	9 p. m.	(i) 29.70	8	9 p. m.	28.89
	The Rock (k).....	29.36	-----	-----	29.50	-----	-----	29.15
Florida.....	Cedar Keys.....	29.83	23	7 a. m.	30.02	8	2 and 9.	29.51
	Jacksonville.....	30.05	22	9 p. m.	30.30	8	2 p. m.	29.42
	Key West (l).....	29.78	-----	2 p. m.	29.95	-----	7 a. m.	29.66
	Knox Hill.....	29.87	22	9 p. m.	30.14	8	2 p. m.	29.52

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) Observations irregular at 2 p. m., and only the first two days at 9 p. m.

(d) Observations taken at 6 a. m., 2 p. m., and 10 p. m.

(e) Observations taken at 5½ a. m., noon, and 7 p. m.

(f) Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

(g) Observations taken at sunrise, 2 p. m., and sunset.

(h) Not corrected for temperature.

(i) Same height at 7 a. m. on the 23d.

(j) Observations omitted on the first five and last four days of the month.

(k) Observations taken in the morning.

(l) Not corrected for temperature. Observations at 7 a. m. and 2 p. m.



No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1854—Continued.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida.....	Warrington (a).....	29.94	23	Sunrise.	30.19	6	Sunset.	29.65
Alabama.....	Tuscaloosa.....	29.83	23	7 a. m.	30.12	9	2 p. m.	29.47
Mississippi.....	Oxford (b).....	29.60	22	9 p. m.	29.83	25	9 p. m.	29.43
	Vicksburg.....	29.71	23	7 a. m.	29.89	9	9 p. m.	29.50
Texas.....	New Wied (c).....	28.68	22	7, 2, 9.	28.91	25	2 p. m.	28.50
Tennessee.....	Glenwood.....	29.58	22	7 a. m.	30.05	9	2 p. m.	29.17
	Knoxville.....	29.09	22	7 a. m.	29.41	9	2 p. m.	28.66
	Memphis.....	29.46	22	7 and 9.	29.69	9	2 p. m.	29.18
Kentucky.....	Ballardsville.....	29.13	22	7 a. m.	29.51	9	2 p. m.	28.78
	Springdale.....	29.43	22	7 a. m.	29.82	9	2 p. m.	29.03
Ohio.....	College Hill.....	29.11	22	7 a. m.	29.54	9	7 a. m.	28.83
	Germantown.....	29.26	-----	7 a. m.	29.71	-----	7, 2, 9.	28.95
	Granville.....	29.04	22	7 and 2.	29.47	9	2 p. m.	28.66
	Hillsborough.....	28.95	22	7 a. m.	29.37	9	2 p. m.	28.56
	Marietta.....	29.29	22	7 a. m.	29.66	9	9 p. m.	28.92
	Oberlin.....	29.22	22	7 a. m.	29.61	9	2 p. m.	28.83
	Perrysburg.....	20.44	22	7 a. m.	29.86	8	9 p. m.	(d)29.12
	Urbana.....	28.98	-----	-----	29.27	-----	-----	28.68
	Zanesville.....	29.15	22	7 a. m.	29.57	9	2 p. m.	28.77
Michigan.....	Ann Arbor, [Winchell].....	29.13	22	2 p. m.	29.46	8	9 p. m.	28.82
	Detroit.....	29.57	22	7 a. m.	29.99	11	9 p. m.	29.22
Indiana.....	Milton.....	29.09	22	7 a. m.	29.44	9	2 p. m.	28.72
	New Harmony.....	29.67	22	7 a. m.	30.03	9	2 p. m.	29.30
Illinois.....	Upper Alton.....	29.48	22	7 a. m.	29.88	8	9 p. m.	(d)29.20
Missouri.....	St. Louis.....	29.50	22	7 a. m.	29.90	8	9 p. m.	(d)29.18
Wisconsin.....	Beloit.....	29.24	22	7 a. m.	29.66	8	2 p. m.	28.93
	Ceresco.....	29.20	22	7 a. m.	29.55	11	2 p. m.	28.90
	Madison.....	29.13	22	7 a. m.	29.53	24	9 p. m.	28.76
	Milwaukie.....	29.42	22	7 a. m.	29.83	24	9 p. m.	29.12
Iowa.....	Dubuque.....	29.37	22	7 a. m.	29.79	8	2 p. m.	29.07
	Muscatine.....	29.55	22	7 a. m.	29.93	3	2 and 9.	29.28
	Quasqueton.....	29.13	22	7 a. m.	29.52	11	7 a. m.	28.83
California.....	Sacramento, [Hatch] (e).....	19.94	-----	-----	-----	-----	-----	-----
	Sacramento, [Logan].....	30.04	-----	-----	30.20	-----	-----	29.85
	Stockton (f).....	29.43	-----	8 a. m.	29.60	-----	8, 2, 8.	29.30

(a) Observations at sunrise, noon, and sunset.

(b) Observed last eleven days only.

(c) Not corrected for temperature.

(d) Same height at 7 a. m. on the 9th.

(e) Observations taken at sunrise, noon, and 10 p. m.

(f) Observations taken at 8 a. m., 2 p. m., and 8 p. m.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1854.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
Nova Scotia.....Halifax (a).....	30.08				29.30
Canada East.....St. Martin's.....	29.97	20	7 and 9.	8	9 p. m.
Canada West.....Hamilton (b).....	29.74	25	9 a. m.	3	9 p. m.
Maine.....Carmel (c).....	29.75	21	7 a. m.	16	7 a. m.
.....Steuben.....	30.04	21	7 a. m.	16	7 a. m.
New Hampshire.....Concord.....	29.71	26	7 a. m.	15	9 p. m.
.....Hanover.....	29.51		7 a. m.		7 and 9.
.....Great Falls.....	29.62	21	7 a. m.	15	9 p. m.
.....Manchester.....	30.08	20	7 a. m.	(d) 30.48	15 9 p. m.
Vermont.....Burlington.....	29.67	20	2 p. m.	(e) 30.06	4 7 and 9.
.....St. Johnsbury.....	29.32	20	7 a. m.	(f) 29.69	16 7 a. m.
Massachusetts.....Amherst.....	29.83	20	7 a. m.		15 2 p. m.
.....Nantucket.....	30.05	20	9 p. m.		15 2 p. m.
.....New Bedford.....	30.07	5	7 a. m.		15 2 and 9.
.....Newburyport.....	30.07	28	9 p. m.		15 9 p. m.
.....North Attleboro'.....	29.80	20	9 p. m.		15 2 and 9.
.....Princeton.....	28.94	5	2 p. m.		15 9 p. m.
.....Williamstown.....	29.37	26	7 a. m.		15 9 p. m.
.....Worcester.....	29.54	26	7 a. m.		15 9 p. m.
Rhode Island.....Providence (g).....	29.91	26	Sunrise	(h) 30.29	15 2 and 10
Connecticut.....Pomfret.....	28.99	26	7 a. m.		15 2 p. m.
New York.....Beaver Brook (i).....	29.13	26	6 a. m.		3 6½ p. m.
.....Canton.....	29.37	26	7 a. m.		3 9 p. m.
.....Madrid (j).....		24	9 p. m.		9 p. m.
.....New York city (k).....	30.08		Sunrise.		10 p. m.
.....New York city, (noon).....	30.06				
.....New York city, (sunset).....	30.04				
.....New York city, [Deaf and Dumb Inst.].....	29.99	20	7 a. m.		14 9 p. m.
Penn Yan (l).....	29.34		Sunset.		Sunset.
Sag Harbor (m).....	29.80	21	7 a. m.	(e) 30.21	16 7 and 9.
Spencertown.....	29.42	5	7 a. m.		16 2 p. m.
New Jersey.....Bloomfield.....	29.94	5	7 a. m.		3 9 p. m.
.....Burlington (n).....	30.04	6	2 p. m.	(o) 30.40	3 9 p. m.
.....Lambertville.....	30.07	20	9 p. m.		3 9 p. m.
.....Newark (p).....	30.10	6	7 a. m.		4 7 a. m.
Pennsylvania.....Bedford.....	29.23	26	7 a. m.		3 9 p. m.
.....Brookville (q).....	28.76	17	9 p. m.		3 2 p. m.
.....Byberry.....	30.01	5	7 a. m.		3 9 p. m.
.....Gettysburg.....	29.51	20	7 a. m.		14 2 p. m.
.....Harrisburg.....	29.83	6	7 a. m.		3 9 p. m.
.....Lima.....	29.93	5	7 a. m.		3 9 p. m.
.....Morrisville (n).....	30.17	5	7, 2, 9	(r) 30.50	14 9 p. m.
.....Norristown.....	30.04	5	7 a. m.		3 9 p. m.
.....Philadelphia.....	29.98	20	9 p. m.		3 9 p. m.
.....Pittsburg, [Marine Hospital] (s).....	29.34	6	7 a. m.		3 2 and 9.
.....Pittsburg, [Oakland Station].....	29.00	7	7 a. m.		3 2 p. m.
Maryland.....Frederick.....	29.78	20	7 a. m.		3 2 p. m.
Dist. of Columbia, Washington.....	30.10	6	7 a. m.		3 9 p. m.
Virginia.....Alexandria.....	30.11	20	7 a. m.		3 9 p. m.
.....Montcalm (f).....	28.78	20	7 a. m.	(u) 29.19	14 9 p. m.
North Carolina.....Chapel Hill.....	29.54	7	7 a. m.		3 9 p. m.

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) No observations from 1st to 5th.

(d) Same height at 7 a. m. on the 21st and 7 a. m. on the 26th.

(e) Same height at 7 a. m. on the 26th.

(f) Same height at 7 a. m. on the 21st.

(g) Observations taken at 2 p. m. and 10 p. m.

(h) Same height on the 20th at 2 p. m.

(i) Observations at 6 a. m., noon, and 6½ p. m.

(j) Record imperfect and doubtful.

(k) Observations at sunrise, noon, 3 p. m., sunset, and 10 p. m.

(l) Observations taken at sunrise, 2 p. m., and sunset.

(m) Observations taken at 9 a. m. and 3 p. m. No observations from 16th to 21st.

(n) Not corrected for temperature.

(o) Same height at 7 a. m. and 9 p. m. on the 20th, and at 7 a. m. on the 26th and 27th.

(p) Observations taken at 7 a. m. and 5 p. m.

(q) No observations after the 17th.

(r) Same height at 9 p. m. on the 19th, and 7 a. m., 2 and 9 p. m. on the 21st, and 7 a. m., 2 and 9 p. m. on the 26th.

(s) Observations from 3d to 15th only.

(t) Incomplete.

(u) Same height at 7 a. m. on the 21st.



No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1854—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
South Carolina.....Camden.....	29.95	6	7 a. m.	30.29	3	9 p. m.	29.53
Georgia.....Savannah.....	30.11	6	7 a. m.	30.37	16	2 p. m.	29.74
.....Sparta.....	29.47	7	7 a. m.	29.69	3	9 p. m.	29.12
.....The Rock (z).....	29.38			29.63			29.00
Florida.....Cedar Keys.....	29.89	21	7 a. m.	30.05	15	2 p. m.	(b)29.66
.....Jacksonville.....	30.12	20	9 p. m.	30.32	16	2 p. m.	29.78
.....Key West (c).....	29.77	11	2 p. m.	29.95	16	7 and 2.	(d)29.67
.....Knox Hill.....	29.93	6	7 a. m.	(e) 30.14	16	2 p. m.	29.68
.....Warrington (f).....	30.03	6	12 m.	30.28	3	Sunset.	29.76
Alabama.....Tuscaloosa.....	29.90	7	7 a. m.	30.19	3	2 p. m.	29.53
Mississippi.....Oxford.....	29.60	7	7 a. m.	29.86	3	2 p. m.	29.23
Louisiana.....New Orleans (g).....	30.30	21	9 p. m.	30.49	16	2 p. m.	30.03
Texas.....New Wied (h).....	28.79	6	7 a. m.	29.02	3	2 p. m.	28.56
Tennessee.....Glenwood.....	29.62	7	7 a. m.	29.96	3	2 p. m.	29.16
.....Knoxville.....	29.13	7	7 a. m.	29.46	3	2 p. m.	28.61
.....Memphis (i).....	29.53	7	7 a. m.	(j) 29.73	3	7 a. m.	29.18
Kentucky.....Ballardsville.....	29.16	19	2 p. m.	29.47	4	7 a. m.	28.63
.....Springdale.....	29.48	7	7 a. m.	29.80	3	2 p. m.	28.93
Ohio.....College Hill.....	29.14	19	7 a. m.	29.48	3	2 p. m.	28.50
.....Germantown.....	29.33		7 a. m.	29.65		2 p. m.	28.97
.....Granville (i).....	29.04	19	7 a. m.	29.38	3	2 p. m.	28.34
.....Hillsborough.....	28.96	19	7 a. m.	(e) 29.30	3	2 p. m.	28.30
.....Marietta.....	29.30	25	7 a. m.	29.59	3	2 p. m.	28.61
.....Oberlin.....	29.18	25	7 a. m.	29.57	3	2 p. m.	28.36
.....Perrysburg.....	29.42	25	7 a. m.	29.84	3	2 p. m.	28.66
.....Urbana.....	28.93			29.24			28.27
.....Zanesville.....	29.21	25	7 a. m.	29.55	3	2 p. m.	28.49
Michigan.....Ann Arbor, [Winchell].....	29.11	25	7 a. m.	29.51	3	2 p. m.	28.24
.....Detroit.....	29.56	25	7 a. m.	30.04	3	2 p. m.	28.70
Indiana.....Milton.....	29.06	3	9 p. m.	29.38	3	7 a. m.	28.44
.....New Harmony.....	29.72	19	7 a. m.	(k) 29.97	3	7 a. m.	29.10
Missouri.....St. Louis.....	29.52	19	7 a. m.	29.81	3	7 a. m.	29.08
Wisconsin.....Beloit.....	29.26	25	7 a. m.	29.64	3	7 a. m.	28.52
.....Ceresco.....	29.15	25	7 a. m.	29.54	3	2 p. m.	28.25
.....Madison.....	29.06	25	7 a. m.	29.42	2	9 p. m.	28.54
.....Milwaukie.....	29.40	25	7 a. m.	29.81	3	7 a. m.	28.57
Iowa.....Dubuque.....	29.37	25	7 a. m.	29.75	3	7 a. m.	28.71
.....Muscatine.....	29.54	25	7 a. m.	29.86	3	7 a. m.	29.11
.....Quasqueton.....	29.11	25	7 a. m.	29.44	3	7 a. m.	28.55
California.....Sacramento, [Hatch] (l).....	30.00						
.....Sacramento, [Logan].....	30.13			30.20			29.83
.....Stockton (m).....	29.51		8 a. m., 2 p. m.	29.70		2 p. m.	29.25
Central America.....Truxillo, Honduras (n).....	30.14	27	9 a. m.	(o) 30.76	4	3 p. m.	29.55

(a) Observations in the morning.

(b) Same height at 2 and 9 p. m. on the 16th.

(c) Not corrected for temperature. Observations at 7 a. m. and 2 p. m.

(d) Same height at 7 a. m. on the 17th.

(e) Same height at 7 a. m. on the 20th.

(f) Observations taken at sunrise, noon, and sunset.

(g) Incomplete.

(h) Not corrected for temperature.

(i) No observations after the 23d.

(j) Same height at 7 a. m. on the 19th.

(k) Same height at 9 p. m. on the 24th.

(l) Observations taken at sunrise, noon, and 10 p. m.

(m) Observations taken at 8 a. m., 2 p. m., and 8 p. m.

(n) Observations taken at 9 a. m. and 3 p. m.

(o) Same height at 7 a. m. on the 28th.

## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1854.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Nova Scotia	Halifax (a)	29.86	5	-----	30.50	17	-----	28.90
Canada East	St. Martin's	29.75	4	9 p. m.	30.50	25	2 p. m.	28.99
Canada West	Hamilton (b)	29.49	-----	9 p. m.	30.22	-----	9 a. m.	28.75
Maine	Carmel	29.48	5	7 a. m.	30.11	30	7 a. m.	28.94
	Steuben (c)	29.92	5	9 p. m.	30.51	8	7 a. m.	29.39
New Hampshire	Concord	29.46	5	7 a. m.	30.14	25	9 p. m.	28.85
	Hanover	29.24	-----	7 a. m.	29.97	-----	7 a. m.	28.64
	Great Falls (d)	29.34	5	7 a. m.	30.03	25	2 p. m.	28.81
	Manchester	29.86	5	7 a. m.	30.50	25	7 a. m.	29.27
Vermont	Burlington	29.44	5	7 a. m.	30.17	25	2 p. m.	28.74
	St. Johnsbury	29.16	5	7 a. m.	29.78	25	2 p. m.	28.57
Massachusetts	Amherst	29.60	5	7 a. m.	30.28	25	7 a. m.	28.93
	Nantucket	29.85	5	2 p. m.	30.49	28	2 p. m.	29.11
	New Bedford	29.76	5	7 and 2.	30.37	25	7 and 2.	29.23
	Newburyport	29.83	5	7 a. m.	30.50	25	2 p. m.	29.26
	North Attleboro'	29.67	5	7 and 2.	30.31	25	7 a. m.	29.09
	Princeton	28.69	5	7 a. m.	29.28	25	7 a. m.	28.11
	Southwick (e)	29.80	5	7 a. m.	30.53	25	7 a. m.	29.21
	Williamstown	29.14	5	7 a. m.	29.77	25	7 a. m.	28.42
	Worcester	29.34	5	7 a. m.	29.97	25	2 p. m.	28.89
Rhode Island	Providence (f)	29.68	5	Sunrise.	30.33	25	Sunrise.	29.05
Connecticut	Pomfret	28.77	5	7 a. m.	29.35	25	7 a. m.	28.22
New York	Beaver Brook (g)	28.88	5	6½ a. m., 12 m.	29.49	25	6½ a. m.	28.20
	Canton	29.24	5	7 a. m.	30.00	25	7 a. m.	28.53
	New York city (h)	29.88	-----	3 p. m.	30.49	-----	Sunrise.	29.20
	New York city, (noon)	29.85	-----	-----	30.51	-----	-----	29.27
	New York city, (sunset)	29.85	-----	-----	30.48	-----	-----	29.38
	New York city, [Deaf and Dumb Inst.]	29.80	5	7 a. m.	30.41	25	7 a. m.	29.07
	Penn Yan (i)	29.08	-----	Sr. & ss.	29.70	-----	Sunrise.	28.39
	Sag Harbor	29.61	5	7 a. m.	30.29	25	7 a. m.	28.97
	Spencertown	29.08	5	2 p. m.	29.72	25	7 a. m.	28.39
New Jersey	Bloomfield	29.72	5	2 p. m.	30.35	25	7 a. m.	29.01
	Burlington (j)	29.89	5	2 and 9.	30.50	25	7 a. m.	29.25
	Lambertville	29.87	5	7 a. m.	30.41	24	9 p. m.	29.34
Pennsylvania	Bedford	28.98	4	9 p. m.	29.50	24	9 p. m.	28.35
	Byberry	29.81	5	7 a. m.	30.46	25	7 a. m.	29.15
	Gettysburg	29.34	5	7 a. m.	29.93	24	9 p. m.	28.63
	Harrisburg	29.60	5	7 a. m.	30.22	24	9 p. m.	28.96
	Lima	29.73	5	2 p. m.	30.33	25	7 a. m.	29.07
	Morrisville (j')	29.99	5	7 a. m.	30.55	25	7 a. m.	29.35
	Norristown	29.77	4	9 p. m.	30.37	24	9 p. m.	29.15
	Philadelphia	29.83	5	7 a. m.	30.37	25	7 a. m.	29.26
	Pittsburg, [Oakland Station]	28.81	5	7 a. m.	29.40	24	2 and 9.	28.18
Delaware	Newark (e)	29.72	5	7 a. m.	30.32	25	7 a. m.	29.06
Maryland	Frederick	29.60	5	7 a. m.	30.22	24	2 and 9.	28.97
Dist. of Columbia	Washington	29.90	5	7 a. m.	30.51	24	9 p. m.	29.20
Virginia	Alexandria	29.93	5	7 a. m.	30.53	25	7 a. m.	29.33
	Montcalm (e)	28.54	5	7 a. m.	29.01	24	9 p. m.	27.91
North Carolina	Chapel Hill	29.42	5	9 p. m.	29.86	15	9 p. m.	28.95
	Thornbury	29.96	5	7 a. m.	30.48	24	9 p. m.	29.31
South Carolina	All Saints	29.95	5	9 p. m.	30.29	25	2 p. m.	29.50
	Camden	29.83	5	9 p. m.	30.20	24	2 p. m.	29.23
Georgia	Savannah	30.02	5	7 a. m.	30.32	24	9 p. m.	29.49
	Sparta	29.47	5	7 a. m.	29.68	24	2 p. m.	28.88
	The Rock (k)	29.29	-----	-----	29.60	-----	-----	28.85
Florida	Cedar Keys (l)	29.89	13	7 a. m.	30.41	25	2 p. m.	29.51

(a) Observations taken at 6 a. m. and 3 p. m.

(b) Observations taken at 9 a. m. and 9 p. m.

(c) From the 3d of the month to the 23d, inclusive.

(d) Observations taken only from the 5th to the 26th, inclusive.

(e) Observations imperfect.

(f) Observations taken at sunrise, 3 p. m., and 10 p. m.

(g) Observations taken at 6½ a. m., noon, and 5½ p. m.

(h) Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

(i) Observations at sunrise, 2 p. m., and sunset.

(j) Not corrected for temperature.

(k) Observations taken in the morning.

(l) For the last 20 days of the month only.



No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1854—Continued.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida	Jacksonville	30.09	14	7 a. m.	30.36	-----	2 p. m.	29.60
	Key West (a)	29.80	3	2 p. m.	29.98	25	7 a. m.	29.57
	Knox Hill (b)	29.88	14	7 a. m.	30.19	24	2 p. m.	29.46
	Warrington (c)	30.03	14	Sunrise.	30.33	24	Sunset.	(d) 29.59
Alabama	Tuscaloosa	29.84	4	9 p. m.	30.17	24	2 p. m.	29.34
Mississippi	Oxford	29.53	4	9 p. m.	29.92	24	2 p. m.	29.08
Louisiana	New Orleans (e)	30.21	14	7 a. m.	30.54	25	7 a. m.	29.81
Texas	New Wied (f)	28.94	-----	7 a. m.	29.36	25	9 p. m.	28.52
Tennessee	Glenwood	29.54	4	7 a. m.	29.98	24	7 a. m.	28.93
	Knoxville	28.98	5	7 and 9.	29.41	26	2 p. m.	28.21
Kentucky	Ballardsville	29.25	4	2 p. m.	29.53	24	2 p. m.	28.23
	Springdale	29.34	4	2 p. m.	29.86	24	7 a. m.	28.66
Ohio	College Hill	28.95	4	7 a. m.	29.53	24	2 p. m.	28.20
	Germantown	29.18	-----	9 p. m.	29.72	-----	2 p. m.	28.64
	Granville (g)	28.87	10	7 a. m.	29.48	24	2 p. m.	28.10
	Hillsborough	28.77	5	7 a. m.	29.32	24	2 p. m.	28.04
	Marietta	29.14	5	7 a. m.	29.64	23	2 p. m.	28.00
	Oberlin	28.95	4	9 p. m.	29.62	24	2 p. m.	28.13
	Perrysburg (h)	29.25	4	7 a. m.	29.88	24	7 a. m.	28.46
	Urbana	28.68	-----	-----	29.30	-----	-----	27.98
	Zanesville	29.06	5	7 a. m.	29.63	24	9 p. m.	28.39
Michigan	Ann Arbor, [Winchell]	28.88	4	2 p. m.	29.56	24	2 p. m.	28.02
	Detroit	29.35	4	2 and 9.	30.02	24	2 p. m.	28.53
Indiana	Madison	29.41	4	2 p. m.	29.95	24	2 p. m.	28.18
	Milton	28.91	4	2 p. m.	29.62	24	7 a. m.	28.12
	New Harmony	29.61	4	7 a. m.	30.09	24	7 a. m.	28.93
Illinois	Upper Alton	29.41	4	7 a. m.	30.36	24	2 p. m.	28.40
Missouri	St. Louis	29.43	4	2 p. m.	30.01	24	7 a. m.	28.84
Wisconsin	Beloit	29.02	4	7 a. m.	29.83	24	7 a. m.	28.40
	Ceresco	28.96	8	2 p. m.	29.77	24	7 a. m.	28.31
	Madison	28.86	4	7 a. m.	29.57	24	9 p. m.	28.22
	Milwaukee	29.21	4	7 a. m.	29.93	24	7 a. m.	28.49
Iowa	Dubuque	29.23	4	7 a. m.	29.94	24	7 a. m.	28.38
	Muscatine	29.45	4	7 a. m.	30.11	24	7 a. m.	28.85
California	Sacramento, [Hatch] (i)	30.07	-----	-----	-----	-----	-----	-----
	Sacramento, [Logan]	30.21	-----	-----	30.35	-----	-----	30.05
	Stockton (j)	29.61	-----	8, 2, 8.	29.70	-----	9 p. m.	29.45
Central America	Truxillo, Honduras (k)	30.13	24	9 a. m.	30.87	25	9 a. m.	29.06

(a) Not corrected for temperature. Observations at 7 a. m. and 2 p. m.

(b) For the first 25 days of the month only.

(c) Observations taken at sunrise, noon, and sunset.

(d) Same height at sunrise on the 25th.

(e) No observations for the first seven days of the month.

(f) Not corrected for temperature.

(g) No observations on the first and second days of the month.

(h) Observations taken at 7 a. m., 1 p. m., and 9 p. m.

(i) Observations taken at sunrise, noon, and 10 p. m.

(j) Observations taken at 8 a. m., 2 p. m., and 8 p. m.

(k) For the last 26 days of the month only. Obs. at 9 a. m. and 3 p. m.

## No. 13—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1854.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
Day.	Hour.	Day.	Hour.					
		Inches.			Inches.			Inches.
Nova Scotia.....	Halifax.....	29.86	22		30.65	5		28.80
Canada East.....	St. Martin's.....	29.79	23	2 p. m.	30.59	5	7 a. m.	29.06
Canada West.....	Hamilton (a).....	29.62		9 a. m.	30.16		9 p. m.	28.98
Maine.....	Carmel.....	29.54	23	2 p. m.	30.47	4	9 p. m.	28.46
	Steuben.....	29.95	23	2 p. m.	30.86	4	9 p. m.	(b) 28.89
New Hampshire.....	Concord.....	29.53	23	9 p. m.	30.41	4	9 p. m.	28.52
	Hanover.....	29.36		7 and 2.	29.93		2 p. m.	28.41
	Great Falls.....	29.46	23	7 and 2.	30.33	4	9 p. m.	28.39
	Manchester (c).....	29.90	23	7 a. m.	30.77	4	9 p. m.	28.93
Vermont.....	Burlington.....	29.55	23	7 a. m.	30.35	4	2 p. m.	28.73
	St. Johnsbury.....	29.19	23	7 and 2.	29.99	4	9 p. m.	28.29
Massachusetts.....	Amherst.....	29.68	23	2 p. m.	30.53	4	7 a. m.	28.69
	Nantucket.....	29.88	23	2 and 9.	30.73	4	2 p. m.	29.02
	New Bedford.....	29.84	23	2 and 9.	30.64	4	2 p. m.	28.87
	Newburyport (d).....	29.91	23	2 p. m.	30.78	4	9 p. m.	28.86
	North Attleboro.....	29.71	23	2 p. m.	30.57	4	2 p. m.	28.76
	Princeton.....	28.69	23	2 p. m.	29.50	4	2 and 9.	27.76
	Southwick (e).....	29.91	23	7 and 2.	30.75	5	7 a. m.	29.20
	Westfield.....	31.04	3	7 a. m.	31.48	2	2 p. m.	30.83
	Williamstown (f).....	29.28	23	7 a. m.	29.98	7	2 p. m.	28.66
	Worcester.....	29.34	23	2 p. m.	30.16	4	2 p. m.	28.34
Rhode Island.....	Providence (g).....	29.68	23	10 p. m.	30.49	4	2 p. m.	28.95
Connecticut.....	Pomfret.....	28.77	23	2 p. m.	29.56	4	7 and 2.	27.93
New York.....	Beaver Brook (h).....	28.95	23	12 m.	29.66	4	7 a. m.	28.20
	Canton.....	29.40	23	7 a. m.	30.15	4	2 and 9.	28.73
	New York city (i).....	29.95		9 a. m.	30.76		10 p. m.	28.98
	New York city (j).....	29.94		Sunrise.	30.75		Sunrise.	29.09
	New York city, [Deaf and Dumb Inst.].....	29.87	23	7 and 2.	30.60	4	2 p. m.	29.08
	Penn Yan (k).....	29.14		Sunrise.	29.73		Sunrise.	28.59
	Sag Harbor.....	29.69		2 p. m.	30.52		7 and 9.	28.71
	Spencertown.....	29.15	23	7 a. m.	29.94	4	7 a. m.	28.24
New Jersey.....	Bloomfield.....	29.85	26	7, 2, 9	30.61	4	7 a. m.	28.91
	Burlington (l).....	30.00	23	7 a. m.	30.70	3	9 p. m.	29.20
	Lambertville.....	29.93	23	2 p. m.	30.72	4	7 a. m.	29.13
Pennsylvania.....	Bedford.....	29.04	4	7 and 2.	29.64	5	9 p. m.	28.57
	Gettysburg.....	29.43	23	7 a. m.	30.08	3	9 p. m.	28.81
	Harrisburg.....	29.71	23	2 p. m.	30.39	4	7 and 9.	29.10
	Lima.....	29.82	23	7 a. m.	30.54	3	9 p. m.	29.09
	Morrisville (l).....	30.11	23	7 and 2.	30.80	4	7 a. m.	29.32
	Norristown.....	29.86	23	7 p. m.	30.66	4	7 a. m.	29.22
	Philadelphia.....	29.89	23	7 and 2.	30.50	3	9 p. m.	29.24
	Pittsburg, [Marine Hospital] (m).....	29.22	23	2 p. m.	29.68	15	9 p. m.	(n) 29.03
	Pittsburg, [Oakland Station] (o).....	28.95	22	9 p. m.	29.41	3	2 p. m.	28.44
Delaware.....	Newark (p).....	29.75	9	9 p. m.	? 30.38	3	9 p. m.	? 29.17
Maryland.....	Frederick.....	29.66	23	7 a. m.	30.33	3	9 p. m.	29.13
Dist. of Columbia.....	Washington.....	30.01	23	7 a. m.	30.68	3	2 p. m.	29.41
Virginia.....	Alexandria.....	30.02	23	2 p. m.	30.64	3	9 p. m.	29.44
	Montcalm (q).....	28.83	23	2 p. m.	29.55	3	2 and 9.	28.26
North Carolina.....	Chapel Hill.....	29.48	9	9 p. m.	29.94	3	7 a. m.	29.01
	Thornbury.....	30.04	9	7 a. m.	30.59	3	2 p. m.	29.49
South Carolina.....	All Saints.....	30.03	9	7 a. m.	30.47	3	2 p. m.	29.55
	Camden.....	29.92	9	7 a. m.	30.35	3	2 p. m.	29.50
Georgia.....	Savannah.....	30.10	23	9 p. m.	30.44	3	2 p. m.	29.66
	Sparta.....	29.48	9	7 a. m.	29.80	15	9 p. m.	29.17
	The Rock (r).....	29.43						

(a) Observations taken at 9 a. m. and 9 p. m.

(b) Same height at 7 a. m. on the 5th.

(c) Observations taken at 7 a. m., 1 p. m., and 9 p. m.

(d) Observations taken at 8 a. m. and 2 and 9 p. m.

(e) Observations irregular. Only eight observations at 9 p. m.

(f) No observations until the 7th.

(g) Observations taken at sunrise, 2 p. m., and 10 p. m.

(h) Observations taken at 7 a. m., noon, and 5 p. m.

(i) Observations taken at 9 a. m., 3 p. m., and 10 p. m.

(j) Observations taken at sunrise, noon, and sunset.

(k) Observations taken at sunrise, 2 p. m., and sunset.

(l) Not corrected for temperature.

(m) No observations before the 12th.

(n) Same height at 9 p. m. and the 16th and at 2 p. m. on the 17th.

(o) Same height at 7 a. m. on the 23d.

(p) Observations omitted after the 19th

(q) Observations irregular.

(r) Observations taken in the morning for the last few days of the month only.



No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1854—Continued.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida.....Cedar Keys.....	29.97	23	7 a. m.	30.22	15	2 and 9.	29.69
Jacksonville.....	30.14	17	7 a. m.	30.44	15	9 p. m.	29.34
Key West (a).....	29.86	-----	2 p. m.	30.05	-----	7 and 2.	29.60
Warrington (b).....	30.12	31	12 m.	30.31	15	Sunset.	29.82
Alabama.....Tuscaloosa.....	29.94	20	7 a. m.	30.15	15	2 p. m.	29.57
Mississippi.....Oxford.....	29.62	29	7 a. m.	29.84	15	2 p. m.	29.25
Louisiana.....New Orleans.....	30.33	20	7 a. m.	30.56	28	2 p. m.	30.11
Texas.....New Wied (a).....	29.08	20	7 a. m.	29.41	26	2 p. m.	28.70
Tennessee.....Glenwood.....	29.63	11	7 a. m.	29.85	15	2 p. m.	29.24
Knoxville.....	29.09	23	7 a. m.	29.47	3	2 p. m.	(c) 28.72
Kentucky.....Ballardsville.....	29.09	8	7 a. m.	29.36	6	9 p. m.	28.69
Springdale.....	29.45	8	7 a. m.	29.73	6	2 p. m.	29.02
Ohio.....Germantown.....	29.24	-----	2 p. m.	29.57	-----	2 p. m.	28.73
Granville.....	28.95	23	7 a. m.	29.31	8	7 a. m.	28.21
Hillsborough.....	28.87	8	2 p. m.	29.19	6	2 p. m.	28.40
Marietta.....	29.24	23	7 a. m.	29.58	3	7 a. m.	28.76
Oberlin.....	29.06	23	7 a. m.	29.49	6	2 p. m.	28.52
Perrysburg (d).....	29.39	6	7 a. m.	29.85	3	7 a. m.	28.77
Urbana.....	28.76	-----	-----	29.10	-----	-----	28.27
Zanesville.....	29.17	8	7 a. m.	29.53	3	7 p. m.	28.67
Michigan.....Ann Arbor, [Winchell] (e).....	29.01	22	9 p. m.	29.41	6	2 p. m.	28.38
Detroit (f).....	29.49	22	9 p. m.	(g) 29.90	3	7 p. m.	28.86
Monroe, [Perkins] (a).....	28.88	-----	7, 2, 9	29.20	-----	7 and 2.	28.30
Indiana.....Madison (h).....	29.49	8	7 a. m.	29.81	6	1 p. m.	29.05
Milton.....	29.03	8	2 p. m.	29.29	3	7 a. m.	28.63
New Harmony.....	29.70	11	7 a. m.	29.95	15	2 p. m.	29.30
Illinois.....Upper Alton.....	29.50	12	7 a. m.	29.78	15	7 a. m.	29.10
Missouri.....St Louis.....	29.52	5	7 a. m.	29.78	6	2 p. m.	(i) 29.12
Wisconsin.....Beloit.....	29.19	10	9 p. m.	(j) 29.48	6	7 a. m.	28.52
Milwaukie.....	29.35	11	7 a. m.	29.67	6	7 a. m.	28.61
Iowa.....Dubuque.....	29.33	11	7 a. m.	29.65	6	7 a. m.	28.76
Muscatine.....	29.60	12	7 a. m.	(k) 29.90	6	7 a. m.	29.10
Quasqueton.....	29.08	8	7 a. m.	29.39	6	2 p. m.	28.65
California.....Sacramento, [Hatch] (l).....	30.15	-----	-----	-----	-----	-----	-----
Sacramento, [Logan].....	29.69	-----	-----	30.26	-----	-----	29.68
Stockton (m).....	29.67	-----	8, 2, 8	29.90	-----	8 p. m.	29.40
Central America...Truxillo, Honduras (n).....	30.06	30	9 a. m.	30.22	5	3 p. m.	29.86

(a) Not corrected for temperature.

(b) Observations taken at sunrise, noon, and sunset.

(c) Same height at 9 p. m. on the 15th.

(d) Observations taken at 7 a. m., 1 p. m., and 9 p. m.

(e) Observations taken at 7 a. m., noon, and 5 p. m.

(f) Observations incomplete.

(g) Same height at 7 a. m. on the 28d.

(h) Observations taken at 7 a. m., 1 p. m., and 9 p. m.

(i) Same height at 7 a. m. on the 15th.

(j) Same height at 9 p. m. on the 11th.

(k) Same height at 9 p. m. on the 17th.

(l) Observations taken at sunrise, noon, and 10 p. m.

(m) Observations taken at 8 a. m., 3 p. m., and 8 p. m.

(n) Observations taken at 9 a. m. and 3 p. m.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	■	■	■	○		□		□		○		○	
Albion Mines.....	14. 00	20. 71	18. 26	17. 66	13	54	13	49. 67	30	—23	29	—13. 00	6. 6
Halifax (a).....	19. 10	24. 40	22. 50	22. 00	13	47	—	—	29	— 10	—	—	—
CANADA EAST—													
St. Martin's.....	5. 00	14. 25	7. 58	8. 94	12	44	12	36. 67	29	—34	29	—19. 10	5. 2
CANADA WEST—													
Hamilton (b).....	26. 13	—	27. 22	26. 67	—	50	4	49. 00	—	—	23	7. 00	—
MAINE—													
Biddeford (c).....	14. 22	26. 79	25. 87	22. 29	5	50	6	43. 33	29	—25	29	—	7. 0
Carmel (d).....	6. 48	17. 32	7. 47	10. 42	13	49	14	42. 83	30	—30	30	19. 67	4. 8
Oldtown.....	12. 10	16. 81	14. 29	14. 40	13	42	13	39. 00	30	—30	29	—24. 00	2. 8
South Thomaston.....	28. 16	32. 23	28. 48	29. 62	7	43	7	40. 33	28	12	28	13. 00	3. 5
Windham.....	11. 14	24. 31	14. 69	16. 71	5	48	5	39. 33	29	—19	29	—10. 00	4. 3
NEW HAMPSHIRE—													
Concord.....	13. 42	25. 42	20. 23	19. 69	5	46	5	39. 67	30	—25	30	7. 67	5. 3
Hanover.....	9. 85	24. 29	14. 92	16. 35	13	42	13	39. 88	29	—29	29	17. 83	6. 3
Exeter.....	12. 81	25. 13	17. 65	18. 53	12	48	12	40. 00	29	—20	29	— 6. 33e	5. 3
Londonderry.....	15. 05	26. 16	19. 66	20. 29	12	49	12	40. 33	30	—16	29	— 7. 33	5. 5
Manchester.....	14. 29	28. 58	22. 51	21. 79	6	g47	5	41. 35	30	—20	29	— 7. 67	6. 1
Salmon Falls.....	13. 92	26. 92	20. 32	20. 39	5	47	13	41. 83	30	—22	29	— 4. 00	5. 4
VERMONT—													
Brandon.....	17. 61	25. 13	19. 60	20. 78	12	49	12	45. 50	29	—19	29	— 5. 67	7. 4
Burlington.....	16. 81	23. 90	18. 07	19. 59	12	53	4	41. 67	25	—15h	29	— 7. 33e	4. 1
Castleton.....	16. 70	29. 65	20. 81	22. 39	12	53	4	40. 33	9	— 1	25	2. 67	6. 3
Craftsbury (i).....	6. 22	17. 71	12. 04	11. 99	4	43	4	35. 00	25	—27	25	—11. 00	5. 8
St. Johnsbury.....	9. 13	18. 89	14. 13	14. 05	4	45	13	39. 00	29	—32	29	—20. 50	5. 2
MASSACHUSETTS—													
Amherst.....	17. 37	27. 10	22. 62	22. 36	12	50	12	40. 23	29	—10	29	— 3. 20	5. 3
Barnstable.....	27. 06	34. 68	28. 94	30. 23	12	51	12	49. 33	29	— 1	29	5. 67	5. 5
Mendon.....	18. 81	27. 87	24. 29	23. 66	12	57	12	47. 67	29	— 8	29	0. 00	5. 7
Nantucket.....	31. 07	34. 94	31. 82	32. 61	5	49	12	48. 50	29	10	25	12. 86	5. 6
New Bedford.....	25. 39	33. 27	27. 84	28. 83	12	52	12	47. 50	29	— 4. 5	29	6. 17	6. 2
Newburyport.....	19. 18	27. 06	21. 23	22. 49	12	52	12	43. 10	23	—16	29	— 4. 80	7. 7
North Attleboro'.....	20. 30	29. 91	24. 35	24. 85	12	51	12	45. 40	29	— 8. 3	29	— 0. 30	5. 4
Princeton.....	18. 39	24. 57	20. 57	21. 18	12	49	12	43. 33	28	— 4	9	3. 00	5. 0
Richmond.....	19. 06	27. 94	21. 23	22. 74	12	52	4	j40. 67	29	— 8	29	2. 67	6. 4
Southwick.....	—	—	—	—	—	—	—	—	—	—	—	—	6. 2
Springfield (k).....	16. 39	27. 77	24. 10	22. 75	12	48	12	40. 67	29	—12	29	— 1. 33	—
Worcester.....	19. 21	28. 23	23. 61	23. 68	12	50	5	40. 33	29	— 6	29	1. 33	4. 7
RHODE ISLAND—													
North Scituate.....	19. 42	27. 29	21. 79	22. 87	12	53	12	45. 66	29	— 1	29	— 0. 03	6. 0
Providence (l).....	23. 1	31. 2	24. 8	26. 40	12	53	12	48. 33	29	— 6	29	1. 83	—
CONNECTICUT—													
New London.....	26. 03	35. 00	28. 29	29. 77	m6	49	12	48. 67	29	1	29	12. 67	5. 3
Pomfret.....	20. 42	28. 61	23. 48	24. 17	12	51	12	48. 67	29	— 7	29	1. 00	5. 2
Salisbury (n).....	23. 10	29. 10	23. 65	25. 28	12	52	12	49. 50	25	h2	25	8. 25	—
Saybrook.....	24. 71	32. 52	27. 03	28. 09	12	51	12	48. 33	29	1	29	11. 00	5. 3
West Cornwall.....	20. 07	29. 56	22. 37	24. 00	5	51	5	43. 00	25	h0	25	7. 00	4. 6
NEW YORK—													
Baldwinsville.....	21. 97	26. 29	24. 03	24. 10	4	47	12	44. 33	29	— 3	28	4. 00	8. 0
Beverly.....	23. 52	30. 97	26. 58	27. 02	12	54	12	51. 70	29	2	29	9. 33	5. 9
Buffalo, [Salisbury] (o).....	23. 96	27. 68	24. 67	25. 44	12	52	12	44. 67	23	5	23	8. 33	5. 8
Canton.....	12. 61	22. 03	14. 77	16. 47	12	53	4	46. 67	25	—28	25	—12. 67	6. 7
Chatham.....	21. 48	27. 81	23. 98	24. 42	12	58	12	52. 67	29	— 6	29	2. 66	6. 7
Falconer.....	20. 58	28. 19	21. 55	23. 44	20	50	12	44. 16	28	— 4	23	1. 16	5. 6
Fishkill (p).....	25. 25	34. 77	29. 41	29. 81	—	59	—	—	—	— 1	—	—	—

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Observations taken at 7 a. m., 1 p. m., and sunset.

d Observations omitted from the 3d to the 6th of the month.

e Same temperature on the 25th.

f Same temperature on the 13th.

g Same temperature on the 12th.

h Same temperature on the 29th.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m. No observations from the 27th to the 31st, said to be the coldest days.

j Same temperature on the 5th.

k Observations taken at 7 a. m., 1 p. m., and 5 p. m.

l Observations taken at sunrise, 2 p. m., and 10 p. m.

m Same temperature on the 21st.

n Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

o Observations taken at 7 a. m., 1 p. m., and 9 p. m.; imperfect.

p Observations taken at 7 a. m., noon, and 6 p. m.



No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1854.—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Gouverneur .....	13.06	22.06	18.68	10.60	---	53	12	47.33	---	-36	29	-14.33	7.
Houseville .....	16.87	24.13	19.71	20.24	12	52	12	47.67	25	-23	28	-11.33	8.6
Lodi .....	21.90	29.58	23.87	25.12	12	58	12	47.67	28	-4	28	3.00	8.1
Lowville (a) .....	17.4	26.4	21.9	21.90	12	50	---	---	29	-24	---	---	---
Madrid .....	11.09	19.47	13.94	14.83	4	47	4	44.43	28	1	22	4.70	1.6
New York city (b) .....	28.58	35.06	31.19	32.61	---	58	12	54.20	---	10	29	17.60	---
New York city, [D. & D. Ins.] .....	26.92	33.51	28.34	29.59	12	52	12	50.03	29	7	29	13.86	5.7
Oswego .....	23.52	29.97	25.30	26.26	---	50	12	49.33	---	-5	28	6.00	6.8
Penn Yan .....	21.26	30.03	24.52	25.27	---	58	12	50.67	---	-4	28	6.00	7.8
Sag Harbor .....	29.90	36.35	31.45	32.57	12	56	12	54.33	29	4	29	9.33	5.5
Troy .....	21.80	30.18	25.15	25.71	12	58	12	48.93	29	-8.5	29	-0.5	6.7
Wampsville .....	21.74	32.52	23.77	26.01	12	58	12	49.00	25	-11	28	0.00	8.1
NEW JERSEY—													
Bloomfield .....	24.23	32.95	27.47	28.22	12	50	12	49.00	3	-2	29	14.67	5.6
Burlington .....	26.84	35.00	29.23	30.36	12	57	12	55.33	3	4	29	17.33	5.0
Lambertville .....	23.98	37.27	28.31	29.85	12	56	12	53.83	3	1.75	3	15.25	4.5
Newark .....	---	---	---	29.41	---	54	12	45.12	---	3.7	29	15.50	---
PENNSYLVANIA—													
Bedford .....	24.29	32.33	28.65	28.42	16	50	16	42.67	3	6.5	23	9.16	4.9
Bustleton (e) .....	23.06	32.41	29.29	28.25	21	52	20	41.33	24	6	24	14.00	5.4
Byberry .....	26.01	34.32	28.53	29.62	12	52	12	49.67	3	-2	3	15.00	5.5
Ceres .....	21.23	32.16	24.16	25.85	5	52	4	47.00	28	-4	23	3.67	7.2
Gettysburg .....	23.45	33.94	26.35	27.91	12	53	12	47.33	3	4	23	12.67	5.0
Harrisburg .....	27.90	35.00	30.75	31.22	12	56	12	50.33	3	12	23	20.00	5.8
Lima .....	26.78	34.47	28.34	29.86	12	56	12	51.90	3	-1.3	28	16.10	5.9
Morrisville .....	24.37	35.55	27.52	29.15	6	58	12	51.67	3	2	3	16.33	4.6
Moss Grove .....	19.72	28.60	21.07	23.13	20	56	20	50.67	23	-2	23	0.67	6.2
Norristown .....	28.62	37.04	29.67	31.78	16	63	12	55.00	3	10	23	17.33	3.2
Paradise .....	---	---	---	29.00	---	---	---	---	---	---	---	---	---
Philadelphia .....	30.05	36.00	32.68	32.91	12	58	16	45.33	3	15	28	21.83	6.4
Pittsburg, [M. H.] (h) .....	27.00	35.45	30.29	29.74	20	64	20	48.25	23	4	23	9.00	---
Pittsburg, [O. S.] .....	23.97	30.19	26.29	26.82	20	57	20	50.00	23	-2	23	4.00	---
Pocopson .....	---	---	---	31.63	---	57	12	56.00	---	-1	3	13.00	---
Sugar Grove .....	20.58	26.80	19.67	22.35	20	52	12	42.00	23	-1	23	-0.67	7.2
West Haverford .....	29.22	37.87	33.56	33.55	12	60	12	59.00	29	14	22	20.00	5.3
Youngsville .....	20.90	27.57	20.97	23.15	12	50	12	44.00	25	0	23	1.67	7.5
MARYLAND—													
Frederick .....	27.18	39.06	30.72	32.32	16	56	12	49.60	3	10	23	19.33	5.8
Schellman Hall .....	25.74	37.58	30.52	31.28	16	66	12	55.33	3	7	23	17.33	5.7
DISTRICT OF COLUMBIA—													
Washington (i) .....	31.10	36.61	35.60	34.44	5	77	5	53.75	3	12	2	18.33	5.6
VIRGINIA—													
Alexandria .....	31.40	40.12	35.70	35.74	16	64	12	57.23	3	12	2	21.83	5.2
Ashland .....	31.93	43.68	37.03	37.55	20	72	20	59.33	24	9	23	14.33	5.8
Crichston's Store (k) .....	38.79	46.26	46.36	43.80	16	69	6	58.00	9	19	23	?	5.1
Huntersville .....	---	---	---	---	---	---	---	---	---	---	---	---	3.0
Lewisburg .....	27.19	41.06	31.42	33.22	16	68	20	58.67	3	10	23	17.33	5.4
Portsmouth .....	38.65	50.39	41.23	43.42	16	72	16	63.00	9	11	9	24.00	3.8
Winchester .....	28.61	40.13	32.23	33.66	16	66	16	51.33	24	12	28	20.67	4.5
NORTH CAROLINA—													
Chapel Hill .....	35.19	47.29	39.61	40.70	16	68	16	58.33	24	16	9	26.00	1.3
Thornbury .....	35.73	48.27	40.15	41.38	16	70	16	59.86	9	7	9	21.60	5.4
SOUTH CAROLINA—													
Camden .....	39.32	54.31	45.31	46.31	17	75	17	65.16	24	23	9	32.67	5.7
St. John's .....	44.20	55.56	48.48	49.41	---	77	---	---	---	27	---	---	---
GEORGIA—													
Culloden .....	43.94	54.47	49.32	49.24	17	76	17	70.67	22	23	22	32.67	5.6
Savannah .....	47.17	58.68	51.96	52.60	18	77	18	69.90	9	31	9	39.13	5.1

a Observations taken at 7 a. m., 1½ p. m., and 9 p. m.

b Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m. Mean at noon 34.52; mean at sunset 33.71.

c Same temperature on the 4th.

d Same temperature on the 3d.

e For the last seventeen days of the month only.

f Same temperature on the 12th.

g Same temperature on the 29th.

h Observations taken at sunrise, 9 a. m., 3 and 9 p. m. Mean at sunrise 26.23.

i Observations very imperfect.

j Same temperature on the 24th.

k Observations taken at 9 a. m., 1 p. m., and 5 p. m.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—Continued.	□	○	○	□		□		○		○		□	
Sparta.....	40.60	54.58	43.79	46.32	17	79	17	70.33	22	20	22	30.00	5.8
Jacksonville.....	45.61					68				22			5.4
The Rock (a).....	46.04	58.93	51.32	52.10	19	75	19	63.33	1	30	1	37.67	4.8
Whitemarsh Island.....													
FLORIDA—													
Cedar Keys.....	52.20	63.87	59.84	58.64	16	74	20	69.33	1	37	2	46.67	4.4
Jacksonville.....	52.11	64.89	55.45	57.48	15	76	20	69.67	3	34	3	42.67	4.7
Key West.....	68.03	73.80		70.91	21	80	21	76.50	2	56	2	57.50	5.8
Knox Hill.....	48.35	61.30	53.81	54.49	18	75	18	71.00	9	78	9	35.67	5.8
Warrington (g).....	50.10	59.39	56.32	55.27	20	80	20	72.00	9	26	9	37.33	3.7
ALABAMA—													
Greene Springs (h).....	37.38	40.50	52.58	43.49	26	74	15	55.33	22	16	8	25.00	4.8
Tuscaloosa.....	37.76	51.66	44.34	44.59	20	74	16	66.83	22	17	8	25.00	5.0
Weewokaville (i).....	38.48	49.48	44.67	44.21	20	72	20	67.67	9	20	8	28.67	3.8
MISSISSIPPI—													
Garlandsville.....	40.74	56.73	48.14	48.54	16	78	16	72.67	8	25	8	26.67	6.8
Jackson.....													6.4
LOUISIANA—													
New Orleans.....	50.62	59.03	53.03	54.03	25	72	20	72.00		20	8	35.33	6.0
TEXAS—													
Austin.....	40.30	56.64	45.42	47.45	20	80	15	69.67	21	18	8	23.33	5.4
New Wied.....	41.74	58.00	45.42	48.39	20	79	4	65.00	21	19	6	22.67	5.1
TENNESSEE—													
Glenwood.....	32.23	42.94	37.02	44.06	20	69	20	56.60	23	5	21	13.93	5.8
Knoxville.....	31.41	41.60	36.31	36.44	20	62	20	65.00	11	11	23	17.58	
Lebanon.....	32.23	44.52	37.65	38.13	20	69	16	58.80	23	6	8	15.30	6.3
Memphis.....	32.45	43.90	38.02	38.12	20	68	4	55.67	23	12	21	18.33	2.0
KENTUCKY—													
Ballardsville.....	28.10	36.03	31.13	31.75	20	68	20	54.00	23	— 5	23	4.33	6.1
Danville.....	34.28	44.48	38.52	39.09	20	72	5	56.33	23	— 5	23	12.33	4.8
Millersburg.....	28.23	36.13	32.24	32.20	20	67	5	48.67	23	— 2	23	7.67	6.4
Springdale.....	16.39	27.77	24.10	22.75	20	65	12	40.67		— 12	29	— 1.33	6.1
OHIO—													
College Hill.....	27.33	34.15	30.29	30.59	5	57	5	50.10	23	— 8	21	9.00	5.5
Germantown.....	24.19	33.08	26.58	27.95	20	56	5	49.62	23	— 7.6	23	2.00	6.6
Granville.....	26.19	33.19	30.03	29.80	20	61	20	54.33	23	— 3	21	11.00	6.9
Hillsborough.....	26.40	34.19	29.74	30.11	20	65	20	53.33	23	— 5	23	4.00	5.2
Jackson.....	26.19	37.84	30.45	31.49	20	69	20	60.00	23	— 3	23	9.33	7.0
Keene.....	23.38	32.08	25.54	27.00	5	53	5	47.33	23	— 8	23	1.33	5.3
Marietta.....	25.84	35.68	29.48	30.33	20	63	20	54.67	23	— 5	23	9.00	5.8
Mount Vernon.....	23.45	35.68	29.19	29.44	20	65	20	51.00	23	— 6	23	2.67	6.1
Oberlin.....	22.50	32.09	26.29	26.96	20	55	4	48.67	23	— 4	23	3.24	4.5
Urbana (m).....	25.15	34.06		29.60		59				— 4			6.0
Zanesville.....	30.30	36.88	35.09	34.07	20	61	20	53.00	23	— 3.5	23	9.50	6.5
MICHIGAN—													
Ann Arbor, [Woodruff].....	17.53	25.06	21.60	21.40	4	46	4	43.33	23	— 7	21	0.00	7.1
Battle Creek (n).....	16.65	29.13	21.19	22.32	4	50	4	44.67	23	— 11	21	— 1.00	6.7
Brooklyn (n).....	16.30	24.09	18.88	19.76	31	44	31	40.00	23	— 10	21	— 3.00	6.0
Detroit (o).....	20.65	27.26	24.72	24.21	4	48	4	45.00	23	— 0	23	5.00	7.7
Flint.....	15.6	26.7	20.7	21.00		48	4	43.67		— 12			
Monroe, [Whelpley].....													6.0
St. James.....	14.74	18.39	16.07	16.40		50	31	34.00		— 3	21	3.67	7.3
INDIANA—													
Greencastle (n).....	20.8	29.6	23.	24.47	5	57	4	47.50	23	— 10	21	1.33	6.4
Milton.....	23.35	31.42	27.29	27.35	3	65	3	51.16	23	— 8	23	3.67	5.4
New Harmony.....	27.4	36.1	30.5	31.33	5	63	4	53.00p	23	— 11	23	9.33	5.9
Richmond (g).....	22.74	30.94	26.24	26.64	5	54	5	49.00	23	— 9	23	1.00	3.2

a Observations taken in the morning.  
b Same temperature on the 3d and 9th.  
c Same temperature on the 17th and 20th.  
d Same temperature on the 9th.  
e Same temperature on the 26th and 27th.  
f Same temperature on the 17th.  
g Observations taken at sunrise, noon, and sunset.  
h Record incomplete.  
i No observations on the first three days of the month.

j Same temperature on the 26th.  
k Same temperature on the 9th and 24th.  
l Same temperature on the 22d.  
m Observations taken at sunrise and 2 p. m.  
n Imperfect  
o Observations taken at 8 a. m., 2 p. m., and 9 p. m.  
p Same temperature on the 3d.  
q Observations taken at 7 a. m., 1 p. m., and 8 p. m.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—	□	○	○	□		○		○		○		○	
Athens .....	18. 16	29. 84	21. 03	23. 01	3	61	3	51. 33	23	—12	23	0. 03	5. 6
Augusta .....	13. 23	22. 90	17. 77	17. 97	4	a46	31	40. 35	23	—14	21	— 3. 00	4. 1
Batavia .....	14. 32	26. 74	18. 96	20. 01	31	54	31	43. 33	23	—11	21	— 1. 33	5. 8
Upper Alton .....	19. 48	30. 19	24. 00	24. 56	31	60	3	50. 67					8. 1
MISSOURI—													
Hannibal .....	16. 87	29. 61	23. 00	23. 16	31	61	3	53. 67	21	—12	21	0. 67	5. 1
Jefferson Barracks .....	24. 18	32. 56	28. 50	28. 41		62	4	53. 67		— 3	21	5. 33	
St. Louis .....	24. 20	32. 60	28. 50	28. 43	31	62	4	53. 67	21	— 3	21	5. 33	4. 9
WISCONSIN—													
Bellefontaine .....	4. 74	17. 58	10. 03	10. 78	31	53	31	42. 33	22	—26	22	—17. 00	5. 9
Beloit .....	8. 72	21. 49	15. 16	15. 12	31	46	31	38. 33	23	—19	22	— 9. 00	4. 7
Janesville .....	4. 58	18. 32	9. 42	10. 77	31	45	31	35. 67	23	—24	21	—13. 33	6. 4
Madison .....	7. 79	17. 96	13. 59	13. 11	31	46	31	41. 16	23	—19	22	—10. 00	5. 0
Plattsville .....	4. 10	19. 32	10. 22	11. 21	31	49	31	41. 33	23	—24	22	—12. 33	5. 4
IOWA—													
Dubuque .....	10. 58	20. 40	15. 07	15. 35	3	48	31	41. 50	23	—12	22	— 7. 33	4. 7
Fort Madison (b) .....	14. 77	26. 74	21. 97	21. 16	31	56	31	49. 00	21	—12	21c	0. 60	4. 8
Keokuk .....	15. 77	28. 60	21. 63	22. 00	31	59	31	43. 67	21	— 8c	22	— 2. 67	5. 7
Muscatine .....	10. 39	21. 54	16. 71	16. 21	31	55	31	45. 00	21	—14	22	— 4. 00	3. 8
Poultney .....	3. 69	17. 98	8. 25	9. 97	31	44	31	36. 40	6	—24	22	—12. 40	5. 5
Quasqueton .....	5. 29	18. 93	13. 20	12. 47	31	48	31	38. 80	23	—22	22	—10. 33	5. 1
St. Mary's .....	7. 39	28. 77	14. 87	17. 01	31	68	31	47. 67	21	—22	20	— 9. 33	2. 3
MINNESOTA—													
Lac qui Parle .....	0. 48	11. 77	4. 06	5. 12	31	50	31	40. 33	21	—26	22	—18. 00	3. 6
St. Anthony's Falls .....				5. 09	31	52			22	—30			3. 0
Red Lake .....													2. 3
St. Joseph's .....	—9. 58	6. 00	—5. 74	—3. 11	31	58	30	37. 00	22	—33d	22	—25. 67	4. 7
NEBRASKA—													
Fort Pierre (e) .....	6. 58	16. 90	15. 19	12. 89	31	64	31	52. 67	20	—20	20	17. 00	
Fort Union (f) .....	2. 35	11. 77	9. 52	7. 88	31	49	8	42. 00	20	—32	20	—20. 67	
CALIFORNIA—													
Sacramento, [Logan] .....				43. 00		59				19			
San Francisco (g) .....	42. 26	54. 23	45. 26	47. 25		59				— 4			
Stockton (h) .....	33. 29	58. 29	40. 13	43. 90		76	31	57. 67		21	21	28. 67	
MEXICO—													
Mirador (i) .....				61. 99				70. 61				51. 12	
SOUTH AMERICA—													
Assumption, Paraguay (j) ..	79. 58	84. 58	79. 81	82. 35	1	93	3	91. 25	14	68			
EASTERN CONTINENT—													
Mosul, Mesopotamia (i) .....				45. 22		56. 4				30. 5			

a Same temperature on the 31st.

b Observations taken at 6 a. m., noon, and 7 p. m.

c Same temperature on the 22d.

d Same temperature on the 24th.

e Observations taken at 7 a. m., noon, and 5 p. m.

f Observations taken at 6 a. m., noon, and 5 p. m.

g Observations taken at sunrise and 2 p. m.

h Observations taken at 7 a. m. and 2 and 6 p. m.

i Hours of observation not given.

j Observations taken at 8 a. m., 12 m., 4 p. m., and 9 p. m. Mean at 4 p. m., 85.42.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	□	□	○	□		○		○		○		□	
Albion Mines .....	12. 25	19. 90	13. 54	15. 23	9	47	9	39. 33	5	—20	5	—12. 00	6. 3
Halifax (a) .....	16. 90	23. 20	20. 90	20. 33	9	44	—	—	8	— 8	—	—	—
CANADA EAST—													
St. Martin's .....	0. 86	18. 92	9. 78	9. 85	1	43	1	36. 10	4	—26	5	—12. 00	3. 9
CANADA WEST—													
Hamilton (b) .....	24. 57	—	27. 39	25. 98	13	45	13	43. 50	3	6	3	10. 00	—
MAINE—													
Carmel .....	2. 62	17. 50	9. 50	9. 87	26	40	14	30. 25	4	—30	4	—12. 83	4. 4
Fryeburg .....	—	—	—	—	—	—	—	—	—	—	—	—	4. 6
Oldtown .....	3. 68	17. 39	11. 36	10. 81	1	40	1	33. 33	5	—28	5	—11. 00	2. 5
Perry .....	14. 82	21. 70	17. 43	17. 98	0	45	9	39. 67	5	— 7	4	— 1. 00	5. 9
Steuben .....	—	—	—	—	—	—	—	—	—	—	—	—	7. 2
Windham .....	12. 40	24. 68	15. 25	17. 44	1	46	1	40. 67	5	—20	4	— 3. 00	4. 2
NEW HAMPSHIRE—													
Concord .....	13. 14	24. 04	18. 50	18. 56	1	44	1	38. 60	5	—20	5	— 2. 70	4. 7
Hanover .....	9. 52	21. 38	15. 57	15. 49	1	42	1	39. 75	5	—24	4	— 8. 27	5. 8
Exeter .....	14. 14	26. 25	18. 57	19. 65	1	44	1	36. 67	5	—16	4	— 0. 00	5. 1
Londonderry .....	16. 25	26. 50	20. 25	21. 00	1	44	1	39. 00	5	—13	4	— 0. 00	5. 2
Manchester .....	14. 21	29. 82	23. 39	22. 47	1	48	1	40. 33	5	—18	5	— 1. 67	3. 7
Salmon Falls .....	14. 79	26. 95	20. 72	20. 82	1	47	1	37. 00	5	—16	4	— 0. 33	5. 3
VERMONT—													
Brandon .....	12. 74	23. 06	17. 97	17. 92	22	40	1	36. 00	4	—13c	4	— 5. 67	5. 4
Burlington .....	11. 75	21. 89	16. 00	16. 55	1	46	1	41. 67	5	—12	4	— 3. 67	3. 5
Castleton .....	14. 19	25. 04	17. 85	19. 03	15	42	1	40. 33	5	—10	6	— 3. 33	5. 0
Craftsbury (d) .....	4. 41	17. 30	11. 90	11. 20	1	38	1	36. 00	4	—21c	4	—11. 33	5. 1
St. Johnsbury .....	4. 37	16. 80	13. 20	11. 46	1	44	1	38. 33	5	—27	4	—14. 50	4. 4
MASSACHUSETTS—													
Amherst .....	17. 08	26. 73	22. 10	21. 97	2	45	1	38. 67	4	— 3	4	— 4. 63	5. 1
Barnstable .....	24. 54	32. 00	27. 25	27. 93	2	57	1	44. 67	5	— 2	4	—11. 00	5. 8
Mendon .....	18. 50	27. 15	21. 89	22. 51	8	46	1	38. 67	7	— 7	4	— 1. 50	5. 3
Nantucket .....	29. 50	33. 16	29. 26	30. 67	2	49	15	43. 50	5	—12	4	—15. 27	5. 3
New Bedford .....	22. 96	30. 98	26. 43	26. 79	1	49	1	42. 50	7	— 0. 5	4	— 7. 00	6. 1
Newburyport .....	18. 96	27. 39	23. 12	23. 16	2	46	1	39. 73	7	— 4	4	— 6. 16	7. 6
North Attleboro' .....	19. 82	29. 57	24. 00	24. 46	2	47	1	39. 00	4	— 8	4	— 1. 50	5. 1
Princeton .....	16. 39	21. 52	19. 28	19. 06	26	44	27	38. 00	4	— 0. 7	4	— 3. 73	5. 0
Richmond .....	17. 00	27. 75	21. 46	22. 07	1	e46	1	38. 67	4	— 2	4	— 6. 00	6. 0
Southwick .....	—	—	—	—	—	—	—	—	—	—	—	—	5. 5
Springfield .....	16. 21	31. 04	21. 00	22. 75	2	50	1	38. 67	4	— 5	4	— 6. 00	5. 1
Worcester .....	19. 21	27. 50	23. 46	23. 39	1	e46	1	40. 00	7	— 3	4	— 6. 00	5. 0
RHODE ISLAND—													
North Scituate .....	17. 93	27. 61	22. 29	22. 61	2	46	1	39. 33	7	—19	4	— 3. 33	6. 0
Providence (f) .....	21. 4	30. 4	24. 9	25. 6	1	49	1	41. 00	5	g1	4	— 7. 33	5. 5
CONNECTICUT—													
New London .....	23. 82	34. 50	27. 75	28. 69	2	56	2	42. 67	7	— 3	4	—12. 00	5. 5
Pomfret .....	19. 50	27. 93	23. 11	23. 51	1	h46	1	37. 00	5	— 1	4	— 6. 33	5. 0
Salisbury (i) .....	21. 36	27. 93	23. 68	24. 32	14	48	1	38. 25	5	— 0	4	— 9. 25	—
Saybrook .....	24. 64	31. 36	27. 46	27. 82	8	45	1	39. 33	4	— 9	4	—12. 00	5. 2
West Cornwall .....	18. 66	26. 25	22. 32	22. 41	1	47	1	39. 67	3	e4	3	— 6. 67	5. 3
NEW YORK—													
Baldwinsville .....	18. 14	25. 82	21. 75	21. 90	1	40	1	37. 67	6	— 2	4	— 8. 67	7. 4
Beverly .....	22. 43	29. 57	26. 79	26. 26	1	46	1	40. 00	5	— 8	3	—11. 33	5. 9
Buffalo, [Salisbury] (d) .....	21. 98	30. 00	24. 65	25. 54	13	44	13	41. 34	4	— 1	4	— 8. 34	7. 6
Canton .....	10. 00	21. 79	14. 36	15. 38	13	40	1	36. 67	4	—13	4	— 7. 00	6. 0
Chatham .....	17. 50	27. 07	21. 79	22. 12	1	48	1	40. 67	4	— 4	4	— 2. 00	5. 6
Falconer .....	19. 84	31. 36	22. 50	27. 90	1	51	13	41. 33	3	— 1. 5	23	— 6. 68	5. 2
Fishkill (j) .....	22. 60	34. 00	30. 25	28. 95	—	56	—	—	—	—	—	—	—

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Same temperature on the 5th.

d Observations taken at 1 p. m. instead of 2.

e Same temperature on the 2d.

f Observations taken at sunrise, 1 p. m., and 10 p. m.

g Same temperature on the 7th.

h Same temperature on the 26th.

i Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at sunrise, 19.75.

j Observations taken at 7 a. m., noon, and 6 p. m.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Gouverneur .....	10.95	20.75	16.46	16.05	8	44	1	37.33	4	—22	4	—8.00	7.0
Lodi .....	18.96	28.29	21.93	23.06	1	52	1	43.34	23	2	23	5.67	7.1
Lowville (a) .....	9.8	24.6	17.8	17.40	1	40			4	—10.5			
Madrid .....	6.56	20.7	13.68	13.65	1	37	1	36.40	25	—19	4	—7.80	1.6
New York city .....	27.36	36.46	30.82	31.55	—	52	1	47.40	—	15	23	19.20	—
New York city, [D. & D. Inst.] .....	25.62	35.03	28.70	29.78	2	51	2	42.00	4	14	4	16.70	5.4
Oswego .....	19.80	28.52	22.56	23.63	1	42	1	40.00	4	5	23	10.67	6.1
Penn Yan .....	18.68	29.93	25.00	24.54	—	52	1	40.00	—	5	23	9.33	7.3
Sag Harbor .....	27.46	34.93	30.61	31.00	2	56	2	45.67	5	4	5	15.33	5.5
Troy .....	19.36	27.82	23.90	23.69	1	45	1	39.83	5	—3	5	6.93	6.7
Wampsville .....	18.25	28.57	19.85	22.22	1	46	1	40.00	5	—4	3	2.67	7.7
NEW JERSEY—													
Bloomfield .....	25.82	35.15	28.82	29.93	19	58	1	45.00	24	10	23	16.00	5.2
Burlington .....	26.86	38.61	31.29	32.25	2	58	14	46.00	7	14	3	20.00	7.1
Lambertville .....	25.57	40.16	31.55	32.43	2	66½	2	46.83	5	11	23	20.17	4.0
Newark (c) .....				30.77	—	56	2	45.62	—	11	5	18.75	—
PENNSYLVANIA—													
Bedford .....	26.29	36.58	31.04	31.30	14	59	1	51.33	28	8	23	14.00	5.2
Byberry .....	26.68	37.13	30.71	31.51	2	56	2	43.67	5	13	4	18.00	6.0
Ceres .....	20.89	33.75	24.04	26.23	1	55	1	40.33	3	1	23	8.33	6.3
Gettysburg .....	25.54	39.12	30.25	31.64	2	61	14	48.67	24	10	23	17.33	4.6
Harrisburg .....	29.07	38.11	33.44	33.54	1	56	1	47.00	5	18	23	24.00	5.1
Lima .....	26.50	38.10	30.78	31.74	2	62	14	50.00	24	11	4	18.40	4.8
Morrisville .....	25.89	37.70	29.96	31.18	2	59	2	44.00	5	12	4	19.67	3.7
Moss Grove .....	20.96	34.29	23.38	26.21	1	54	1	46.67	3	—3	3	9.00	6.1
Norristown .....	27.62	37.73	31.54	32.30	2	64	2	49.00	22	15	4	19.33	5.0
Paradise .....				22.00									
Philadelphia .....	30.07	39.70	34.75	34.84	2	61	14	49.67	5	18	4	22.70	5.1
Pittsburg, [M. H.] <sup>d</sup> .....	31.07	41.18	34.64	34.15	1	65	1	52.00	3	10	3	16.25	—
Pittsburg, [O. S.] .....	27.79	35.25	30.50	31.18	12	54	13	49.33	3	5	3	10.67	—
Pocopson (e) .....	26.64	41.04		33.84	2	65	14	55.25	18	12	23	20.50	4.0
Sugar Grove (f) .....	20.23	28.86	23.19	24.09	14	51	13	44.00	3	0	3	8.50	6.6
West Haverford .....	29.7	42.7		36.20	2	67	2	57.00	5	g16	23	19.50	4.6
Youngville .....	20.70	31.05	24.50	25.42	1	51	14	41.33	3	—1	23	9.00	6.9
MARYLAND—													
Frederick .....	29.66	41.33	34.63	35.21	14	64	14	55.60	5	17	23	21.26	4.7
Schellman Hall .....	29.00	43.61	33.71	35.44	14	70	14	60.00	23	15	23	18.67	4.5
DISTRICT OF COLUMBIA—													
Washington .....	32.29	43.16	36.18	37.21	14	64	14	57.16	24	19	23	21.67	4.4
VIRGINIA—													
Alexandria .....	32.02	44.29	37.59	37.97	11	67	14	59.67	24	16	23	22.17	4.7
Ashland .....	37.36	51.04	44.00	44.13	1	66	13	h60.67	3	20	3	28.00	4.4
Crichton's Store (i) .....	40.58	48.86		44.72	2	65	26	65.67	7	29	3	28.50	4.2
Huntersville .....													4.7
Lewisburg .....	32.57	46.00	36.68	38.42	2	64	14	54.33	3	g20	23	25.67	5.2
Lynchburg .....	37.71	48.03	43.07	42.94	14	65	15	57.33	24	26	4	36.67	—
New Creek Depot (j) .....	36.06	43.36	37.54	38.99	14	58	14	52.70	18	24	25	30.00	5.4
Portsmouth .....	27.35	51.14	41.57	43.32	14	71	14	62.00	4	18	4	27.67	5.7
Winchester .....	29.34	43.46	36.00	36.27	14	68	14	58.00	24	14	23	20.00	5.3
NORTH CAROLINA—													
Chapel Hill .....	38.57	52.64	44.71	45.31	1	k68	26	64.00	24	23	3	31.33	2.3
Thornbury .....	38.05	52.72	42.91	44.56	14	69	26	64.03	4	23	3	29.50	4.7
SOUTH CAROLINA—													
Camden .....	41.77	58.45	49.29	49.84	26	71	26	66.76	4	23	4	34.30	4.8
St. John's (l) .....	46.65	61.50	48.27	52.14	—	75	15	67.33	—	30	—	—	—
GEORGIA—													
Culloden .....	44.64	58.28	52.35	51.76	13	69	14	63.67	4	29	16	40.00	4.5

a Observations taken at 7 a. m., 1½ p. m., and 9 p. m.

b Same temperature on the 14th.

c Observations taken at 7 a. m. and 5 p. m.

d Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at sunrise, 29.71.

e Observations taken at daybreak and 2 p. m.

f Imperfect.

g Same temperature on the 24th.

h Same temperature on the 12th.

i Observations taken at 9 a. m. and noon.

j No observations for the first nine days of the month.

k Same temperature on the 2d and 26th.

l Observations taken at sunrise, 2 p. m., and 9 p. m.

No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1854.—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—Continued.	°	°	°	°		°		°		°			
Savannah.....	48.24	62.47	53.69	54.80	26	74	26	69.03	4	32	4	40.96	4.3
Sparta.....	40.07	58.53	45.85	48.15	13	73	13	63.00	4	21	4	32.67	4.7
The Rock (a).....	47.00					62				32			2.9
Whitmarsh Island.....	47.79	60.96	52.75	53.83	15	73	26	66.00	4	29	4	38.33	4.4
FLORIDA—													
Cedar Keys.....	56.46	65.00	60.71	60.72	7	b 72	15	69.00	4	41	17	48.00	4.1
Jacksonville.....	52.68	70.57	58.05	60.43	13	c 76	26	70.67	4	35	4	45.67	4.1
Key West.....	68.13	74.02		71.22	26	83	26	79.00	1	d 64	1	65.25	4.0
Knox Hill.....	48.29	64.50	55.21	56.00	14	e 73	14	68.33	4	32	16	44.33	5.6
Warrington (e).....	57.07	62.18	60.86	60.04	15	76	15	74.33	17	40	16	43.67	6.7
ALABAMA—													
Weecokaville.....	40.07	54.08	47.46	47.20	1	66	14	61.33	18	26	3	32.67	4.9
MISSISSIPPI—													
Garlandville.....	42.57	61.24	51.71	51.84	14	76	14	70.33	4	27	8	37.00	5.1
Jackson.....													4.6
Lake Washington.....	43.43	59.01	48.11	50.18	13	74	13	68.33	4	29	15	35.76	5.3
LOUISIANA—													
New Orleans.....	50.40	57.13	54.96	54.16	14	75	14	68.00	16	31	16	42.67	5.4
TEXAS—													
Austin.....	46.21	64.39	52.82	54.47	12	79	12	68.33	4	24	15	35.33	5.6
Huntsville (f).....	55.48	62.94	60.06	59.49	28	75	28	69.00	3	41	3	43.67	1.8
New Wied.....	47.57	64.50	52.20	54.86	6	g 76	13	68.67	4	28	3	40.00	5.0
TENNESSEE—													
Glenwood.....	39.08	50.85	42.80	44.24	14	70	13	63.17	3	20	3	27.20	5.8
Knoxville.....	38.24	46.31	37.68	40.74	14	63	14	61.00	4	17	3	25.83	5.4
Lebanon.....	36.98	51.83	43.08	43.96	14	67	13	63.07	17	21	3	27.70	6.1
Memphis.....	41.14	52.50	47.39	37.01	14	68	13	63.66	3	26	3	32.67	4.8
KENTUCKY—													
Ballardsville.....	35.43	45.14	38.89	39.82	14	64	13	58.33	3	18	3	24.67	5.4
Danville.....	38.64	52.68	43.39	44.90	1	h 68	13	62.00	3	20	3	26.67	4.7
Millersburg.....	33.00	47.12	38.38	39.50	13	66	14	57.33	3	17	3	23.33	6.1
Springdale.....	33.32	47.71	42.68	41.24	14	68	14	59.67	3	16	3	25.67	5.3
OHIO—													
College Hill.....	33.67	43.69	37.17	38.18	14	64	13	56.00	3	14	3	23.40	4.9
Geneva Hall (i).....	30.32	41.16	33.58	35.02	25	54	13	48.00	23	12	23	22.67	5.7
Germantown.....	30.52	41.65	33.28	35.15		58	13	53.67		12	3	21.58	6.3
Granville.....	31.36	40.44	36.81	36.20	18	63	13	53.00	3	8	3	20.33	5.1
Hillsborough.....	31.61	43.21	36.28	37.03	14	59	13	55.33	3	10	3	20.83	5.0
Huron (j).....	24.43	36.96	30.11	30.50	1	62	13	55.33	4	— 6	4	10.00	
Jackson.....	32.18	46.75	36.50	38.48	1	61	13	56.67	4	16	23	25.00	6.5
Marietta.....	30.86	42.68	36.64	36.73	1	58	14	54.33	3	15	23	k 21.33	4.5
Mount Vernon.....	28.39	42.07	33.88	34.78	1	66	1	53.00	3	3	3	13.67	5.4
Oberlin.....	25.07	35.29	27.18	29.18	1	58	1	48.67	3	— 1	3	12.00	4.2
Urbana (l).....	30.46	40.78		35.62		61				12			
MICHIGAN—													
Ann Arbor, [Woodruff].....	20.61	32.04	24.93	25.86	13	48	13	42.67	4	— 8	4	4.33	5.4
Battle Creek.....	20.64	33.57	24.11	26.11	12	50	12	40.67	4	— 4	4	8.67	5.2
Brooklyn.....	22.91	30.23	24.44	25.86	12	m 49	12	42.67	4	— 17	4	— 5.00	5.0
Detroit (n).....	23.33	31.68	26.21	27.09	1	49	1	44.33	4	4	4	6.60	6.5
Flint.....	16.6	30.8	25.8	24.4		47				— 15			
Monroe, [Whelpley].....													4.9
St. James.....	12.53	21.51	15.10	16.38	21	42	21	31.33	4	— 11	10	5.50	5.8
Saugatuck.....	25.00	33.18	28.04	28.74		54				2			
INDIANA—													
Greencastle (o).....	29.54	39.81	35.61	34.99	1	p 58	12	55.33	17	13	16	21.00	5.0
Kendallville.....	26.55	40.57	27.25	31.46	12	62	12	50.00	2	0	3	15.00	3.2

a Observations taken in the morning.

b Same temperature on the 15th and 25th.

c Same temperature on the 15th.

d Same temperature on the 2d, 4th, 5th, 11th, and 12th.

e Observations taken at sunrise, noon, and sunset.

f Observations mostly omitted from the 10th to the 21st, inclusive.

g Same temperature on the 22d.

h Same temperature on the 14th.

i No observation for the first nine days of the month.

j Observations taken at 7 a. m., noon, and 5 p. m.

k Same temperature on the 3d.

l Observations taken at sunrise and 2 p. m.

m Same temperature on the 13th and 24th.

n Observations taken at 8 a. m., 2 p. m., and 9 p. m.

o No observation after the 23d.

p Same temperature on the 12th.



No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1854.—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—Continued.	°	°	°	°		°		°		°			
Milton .....	29.57	39.61	33.18	34.12	1	58	1	50.00	3	14	3	21.67	5.1
New Harmony .....	35.64	47.05	38.95	40.55	12	a 65	12	60.67	3	18	3	26.00	5.3
Richmond (b) .....	29.64	39.92	32.70	34.09	1	c 58	13	53.33	3	11	3	20.00	6.2
ILLINOIS—													
Athens .....	29.46	43.43	31.00	34.63	1	67	12	56.33	17	2	16	17.67	3.9
Augusta .....	27.68	40.61	31.82	33.37	1	69	12	55.33	17	— 2	16	10.33	4.8
Batavia .....	25.53	34.78	27.39	29.23	25	50	12	46.67	17	— 1	16	11.00	2.6
Ottawa .....	26.70	39.14	28.53	31.46	1	60	12	53.33	17	— 1	16	12.33	4.4
Upper Alton .....	30.70	44.14	35.59	36.81	1	d 62	12	53.33	16	e 12	16	23.33	8.9
MISSOURI—													
Hannibal .....	29.32	47.19	35.34	37.30	11	c 68	12	59.33	17	4	16	14.00	5.2
St. Louis .....	34.07	44.52	39.66	39.42	1	68	12	59.33	16	16	16	25.25	4.6
WISCONSIN—													
Bellefontaine .....	16.46	30.50	22.35	23.10	21	52	12	42.33	17	—17	3	1.33	5.0
Beloit .....	21.61	32.07	25.18	26.29	12	50	12	44.33	17	—12	16	5.33	4.3
Janesville .....	16.00	30.53	20.16	22.23	21	48	12	42.67	17	—20	16	1.33	5.0
Madison .....	19.63	29.45	23.86	24.31	12	47	12	43.67	17	— 5	16	6.67	3.9
Milwaukee (f) .....	24.16	32.61	27.54	28.10	21	49	21	38.67	17	— 2	16	12.50	4.3
Plattsville .....	17.36	33.32	23.32	24.67	1	55	12	42.33	17	—12	16	— 0.67	4.2
IOWA—													
Dubuque .....	21.46	34.78	27.29	27.84	24	52	12	42.00	17	—15	15	12.00	3.3
Fort Madison (g) .....	26.39	40.39	32.14	32.97	12	68	12	55.00	17	— 2	16	8.00	4.1
Keokuk .....	30.11	42.39	30.18	34.23	12	68	12	55.33	17	0	66	12.50	4.8
Muscatine .....	22.50	35.75	26.92	28.39	12	60	12	48.67	17	—13	16	0.00	4.3
Poultney .....	15.75	31.51	21.88	23.05	12	49	12	39.76	17	—18	15	7.50	4.1
Quasqueton .....	15.77	32.76	24.41	24.31	12	52	12	41.80	17	—22	16	— 1.50	4.9
St. Mary's .....	23.10	44.25	29.89	32.41	11	60	11	46.00	17	3	15	10.67	3.7
MINNESOTA—													
Lac qui Parle .....	8.18	25.64	15.43	16.42	28	46	28	36.00	16	—17	3	— 3.00	3.4
St. Anthony's Falls .....	—	—	—	19.00	28	47	—	—	3	—18	—	—	3.7
Red Lake .....	—	—	—	—	—	—	—	—	—	—	—	—	3.0
St. Joseph's .....	—1.50	19.00	3.39	6.96	28	48	27	27.67	3	—28	3	—14.00h	4.1
NEBRASKA—													
Fort Pierre (i) .....	21.71	35.68	35.74	31.06	11	j 56	23	46.00	15	— 2	15	6.67	—
Fort Union (i) .....	13.04	30.00	24.07	22.37	18	56	8	31.00	14	—14h	13	—5.33	—
CALIFORNIA—													
Sacramento [Logan] .....	—	—	—	51.00	—	62	—	—	—	38	—	—	—
San Francisco (k) .....	47.93	59.21	49.07	51.41	—	—	—	—	—	—	—	—	—
Stockton (l) .....	42.39	59.57	48.54	50.17	—	72	6	56.00	—	30	13	42.67	—
MEXICO—													
Mirador (m) .....	—	—	—	63.12	—	—	—	72.50	—	—	—	56.75	—
SOUTH AMERICA—													
Assumption, Paraguay(n) .....	80.03	86.57	80.21	81.73	9	96	9	89.25	21	67	21	71.75	—
EASTERN CONTINENT—													
Mosul, Mesopotamia (m) .....	—	—	—	48.87	—	58.6	—	—	—	40	—	—	—

a Same temperature on the 13th.

b Observations taken at 7 a. m., 1 p. m., and 8 p. m.

c Same temperature on the 12th.

d Same temperature on the 11th and 12th.

e Same temperature on the 17th.

f Observations from the 15th to the 28th, inclusive.

g Observations taken at 6 a. m., noon, and 7 p. m.

h Same temperature on the 15th.

i Observations taken at 7 a. m., noon, and 5 p. m.

j Same temperature on the 28th.

k Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at 9 a. m., 50.86.

l Observations taken at 8 a. m., 2 and 8 p. m.

m Hours of observation not given.

n Observations taken at 8 a. m., 12 m., 4 and 9 p. m. Mean at 4 p. m., 67.00.

## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	°	°	°	°		°		°		°			
Albion Mines.....	21.74	30.45	23.09	25.09	13	43	13	37.67	21	2	21	7.00	6.
Halifax (a).....	24.20	32.40	28.80	28.47	9	46	—	—	21	10	—	—	—
CANADA EAST—													
St. Martin's.....	20.21	33.43	24.68	26.11	16	56	16	43.80	21	2.5	18	10.00	5.9
CANADA WEST—													
Hamilton (b).....	35.32	—	35.61	35.46	—	58	16	51.50	—	18	28	20.00	—
MAINE—													
Carmel (c).....	22.90	33.92	24.17	27.00	13	59	13	43.33	21	■	20	d 12.75	5.7
Fryeburg.....	—	—	—	—	—	—	—	—	—	—	—	—	5.0
Oldtown.....	17.55	30.87	22.94	23.79	13	52	16	e 38.00	22	— 4	20	9.67	2.8
Perry.....	24.42	35.00	28.42	29.28	15	f 46	16	41.00	21	■	21	16.67	6.7
Steuben.....	—	—	—	—	—	—	—	—	—	—	—	—	4.8
Windham.....	25.42	36.39	27.29	29.70	13	g 55	15	47.00	28	12	16	18.67	4.0
NEW HAMPSHIRE—													
Concord.....	23.84	35.58	29.06	29.49	16	56	16	47.00	30	■	28	18.00	4.7
Hanover.....	21.66	33.19	26.79	27.21	16	57	16	47.33	30	— 4	21	11.67	6.8
Exeter.....	25.70	35.50	28.00	29.73	16	50	16	49.33	22	10	28	18.33	3.9
Londonderry.....	25.68	32.61	29.20	29.16	16	66	16	53.00	21	11	28	15.67	5.5
Manchester.....	25.58	39.32	32.93	32.61	16	63	16	52.33	21	■ 9	21	19.67	5.7
Salmon Falls.....	26.80	36.50	29.90	31.07	16	58	16	49.17	30	11	20	17.67	5.2
VERMONT—													
Brandon.....	24.45	34.63	28.28	29.12	16	55	16	48.00	21	■	28	14.33	6.4
Burlington.....	25.58	36.74	29.26	30.53	15	56	16	47.00	30	■	18	14.00	3.9
Castleton.....	35.97	35.94	29.06	30.32	16	62	16	49.33	21	■	21	14.00	6.8
Craftsbury (i).....	20.70	30.57	22.63	24.63	13	55	13	42.33	22	0	18	6.33	6.4
St. Johnsbury.....	19.40	31.32	25.87	25.53	■	55	14	46.67	21	— 10 j	21	10.33	5.4
MASSACHUSETTS—													
Amherst.....	26.70	33.90	30.80	30.47	16	65	16	52.00	21	14	28	19.47	4.5
Mendon.....	26.10	36.10	30.10	30.77	16	65	16	53.67	—	8	28	17.67	4.1
Nantucket.....	34.64	40.97	35.59	37.07	16	53	16	49.67	21	21	21	25.83	5.2
New Bedford.....	29.55	40.76	31.85	34.05	16	65	16	54.67	21	14	28	31.33	6.4
Newburyport.....	28.44	37.31	31.12	32.29	16	67	16	57.17	22	16	28	19.07	5.0
North Attleboro'.....	28.06	39.22	31.02	32.77	16	70	16	55.70	—	14	28	19.57	4.7
Princeton (k).....	23.10	31.00	24.70	26.27	12	43	12	36.67	21	7.5	29	11.90	3.5
Richmond.....	23.87	35.58	29.56	29.67	15	54	15	42.67	19	6	19	11.33	7.6
Southwick.....	—	—	—	—	—	—	—	—	—	—	—	—	5.6
Springfield.....	26.26	39.71	30.55	32.17	16	71	16	53.33	22	12	26	19.00	4.8
Worcester.....	28.18	37.65	31.19	32.34	16	67	16	54.00	28	15	20	18.67	4.2
RHODE ISLAND—													
North Scituate.....	28.90	37.40	31.70	32.67	16	67	16	54.00	22	12	28	17.67	5.1
Providence.....	28.1	40.1	31.1	33.1	16	68	16	53.7	21	13	28	20.0	4.4
CONNECTICUT—													
New London.....	31.45	41.65	34.35	35.82	16	62	16	54.00	21	16	19	26.00	4.6
Pomfret.....	26.90	37.30	30.19	31.46	16	65	16	52.00	21	12	28	18.33	4.7
Salisbury (l).....	26.93	37.25	30.67	31.17	16	63	16	50.25	21	10	28	m 17.25	—
Saybrook.....	30.10	38.68	32.26	32.59	16	51	16	46.33	21	18	28	22.00	4.7
West Cornwall.....	29.40	55.80	29.50	38.23	16	62	16	47.33	—	10	28	15.67	5.1
NEW YORK—													
Baldwinsville.....	27.71	35.39	30.74	31.28	13	56	15	48.33	30	11	28	n 17.67	7.1
Beaver Brook (o).....	20.60	31.20	24.33	25.38	17	52	17	43.33	22	0	28	3.67	5.0
Beverly (p).....	30.42	41.77	33.33	35.17	16	71	16	56.67	21	q 17	21	23.67	5.3
Buffalo, [Salisbury] (r).....	26.22	37.35	31.55	31.71	15	53	15	50.00	28	14	—	—	8.3
Canton.....	24.50	33.70	26.72	28.31	13	55	16	48.00	21	2	18	12.67	6.7
Chatham.....	26.06	37.23	28.93	30.74	16	56	16	52.00	21	5	18	s 16.00	6.5
Falconer.....	27.65	38.45	29.92	32.01	13	64	16	51.33	29	8	18	13.00	6.5

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Observations omitted from the 13th to the 19th, inclusive.

d Observations at 7 a. m. omitted.

e Same temperature on the 13th.

f Same temperature on the 16th.

g Same temperature on the 15th.

h Same temperature on the 22d.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Same temperature on the 30th.

k Observations omitted on the 7th, 14th, 15th, 16th, and 17th.

l Observations taken at sunrise, 9 a. m., 3 and 9 p. m. Mean at 9 a. m., 29.83.

m Same temperature on the 21st.

n Same temperature on the 18th.

o Observations taken at 7 a. m., noon, and 7 p. m.

p Observations omitted at 2 p. m. of the 28th.

q Same temperature on the 28th.

r Observations very incomplete.

s Same temperature on the 21st and 28th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date	Mean temp.	
NEW YORK—Continued	°	°	°	°		°		°		°		°	
Fishkill (a).....	32.29	43.23	39.77	38.43	---	76	---	---	---	20	---	---	---
Gouverneur.....	23.03	33.55	26.74	27.77	16	54	16	45.00	21	— 3	21	6.33	7.0
Leroy (b).....	34.60	44.90	---	39.75	---	---	---	---	---	---	---	---	5.2
Lodi.....	28.45	37.48	29.71	31.88	13	62	13	52.67	19	c 10	28	13.67	7.2
Madrid.....	26.43	33.40	29.63	29.82	16	51	16	45.10	18	8.6	18	14.13	2.5
New York city (d).....	33.52	44.42	37.29	39.92	---	72	15	64.6	---	20	28	24.80	---
New York city, [D. & D. Inst.]	33.75	41.92	35.73	37.13	16	69	16	60.73	28	21	28	23.86	5.3
Oswego.....	30.48	35.00	31.48	32.65	8	e 50	16	45.00	25	f 17	18	19.33	5.3
Penn Yan (g).....	27.55	39.58	33.61	33.58	---	63	13	54.67	---	8	28	15.33	2.4
Sag Harbor.....	31.68	43.39	34.61	36.56	16	68	16	57.33	21	16	29	20.67	4.6
Troy.....	29.10	39.60	34.10	34.27	16	70	16	54.80	21	14	28	20.13	6.3
Wampsville.....	27.87	39.00	29.81	28.84	16	63	16	51.00	21	8	29	17.00	8.1
NEW JERSEY—													
Bloomfield.....	32.16	44.34	35.94	37.81	16	74	16	62.67	21	c 19	28	20.17	4.4
Burlington.....	34.00	46.42	38.77	39.73	16	70	16	60.00	21	k 20	28	23.33	6.4
Lambertville.....	32.46	47.46	37.72	39.71	16	77	16	64.33	29	20	28	24.83	5.3
PENNSYLVANIA—													
Bedford.....	33.30	46.28	39.22	39.60	16	70	16	60.00	29	14	28	21.00	3.8
Byberry.....	33.63	46.89	39.03	39.85	16	75	16	64.00	29	19	28	24.67	5.4
Ceres.....	27.67	39.80	29.83	32.43	15	60	16	52.00	27	c 10	28	14.33	8.4
Gettysburg.....	34.42	49.39	39.45	41.09	16	76	16	65.33	29	16	28	24.00	4.4
Harrisburg.....	37.06	48.06	42.55	42.56	16	76	15	60.67	29	24	28	28.33	4.6
Lima.....	33.54	47.30	39.01	39.95	16	73	16	63.47	29	19	28	26.10	4.4
Morrisville.....	32.50	47.00	37.50	39.00	---	72	16	60.67	---	20	28	25.67	3.6
Moss Grove.....	26.53	41.52	30.81	32.95	13	65	15	55.00	29	— 4	28	8.67	5.3
Norristown.....	34.95	47.06	39.39	40.47	16	73	16	64.00	29	21	28	24.67	5.1
Paradise.....	---	---	---	30.00	---	---	---	---	---	---	---	---	---
Philadelphia.....	37.87	48.37	42.93	43.06	16	75	16	65.33	21	23	28	28.00	4.9
Pittsburg, [M. H.] (i).....	38.03	49.94	41.87	41.35	16	j 72	16	k 59.25	29	16	28	22.25	---
Pittsburg, [O. S.].....	35.00	45.00	38.00	39.33	14	l 65	16	56.33	29	13	28	18.00	---
Pocopson (m).....	32.82	49.37	---	41.09	16	77	16	66.00	21	18	28	26.25	4.9
Sugar Grove.....	27.77	36.80	29.87	31.48	13	62	16	54.50	28	9	18	12.00	6.0
Warrior's Mark (n).....	28.90	42.10	34.66	35.22	13	67	15	57.77	28	17	28	20.07	5.0
West Haverford.....	35.19	48.96	---	42.07	16	75	16	66.00	29	18	28	26.50	3.5
Youngsville.....	28.00	37.20	32.30	32.50	13	60	16	50.00	27	0	18	13.67	6.5
MARYLAND—													
Frederick.....	36.67	50.39	36.67	41.24	10	o 74	16	65.40	29	20	28	28.50	4.7
Schellman Hall.....	39.74	51.68	42.77	44.73	14	75	16	63.33	29	25	28	29.00	3.9
DISTRICT OF COLUMBIA—													
Washington.....	40.70	52.20	46.90	46.60	10	76	16	67.33	29	25	28	31.00	4.4
VIRGINIA—													
Alexandria.....	39.74	52.64	45.92	46.10	10	76	16	68.17	29	23	28	p 31.00	4.2
Ashland.....	43.48	58.39	51.13	51.00	15	76	15	66.00	26	26	26	33.67	4.1
Crichton's Store (q).....	47.90	57.25	63.00	56.05	10	81	10	---	29	30	29	---	4.7
Huntersville.....	---	---	---	---	---	---	---	---	---	---	---	---	4.7
Lewisburg.....	40.45	55.06	46.06	47.19	15	74	15	62.67	26	25	26	30.67	5.6
Lynchburg.....	44.16	57.29	51.81	51.09	9	78	13	72.00	18	r 31	25	37.00	---
New Creek Depot (s).....	36.60	46.00	40.00	40.87	13	68	8	58.57	28	23	28	27.73	5.0
Portsmouth.....	45.32	60.13	48.03	51.16	10	83	8	72.00	29	22	28	30.67	5.1
Winchester.....	38.58	52.06	42.74	44.46	10	75	16	64.00	29	22	28	29.00	4.8
NORTH CAROLINA—													
Chapel Hill.....	47.93	62.29	54.10	54.77	16	88	10	73.67	29	28	26	37.33	2.3
Thornbury.....	46.20	62.10	51.70	53.33	10	82	10	73.93	26	31	29	37.23	5.3

a Observations taken at 7 a. m., noon, and 6 p. m.

b For six days only, early in the month.

c Same temperature on the 28th.

d Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

Mean at noon, 43.13; mean at sunset, 41.26.

e Same temperature on the 13th and 16th.

f Same temperature on the 30th.

g Observations taken at sunrise, 2 p. m., and sunset.

h Same temperature on the 28th and 29th.

i Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 35.55.

j Same temperature on the 17th.

k Same temperature on the 14th.

l Same temperature on the 15th and 16th.

m Observations taken at daybreak and 2 p. m.

n For the last 94 days of the month only.

o Same temperature on the 16th.

p Same temperature on the 29th.

q Observations taken at 8 a. m., noon, and 6 p. m.; the latter very incomplete.

r Same temperature on the 25th.

s Observations omitted on the 14th, 15th, 16th, and 29th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
SOUTH CAROLINA—	°	°	°	°		°		°		°		°	
Camden	57.10	69.50	57.20	61.27	16	86	16	78.90	27	31	26	44.77	5.2
St. John's (a)	52.52	68.58	54.78	58.63	---	84	16	?	---	27	27	45.00	---
GEORGIA—													
Culloden	56.48	72.58	64.32	64.46	17	84	17	77.00	26	32	26	45.33	4.1
Savannah	54.40	73.40	63.40	63.73	16	86	17	76.80	27	39	27	48.77	4.6
Sparta	52.30	72.20	57.52	60.67	17	90	16	79.00	27	32	27	45.33	5.8
The Rock (c)	58.96					72				48			5.9
Whitemarsh Island (d)	56.41	67.82	60.34	61.52	18	80	18	71.33	26	40	26	48.33	4.3
FLORIDA—													
Cedar Keys	65.03	73.00	69.19	69.07	21	79	22	73.67	27	48	27	58.67	3.1
Jacksonville	62.61	76.54	65.48	68.21	16	87	16	77.67	26	47	26	50.33	3.2
Key West	72.18	79.19		75.68	22	83	22	78.75	29	67	27	70.75	3.0
Knox Hill	57.80	72.69	64.00	64.83	14	83	15	73.67	27	43	27	54.00	5.9
Warrington (f)	60.32	70.81	66.03	65.72	18	82	18	75.67	28	46	26	53.33	3.2
ALABAMA—													
Greene Springs (g)	54.11	74.16	62.71	63.20	24	98 ?	17	77.67	27	32	27	49.92	4.5
MISSISSIPPI—													
Garlandville (h)	56.93	74.82	62.04	64.60	17	90	17	78.33	12	39	26	51.00	5.3
Jackson													4.9
Lake Washington	56.00	70.98	59.60	62.19	17	87	17	76.97	26	41	26	48.33	5.0
LOUISIANA—													
New Orleans	60.30	71.00	64.00	65.10	17	80	17	74.00	27	44	26	52.66	4.2
TEXAS—													
Austin	60.19	74.15	61.87	65.41	15	86	30	76.33	11	34	10	48.00	6.6
Huntsville	66.71 ?	71.35 ?	64.12 ?	67.39 ?	17	88 ?	16	78.00 ?	25	56 ?		57.00 ?	5.0
New Wied	63.81	75.67	65.47	68.32	22	90	22	79.00	11	45	10	62.60	3.5
TENNESSEE—													
Glenwood	47.51	59.04	51.98	52.84	15	79	16	71.07	26	30	26	38.47	6.5
Knoxville	49.50	58.50	52.00	53.33	16	77	16	70.67	26	31	25	32.00	5.5
Lebanon	47.81	60.41	52.81	53.68	16	78	16	70.73	26	31	26	36.33	6.6
Memphis	53.50	61.50	56.25	57.08	17	82	16	75.00	11	j 40	19	43.00	2.3
KENTUCKY—													
Ballardsville	42.65	53.68	45.70	47.34	15	73	16	61.00	26	27	19	k 32.67	5.5
Danville	46.20	59.70	50.40	52.10	2	e 76	8	66.00	26	29	26	37.67	4.6
Millersburg	40.82	54.36	46.25	47.14	15	71	15	61.33	26	25	26 ?	?	5.2
Springdale	40.10	56.70	50.20	49.00	15	77	16	66.67	26	19	25	34.67	6.0
OHIO—													
College Hill	40.55	53.43	45.63	46.54	15	75	16	62.57	19	25	18	30.67	4.6
Gallipolis	44.40	53.20	50.81	49.47	16	68	16	64.33	26	31	26	35.50	---
Geneva Hall	39.55	50.39	39.23	43.06	14	70	14	62.00	24	24	29	32.00	4.8
Germantown	36.64	50.77	41.23	42.88		72	16	57.07		23	25	28.24	5.7
Granville	37.45	49.03	41.84	42.77	15	68	16	57.33	29	21	28	28.00	4.2
Hillsborough	38.81	51.40	43.55	44.59	15	73	16	60.83	19	22	28	28.33	3.1
Huron (i)	34.45	45.77	39.64	39.95	15	75	15	65.33	28	14	23	19.67	4.8
Jackson (m)	35.74	55.58	46.07	46.80	15	79	15	64.67	19	29	25	33.00	5.9
Marietta	37.10	51.90	42.70	43.90	14	69	31	59.33	29	29	23	27.33	4.9
Mount Vernon	34.45	50.67	41.61	42.24	15	70	14	56.33	29	15	27	n 28.33	4.4
Oberlin	35.31	45.21	40.35	40.29	15	67	15	59.00	25	19	25	24.50	4.5
Perrysburg (o)	34.53	48.63	37.26	40.14	16	69	15	61.00	28	20	28	26.33	3.1
Savannah	39.6	48.16	37.81	41.71	15	70	15	62.33	28	14	28	22.00	4.8
Urbana (p)	37.13	50.42		43.77		70				21			4.9
MICHIGAN—													
Ann Arbor, [Woodruff]	29.20	42.00	35.70	35.63	15	60	15	54.00	28	13	26	19.67	5.1
Battle Creek	29.71	45.03	33.16	35.97	13	e 70	15	55.67	28	14	18	20.00	4.5
Brooklyn	33.00	43.54	34.86	37.13	15	63	15	56.00	27	12	18	16.33	4.6
Detroit (q)	34.20	42.30	35.70	37.40		59	15	53.00		15	28	20.33	5.4

a Observations taken at sunrise, 2 p. m., and 9 p. m.

b Same temperature on the 17th.

c Observations taken in the morning.

d Observations omitted on the 16th.

e Same temperature on the 15th.

f Observations taken at sunrise, noon, and sunset.

g Observations taken at sunrise, 9 a. m., 3 and 9 p. m.; mean at 9 a. m., 61.83.

h Observations taken at 7 a. m., 1 p. m., and 9 p. m.

i Same temperature on the 16th, 17th, 22d, and 30th.

j Same temperature on the 26th and 27th.

k Same temperature on the 25th.

l Observations taken at 7 a. m., noon, and 6 p. m.

m Observations omitted from the 3d to the 14th, inclusive. Freezing point of the instrument 1 degree too high.

n Same temperature on the 25th.

o For the last 19 days of the month only.

p Observations taken at sunrise and 2 p. m.

q Observations taken at 8 a. m., 2 p. m., and 9 p. m.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date	Temp	Date.	Mean temp	
MICHIGAN—Continued.	°	°	°	°		°		°		°			
Flint .....	28.00	43.50	33.40	34.97	---	65	---	---	---	12	28	17.67	---
Monroe, [Whelpley] .....	---	---	---	---	---	---	---	---	---	---	---	---	4.8
St. James .....	23.97	32.97	25.42	27.45	15	53	15	42.67	18	4	18	13.33	6.0
Saugatuck .....	31.71	42.80	37.55	37.35	---	61	---	---	---	15	---	---	---
INDIANA—													
Kendallville (a) .....	34.54	49.67	37.19	40.47	12	b 72	13	57.33	25	14	25	22.00	3.5
Milton .....	36.97	50.10	41.19	42.75	15	73	15	59.50	19	22	25	27.00	4.3
New Harmony .....	43.30	55.10	46.50	48.30	15	77	15	67.00	26	27	18	34.00	5.6
Richmond (c) .....	36.20	51.90	43.40	43.83	15	74	15	59.67	25	22	25	27.33	5.3
ILLINOIS—													
Athens .....	37.51	52.48	42.00	44.00	15	80	15	67.00	18	19	18	29.00	5.4
Augusta .....	36.32	49.48	41.65	42.48	15	79	15	66.67	18	16	18	26.67	4.6
Batavia .....	33.97	44.45	37.10	38.51	15	70	15	54.00	18	15	18	21.00	2.5
Ottawa .....	34.66	49.19	31.58	38.48	15	70	13	56.00	18	16	18	22.67	4.4
Upper Alton .....	39.02	50.30	43.76	44.36	15	77	15	65.33	18	22	18	29.67	9.3
MISSOURI—													
Hannibal .....	40.17	53.32	44.90	46.13	15	d 84	15	73.67	18	18	28	30.00	5.6
St. Louis .....	42.20	53.10	46.90	47.40	15	81	15	70.67	18	25	18	34.67	4.6
WISCONSIN—													
Bellefontaine .....	29.06	44.35	34.58	36.00	15	72	15	54.67	18	e 9	18	17.00	4.7
Beloit .....	36.80	45.90	36.30	39.67	16	68	16	55.00	19	18	19	23.33	3.8
Ceresco .....	32.13	43.03	33.00	36.05	15	62	15	53.33	18	e 12	27	23.33	5.4
Janesville .....	28.09	44.61	31.74	34.81	15	68	15	49.33	18	7	18	15.00	4.3
Madison .....	30.90	41.80	34.90	35.87	15	66	15	52.67	18	10	18	17.67	4.0
Milwaukee .....	32.03	40.64	35.84	35.50	15	66	15	54.00	18	13	18	20.33	4.6
Platteville .....	33.46	45.55	35.10	38.04	12	62	15	53.33	18	8	18	17.67	4.7
IOWA—													
Dubuque .....	33.00	46.00	38.00	39.00	16	67	15	54.67	18	12	18	21.00	4.7
Fort Madison (f) .....	36.00	50.00	42.00	42.67	15	77	15	63.00	18	16	18	27.33	4.6
Keokuk .....	38.03	52.35	41.32	43.90	15	80	15	67.33	18	18	18	28.00	6.4
Muscatine .....	32.77	47.45	36.52	38.91	15	70	15	56.67	18	14	18	21.00	4.4
Poultney .....	32.40	43.23	33.70	36.44	14	64	12	53.97	18	10	18	17.60	5.2
Quasqueton .....	27.10	44.10	34.70	35.30	15	65	15	50.13	18	11	18	17.83	5.3
MINNESOTA—													
St. Anthony's Falls .....	27.64	40.54	29.96	32.71	15	59	15	46.00	27	6	27	15.00	4.3
St. Joseph's .....	13.35	28.52	20.00	20.62	7	50	21	35.33	18	— 8	26	0.67	5.2
NEBRASKA—													
Fort Pierre (g) .....	27.19	42.97	42.00	37.39	14	64	14	52.33	26	12	26	20.00	5.3
Fort Union (h) .....	22.13	35.06	30.52	29.24	19	54	19	45.33	31	4	31	13.33	---
CALIFORNIA—													
Sacramento, [Logan] .....	---	---	---	54.53	---	68	---	---	---	37	---	---	---
San Francisco (i) .....	47.23	60.97	49.45	52.43	---	---	---	---	---	---	---	---	---
Stockton (j) .....	46.77	63.87	50.90	53.85	---	82	22	65.33	---	38	13	46.00	---
MEXICO—													
Mirador (k) .....	---	---	---	69.62	---	---	---	78.12	---	---	---	59.99	---
SOUTH AMERICA—													
Assumption, Paraguay .....	75.81	83.61	78.87	79.43	21	90	3	85.00	29	68	29	74.33	3.9
EASTERN CONTINENT—													
Mosul, Mesopotamia (k) .....	---	---	---	50.25	---	68.3	---	---	---	36.6	---	---	---

a Records imperfect on the 15th, 16th, and 17th.

b Same temperature on the 20th.

c Observations taken at 7 a. m., 1 p. m., and 8 a. m.; omitted from the 5th to the 9th, inclusive.

d Same temperature on the 16th.

e Same temperature on the 28th.

f Observations taken at 6 a. m., noon, and 7 p. m.

g Observations taken at 7 a. m., noon, and 5 p. m.

h Observations taken at 7 a. m., noon, and 6 p. m.

i Observations taken at sunrise, 9 a. m., noon, and 10 p. m.; mean at 9 a. m., 52.06.

j Observations taken at 8 a. m., 2 p. m., and 8 p. m.

k Hours of observation not given.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	○	□	○	□		○		○		□		□	
Halifax (a).....	33. 20	43. 00	37. 20	37. 67	28	60	.....	.....	14	20	.....	.....	5 5
CANADA EAST—													
St. Martin's.....	32. 10	45. 74	35. 16	37. 67	25	65	25	52 80	14	16	2	23. 40	4 7
CANADA WEST—													
Hamilton (b).....	44. 66	.....	43. 93	44. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....
MAINE—													
Carmel (c).....	33. 03	44. 56	32. 35	36. 65	26	59	30	48. 67	12	19	12	19. 00	4. 5
Fryeburg.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5. 5
Oldtown.....	29. 63	43. 53	32. 43	35. 20	25	62	30	47. 00	4	11	3	22. 00	2. 0
Perry (d).....	33. 83	44 47	34. 70	37. 67	20	56	20	49. 33	4	15	14	29. 33	4. 9
Steuben.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5. 8
Windham.....	34. 00	44. 77	32. 53	37. 10	6	66	6	55. 33	1	e 14	3	20. 00	4. 5
NEW HAMPSHIRE—													
Concord.....	35. 66	47. 40	39. 00	40. 69	25	66	25	55. 33	3	f 20	3	27. 00	5. 2
Hanover.....	32. 06	45. 07	36 73	37. 95	25	67	30	54. 10	3	10	3	22. 63	6. 4
Exeter.....	33. 4	47. 00	36 2	38. 9	6	g 66	6	52. 00	3	16	3	25. 33	5. 6
Londonderry.....	36. 87	49 83	39. 70	42. 13	25	69	25	h 56. 00	3	22	3	29. 00	6. 4
Manchester.....	36. 76	51. 90	42. 00	43. 55	6	71	25	57. 00	3	17	3	28. 67	6. 5
Salmon Falls.....	36. 73	48. 10	39. 57	41. 47	6	67	■	52 33	3	19	3	28. 33	5. 8
VERMONT—													
Brandon.....	33. 71	45. 31	38. 03	39. 02	25	74	25	55. 67	14	20	2	28. 00	6. 1
Burlington.....	35. 12	46. 90	38. 10	40. 04	25	68	6	54. 00	14	20	14	27. 0	3. 6
Castleton.....	36. 53	46. 50	39. 67	40. 90	30	66	25	56. 67	14	20	2	27. 10	6. 0
Craftsbury (i).....	31. 68	44. 77	33. 26	36. 57	25	61	30	53. 00	14	13	14	25. 00	5. 8
St. Johnsbury.....	31. 69	41. 43	36. 63	36. 58	30	61	30	52. 67	2	14	2	21. 33	5. 3
MASSACHUSETTS—													
Amherst.....	37. 31	50. 79	41. 12	43. 07	25	70	26	59. 60	3	24	3	30. 00	5. 9
Mendon.....	35. 13	47. 73	39. 07	40. 64	25	69	26	57. 20	3	17	3	28. 00	5. 8
Nantucket.....	44. 18	47. 17	40. 50	43. 95	21	j 60	27	54. 67	3	30	15	33. 33	5. 7
New Bedford.....	40. 98	48. 85	39. 85	43. 23	27	66	27	59. 17	3	25	3	30. 50	7. 2
Newburyport.....	37. 23	47. 49	39. 49	41. 40	6	70	6	56. 3	3	23	3	28. 50	5. 2
North Attleboro'.....	40. 29	51. 13	39. 33	43. 58	27	73	27	62. 40	3	24	3	29. 57	5. 7
Princeton.....	36. 88	43. 76	39. 27	39. 97	25	66	26	56. 20	3	21	■	21. 00	5. 5
Richmond.....	33. 73	51. 73	41. 07	42. 18	26	70	26	61. 33	3	12	2	23. 67	6. 3
Southwick.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5. 9
Springfield.....	36. 23	55. 13	40. 80	44. 05	27	80	26	62. 00	3	21	2	30. 67	5. 6
Worcester.....	37. 90	49. 80	42. 00	43 23	26	69	26	61. 30	■	24	■	26. 00	5. 5
RHODE ISLAND—													
North Scituate.....	37. 4	49. 5	36. 4	41. 1	27	73	27	63. 3	3	23	3	28. 00	6. 2
Providence (k).....	38. 00	51. 30	39. 50	42. 93	25	l 68	27	57. 67	3	22	3	30. 00	5. 9
CONNECTICUT—													
New London.....	40. 97	53. 43	42. 43	45. 61	25	70	27	60 67	3	26	3	33. 33	5. 6
Pomfret.....	38. 00	49. 51	39. 23	42. 25	27	72	27	60. 00	3	22	■	28. 33	5. 5
Salisbury.....	37. 06	51. 20	39. 03	42. 43	27	76	26	61. 33	3	20	3	28. 00	.....
Saybrook.....	40. 40	47. 52	40. 97	42. 96	26	60	27	54. 00	3	28	15	32. 67	5. 8
West Cornwall.....	36. 10	49. 20	38. 00	41. 10	27	72	26	58. 00	3	18	2	24. 67	5. 7
NEW YORK—													
Baldwinsville.....	37. 00	45. 67	41. 60	41. 42	25	l 62	26	58. 33	2	24	■	26. 33	6. 4
Beaver Brook.....	37. 73	54. 13	43. 20	45. 02	27	77	26	63. 33	3	19	2	27. 33	.....
Beverly.....	40. 03	52. 53	43. 40	45. 32	26	72	26	64. 00	14	29	17	31. 67	6. 6
Buffalo, [Salisbury] (m).....	36. 90	48. 41	40. 38	41. 90	25	77	25	?	11	27	14	?	7. 0
Canton.....	35. 63	46. 53	38. 47	40. 21	6	g 63	25	56. 30	2	19	■	24. 00	6. 2
Chatham.....	38. 03	48. 59	40. 70	42. 44	■	l 68	■	62. 33	14	14	14	23. 33	6. 9
Fishkill (n).....	41. 33	54. 90	51. 00	49. 08	.....	79	.....	.....	.....	25	.....	.....	.....
Gouverneur.....	34. 67	46. 77	36. 77	39. 40	6	66	25	56. 33	2	18	2	24. 67	6. 5
Leroy (o).....	37. 97	45. 77	.....	41. 87	25	74	26	65. 00	2	26	10	32. 50	5. 8

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Observations omitted from the 3d to the 6th.

d Observations taken at sunrise, 7 a. m., 2 and 9 p. m. Mean at sunrise, 30.43.

e Same temperature on the 3d.

f Same temperature on the 4th.

g Same temperature on the 25th.

h Same temperature on the 6th.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Same temperature on the 27th and 29th.

k Observations taken at 6 a. m., 1 p. m., and 10 p. m.

l Same temperature on the 26th.

m For the last 21 days of the month only. Observations taken at 7 a.

n., 1 p. m. and 9 p. m.

o Observations taken at 7 a. m., noon, and 6 p. m.

p Imperfect.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
NEW YORK—Continued.	■	○	○	○		○		○		■		○	
Lodi.....	37.30	48.60	39.47	41.79	25	74	25	63.00	2	20	2	22.00	7.1
Madrid.....	36.65	45.13	37.62	39.80	25	65	25	58.70	2	22	2	26.33	6.2
New York city (b).....	41.90	52.83	45.40	48.44	---	78	26	69.60	---	28	17	33.60	---
New York city,[D.&D. Inst.].....	43.23	52.97	43.86	46.69	26	74	26	63.47	3	29	17	32.00	6.1
Penn Yan.....	34.33	48.63	41.93	41.63	25	71	26	64.33	---	20	2	27.33	7.2
Sag Harbor.....	41.73	53.53	41.80	45.69	25	74	27	61.00	3	23	3	31.67	6.2
Troy.....	39.37	51.20	43.76	44.78	25	75	25	61.20	3	25	2	30.80	7.1
Wampsville.....	38.6	50.7	39.3	42.9	25	71	8	62.00	2	c 22	2	27.00	6.7
NEW JERSEY—													
Bloomfield.....	42.46	54.40	43.30	46.72	9	74	26	64.33	3	26	3	29.33	5.6
Burlington.....	42.87	58.40	49.03	50.10	27	86	26	72.00	3	24	17	d 32.67	5.4
Lambertville.....	43.50	63.44	45.27	50.74	27	84	26	71.67	3	25	16	32.83	3.1
PENNSYLVANIA—													
Bedford (e).....	44.28	58.52	47.60	50.13	25	84	25	68.33	3	24	17	33.33	3.9
Byberry.....	43.17	56.75	46.78	48.90	27	82	27	67.33	3	25	3	31.67	6.4
Gettysburg.....	43.00	58.40	46.37	49.26	25	a 84	26	69.00	3	21	17	c 31.00	5.4
Harrisburg.....	45.90	57.63	49.86	51.13	26	82	26	72.00	3	29	16	33.00	5.7
Lima.....	43.38	55.58	45.60	48.19	27	80	26	68.00	3	23	3	30.4	6.3
Morrisville.....	42.47	55.77	45.30	47.85	27	80	25	66.67	3	29	14	31.33	4.9
Moss Grove.....	36.60	54.00	39.00	43.20	25	88	25	67.00	n	14	2	21.00	6.5
Norristown.....	46.07	57.50	47.50	50.36	27	81	26	70.33	3	30	3	32.80	6.2
Paradise.....				43.00									
Philadelphia.....	45.70	58.07	50.40	51.39	27	85	26	70.00	3	29	16	33.00	6.9
Pittsburg, [M. H.] (f).....	47.87	58.53	49.83	49.91	25	89	25	68.25	2	27	2	28.50	---
Pittsburg, [O. S.].....	43.17	53.07	45.60	47.28	25	81	8	67.67	2	22	2	28.00	---
Pocopson (g).....	42.17	58.70	---	50.43	26	h 81	26	72.00	3	23	3	32.25	6.6
Sugar Grove.....	37.10	48.43	38.46	41.33	25	82	25	64.67	2	17	2	20.33	6.8
Warrior's Mark.....	41.03	52.45	40.62	44.70	25	81	25	69.90	3	19	2	28.70	6.9
West Haverford.....	43.60	57.57	50.53	50.57	27	81	27	71.00	3	25	17	i 30.00	5.6
Youngsville.....	36.67	49.68	38.55	41.63	8	a 74	---	?	2	c 17	---	?	6.7
MARYLAND—													
Frederick.....	45.59	57.55	49.34	50.83	25	79	26	68.33	3	25	16	32.33	5.9
Schellman Hall.....	46.62	58.83	47.49	50.98	25	83	26	69.33	17	27	16	29.33	4.5
DISTRICT OF COLUMBIA—													
Washington (j).....	49.12	58.59	50.76	52.82	27	82	27	72.50	16	32	16	33.00	5.4
VIRGINIA—													
Alexandria.....	47.02	57.97	50.62	51.87	26	82	26	70.00	3	28	17	33.00	5.5
Ashland.....	50.70	64.23	56.70	57.21	8	k 86	21	76.00	3	27	2	33.00	4.5
Crichton's Store (l).....	51.43	65.82	---	58.62	22	86	23	76.00	17	32	17	34.00	5.1
Lewisburg.....	44.03	61.50	49.33	51.62	25	90	25	72.67	2	26	2	28.00	5.7
Lynchburg.....	49.30	65.80	56.78	57.30	26	85	26	74.33	19	30	17	33.33	---
Winchester.....	47.07	58.60	49.83	51.83	25	78	26	69.33	3	27	16	33.33	5.5
NORTH CAROLINA—													
Chapel Hill.....	50.67	65.16	54.80	56.88	26	87	26	77.33	3	27	3	34.33	4.7
Thornbury.....	52.21	67.46	54.44	58.04	27	88	26	76.00	19	32	17	38.33	5.5
SOUTH CAROLINA—													
Camden.....	53.70	70.70	58.10	60.83	26	89	23	77.20	4	35	3	41.60	4.1
St. John's (m).....	54.11	71.22	58.25	61.19	---	87	15	74.00	---	---	---	---	---
GEORGIA—													
Culloden.....	58.60	69.30	61.30	63.07	23	a 88	23	76.33	2	c 37	2	44.67	3.2
Savannah.....	57.14	72.61	61.50	63.75	23	90	23	75.50	3	32	3	46.90	3.8
Sparta.....	51.91	66.13	56.70	58.25	26	92	26	78.00	3	n 30	3	40.67	4.5
The Rock (o).....													3.6
Whitemarsh Island.....	57.53	69.40	59.57	62.17	23	87	23	73.10	3	40	3	45.10	3.5

a Same temperature on the 26th.

b Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m. Mean at noon 51.76; mean at sunset 50.30.

c Same temperature on the 3d.

d Same temperature on the 3d and 16th.

e No observations on Sundays.

f Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at sunrise, 43.43.

g Observations taken at daybreak and 2 p. m.

A Same temperature on the 27th.

i Same temperature on the 15th.

j Observations taken at 9 a. m., 2 p. m., and 9 p. m.

k Same temperature on the 25th.

l Observations omitted after the 23d.

m Observations taken at sunrise, 2 p. m., and 9 p. m.

n Same temperature on the 4th.

o Observations taken in the morning.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp	Date.	Temp.	Date	Mean temp.	
FLORIDA—	°	°	°	°		°		°		°			
Cedar Keys .....	63.43	71.10	67.30	67.28	14	a80	26	b75.67	3	43	3	52.33	3.8
Jacksonville.....	59.50	72.50	63.56	65.19	23	c83	27	76.33	3	d47	3	50.33	3.8
Key West.....	70.17	76.97		73.57	1	e84	15	f80.00	3	g62	3	g65.00	4.2
Knox Hill (A).....	55.11	69.60	59.47	61.39	24	86	25	i73.00	3	35	3	47.00	3.8
Warrington (J).....	57.97	68.53	65.23	63.91	11	79	26	72.67	18	42	3	51.33	1.6
ALABAMA—													
Greene Springs (k) .....	49.29	72.70	57.05	60.11	24	93	24	79.00	18	29	2	42.50	5.7
MISSISSIPPI—													
Garlandsville.....	57.07	73.69	67.65	66.14	24	92	26	81.00	3	36	2	49.33	3.8
Jackson.....	53.10	69.10	57.30	59.83									2.4
Lake Washington (L) .....	58.00	71.16	61.50	63.35	22	85		?	17	43			3.3
LOUISIANA—													
New Orleans.....	58.80	70.00	59.36	62.72	24	m82	26	75.00	3	45	3	51.67	3.1
TEXAS—													
Austin.....	61.07	76.83	62.73	66.88	26	92	26	78.67	1	43	1	51.00	5.3
New Wied.....	62.86	79.73	65.40	69.33	26	94	26	81.00	1	43	1	53.00	5.1
TENNESSEE—													
Glenwood .....	51.51	66.51	57.95	58.66	24	88	24	76.25	2	30	2	36.20	5.4
Knoxville.....	48.98	61.17	54.33	54.83	23	81	25	71.10	2	30	2	30.50	4.5
Memphis.....	57.00	67.33	59.41	61.25	24	86	24	78.00	1	n38	2	42.00	1.5
KENTUCKY—													
Ballardsville .....	49.37	62.10	55.47	55.65	23	83	23	74.00	2	27	2	30.00	5.4
Danville.....	51.83	63.92	54.22	56.66	8	84	22	73.00	3	33	2	37.33	4.7
Millersburg (O).....	47.81	60.20	51.79?	53.29	21	a84	25	71.67p	2	26	2	31.33	5.8
Springdale.....	44.78	61.25	55.70	53.91	25	87	24	75.00	18	24	1	34.50	5.7
OHIO—													
College Hill .....	47.37	62.44	52.52	54.44	25	84	25	75.67	1	27	2	30.60	4.7
Gallipolis.....	49.90	59.87	52.52	54.10	21	80	22	70.00	3	30	17	34.33	
Geneva Hall.....	42.73	57.27	44.07	48.02	23	88	8	69.00p	3	26	1	30.00	6.0
Germantown.....	46.08	59.38	48.11	51.19	25	86	25	74.97	16	27	2	29.90	6.4
Granville.....	45.93	55.82	48.50	50.08	8	p79	8	67.67	2	24	2	29.00	6.0
Hillsborough.....	46.60	57.90	45.16	49.89	25	84	25	71.33	1	n26	2	29.20	5.3
Huron (Q).....	41.47	50.59	42.76	44.92	25	89	25	72.67	2	25	2	27.33	6.3
Jackson.....	48.57	63.47	50.90	54.31	25	90	25	73.70	1	r32	2	34.00	7.0
Mount Vernon.....	44.80	59.40	48.03	50.74	25	86	25	72.67	3	21	2	s31.00	6.1
Oberlin.....	42.93	46.97	41.57	43.49	25	79	26	67.7	2	25	2	29.70	5.6
Perrysburg (Q) .....	43.40	56.30	47.27	48.99	8	84	25	70.33	2	27	2	29.33	5.5
Savannah.....	48.90	55.93	46.27	50.37	25	82	25	77.67	1	30	16	32.67	6.1
Urbana (T).....	44.26	57.66		50.92		85				27			6.1
MICHIGAN—													
Ann Arbor, [Woodruff] .....	39.90	55.73	45.33	46.99	21	80	26	65.33	1	r26	2	28.67	5.4
Battle Creek.....	40.47	60.67	40.67	47.27	25	90	25	71.33	1	n24	1	27.33	4.1
Detroit.....	41.90	52.03	42.23	45.39	8	u70	21	64.33	2	26	2	29.67	6.8
Flint.....	40.0	57.8	41.0	46.27		81	25?			21	1?		
Grand Rapids (V).....	43.34	61.81	48.90	51.35	25	82	25	70.00	11	w32	14	36.00	3.5
Monroe, [Whelpley].....													5.2
Saugatuck.....	44.77	55.13	45.50	48.47		80				25			
St. James.....	36.47	41.78	34.65	37.63	24	55	28	46.67	1	7	1	21.50	4.3
INDIANA—													
Kendallville .....	44.03	59.93	47.48	50.48	8	x82	25	70.33	2	26	3	f30.33	3.1
Milton.....	46.62	58.31	49.13	51.35	25	82	25	72.50	2	28	3	29.80	4.6
New Harmony.....	50.4	65.7	55.1	57.1	24	89	24	77.33	2	28	1	33.67	4.5
Richmond (Y).....	46.55	58.87	49.03	51.48	25	83	?	?	1	26	2	29.00	6.3

a Same temperature on the 24th and 25th.

b Same temperature on the 14th.

c Same temperature on the 27th.

d Same temperature on the 18th.

e Same temperature on the 12th and 15th.

f Same temperature on the 1st.

g Same temperature on the 19th.

h No observations from the 6th to the 18th.

i Same temperature on the 24th.

j Observations taken at sunrise, 2 p. m., and sunset.

k Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at

9 a. m., 61.42.

l Imperfect.

m Same temperature on the 26th.

n Same temperature on the 3d.

o Observations taken at 9 a. m., 2 p. m., and 9 p. m.

p Same temperature on the 25th.

q Observations taken at 7 a. m., 1 p. m., and 9 p. m.

r Same temperature on the 3d and 3d.

s Same temperature on the 17th.

t Observations taken at sunrise and 2 p. m.

u Same temperature on the 21st, 22d, and 26th.

v No observations till the 5th.

w Same temperature on the 14th and 18th.

x Same temperature on the 21st, 24th, and 25th.

y Observations taken at 7 a. m., 1 p. m., and 8 p. m.



No 17.—THERMOMETER AND FACE OF SKY, APRIL, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—	°	°	°	°		°		°		°		°	
Athens .....	48.33	65.56	52.53	55.47	22	91	22	<sup>a</sup> 77.67	1	23	1	27.67	4.7
Augusta .....	47.06	62.70	53.20	54.32	22	87	22	75.00	1	21	1	26.33	3.5
Batavia .....	42.80	59.23	47.20	49.74	19	86	24	73.00	2	22	1	28.33	3.9
Ottawa .....	45.10	63.23	46.68	51.67	24	87	24	73.33	1	21	1	21.67	4.5
Upper Alton .....	50.42	61.90	52.90	55.07	24	85	24	76.33	2	26	1	29.67	6.1
MISSOURI—													
Hannibal .....	50.43	57.07	51.07	52.86	17	<sup>b</sup> 88	22	75.50	1	19	1	24.50	4.4
St. Louis .....	51.50	64.20	54.90	56.87	24	88	24	78.00	2	27	1	31.00	5.8
WISCONSIN—													
Bellefontaine .....	43.63	58.67	47.37	49.89	19	<sup>a</sup> 79	25	69.00	2	17	2	26.00	5.0
Beloit .....	45.26	59.66	45.16	50.03	20	87	20	71.67	1	<sup>c</sup> 27	1	28.33	3.4
Janesville .....	40.00	59.96	43.26	44.41	20	88	24	72.00	1	<sup>c</sup> 20	1	23.33	4.6
Madison .....	41.87	55.82	46.33	48.01	24	79	22	68.50	1	<sup>c</sup> 23	1	24.67	3.6
Milwaukee .....	40.93	47.97	42.07	43.66	6	69	20	59.00	2	24	1	27.00	4.2
Platteville .....	45.63	61.70	49.17	52.17	20	86	20	75.20	2	18	1	26.10	4.6
IOWA—													
Dubuque .....	45.00	60.63	50.93	52.19	20	87	20	79.00	1	<sup>c</sup> 22	1	26.00	3.9
Fort Madison ( <sup>d</sup> ) .....	46.33	64.57	57.70	56.20	23	91	22	78.00	1	19	1	27.00	3.3
Muscatine .....	41.33	64.27	48.73	51.44	22	<sup>e</sup> 88	22	68.33	2	12	1	22.33	3.8
Poultney .....	44.41	60.50	43.35	49.42	20	87	20	72.20	1	12	1	20.00	4.6
Quasqueton .....	43.85	61.68	46.33	50.62	20	88	20	72.33	2	14	1	21.90	4.0
MINNESOTA—													
St. Anthony's Falls .....	40.77	59.03	44.93	48.24	20	86	20	72.00	1	16	1	26.00	3.9
St. Joseph's .....	36.23	52.53	40.73	43.16	18	78	19	<sup>e</sup> 57.67	1	8	1	15.00	4.6
NEBRASKA—													
Fort Pierre ( <sup>f</sup> ) .....	43.40	66.37	61.37	57.05	18	90	19	75.00	1	12	1	26.33	5.8
Fort Union ( <sup>g</sup> ) .....	41.10	60.17	53.53	51.60	20	84	19	70.00	1	3	1	25.67	---
CALIFORNIA—													
Sacramento, [Logan] .....				60.00		78				49			
San Francisco ( <sup>h</sup> ) .....	51.10	68.43	52.90	58.07									
Stockton ( <sup>i</sup> ) .....	54.30	74.51	57.20	62.00		90	16	71.33		48	22	51.33	
MEXICO—													
Mirador ( <sup>j</sup> ) .....				67.68				77.00				57.11	
SOUTH AMERICA—													
Colonia Tovar ( <sup>k</sup> ) .....	55.90	67.50	61.40	63.36	21	78	21	68.60	5	50	5	55.02	---
Assumption, Paraguay .....	72.37	78.37	75.27	75.34	10	90	10	85.33	14	61	15	63.00	4.4
EASTERN CONTINENT—													
Mosul, Mesopotamia ( <sup>j</sup> ) .....				59.98		84.4				45.6			

<sup>a</sup> Same temperature on the 24th.<sup>b</sup> Same temperature on the 22d and 24th.<sup>c</sup> Same temperature on the 2d.<sup>d</sup> Observations taken at 6 a. m., 2 p. m., and 7 p. m.<sup>e</sup> Same temperature on the 29th.<sup>f</sup> Observations taken at 7 a. m., 2 p. m., and 6 p. m.<sup>g</sup> Observations taken at 6 a. m., noon, and 6 p. m.<sup>h</sup> Observations taken at sunrise, 9 a. m., noon, and 10 p. m.; mean at 9 a. m., 59.83.<sup>i</sup> Observations taken at 8 a. m., 2 p. m., and 8 p. m.<sup>j</sup> Hours of observation not given.<sup>k</sup> Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and sunset; mean at 9 a. m., 66.50; mean at 3 p. m., 65.50.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	°	°	■	°		°		°				■	
Halifax (a).....	46.10	55.10	50.00	50.40	13	74	—	—	7	29	—	—	—
CANADA EAST—													
St. Martin's.....	51.45	67.06	52.84	57.12	24	90	17	69.67	■	26	■	27.67	3.5
CANADA WEST—													
Hamilton (b).....	56.84	—	55.00	55.92	28	68	14	66.50	6	38	6	39.00	—
MAINE—													
Carmel.....	49.94	66.94	48.33	55.07	28	85	28	68.33	7	25	—	?	5.5
Fryeburg.....	—	—	—	—	—	—	—	—	—	—	—	—	4.6
Perry (c).....	46.16	57.52	48.48	50.72	28	70	28	60.00	7	29	6	33.67	6.4
Steuben.....	—	—	—	—	—	—	—	—	—	—	—	—	5.8
Windham.....	53.87	64.22	52.26	56.78	28	80	28	70.67	■	29	6	32.00	4.7
NEW HAMPSHIRE—													
Concord.....	55.45	66.80	57.20	59.82	13	80	13	69.67	6	28	■	35.67	3.9
Hanover.....	49.25	66.22	54.66	56.71	24	80	15	67.57	6	26	■	32.20	4.9
Exeter.....	52.10	65.60	53.00	56.90	13	78	13	66.67	6	30	6	35.33	5.5
Londonderry.....	52.80	68.00	60.30	60.37	13	84	13	70.67	6	28	■	30.33	5.3
Manchester.....	53.35	70.80	60.41	61.52	16	84	16	72.00	■	32	6	37.33	6.0
Salmon Falls.....	55.37	66.84	55.56	59.26	13	79	11	68.17	6	31	■	33.33	5.0
VERMONT—													
Brandon.....	51.48	65.38	56.06	57.64	13	82	17	70.67	6	d 29	■	28.67	4.7
Burlington.....	55.50	68.13	56.50	60.04	17	83	17	72.67	■	28	■	28.67	2.5
Castleton.....	53.20	66.58	57.58	59.12	13	e 82	20	72.33	■	30	6	31.33	4.1
Craftsbury.....	50.0	59.2	52.0	53.73	13	76	17	64.33f	6	20	6	20.67	5.0
St. Johnsbury.....	44.10	62.80	51.50	52.80	13	81	13	66.33	6	d 25	6	26.67	3.3
MASSACHUSETTS—													
Amherst.....	52.80	64.80	54.20	57.27	15	g 79	16	69.33	6	31	6	37.80	5.0
Mendon.....	50.70	63.00	55.30	56.33	10	h 75	20	65.33	7	24	6	35.33	5.5
Nantucket.....	53.30	55.10	51.00	53.13	12	k 70	22	62.33	7	35	7	42.33	6.1
New Bedford.....	54.10	64.30	53.10	57.17	12	78	22	65.83	6	31	■	43.17	7.2
Newburyport.....	49.40	60.00	56.00	55.13	12	79	15	67.90	6	30	■	36.83	7.1
North Attleboro'.....	52.3	67.5	52.3	57.4	15	80	21	67.77	6	30	6	38.93	5.6
Princeton.....	48.00	63.50	55.10	55.53	28	75	28	68.20	■	26	6	32.64	4.6
Richmond.....	49.2	64.2	55.6	56.33	12	80	15	67.33	7	28	■	32.67	5.8
Southwick.....	—	—	—	—	—	—	—	—	—	—	—	—	4.1
Springfield.....	54.74	68.58	54.45	60.59	12	81	28	70.00	6	31	■	38.67	4.8
Taunton.....	56.80	72.51	58.77	62.69	28	90	21	75.33	7	34	6	40.33	2.9
Worcester.....	56.30	66.40	57.90	60.20	12	79	16	69.83	7	29	■	37.00	4.2
RHODE ISLAND—													
North Scituate.....	46.8	64.9	54.8	55.5	12	i 75	28	67.67	6	29	7	30.00	5.7
Providence (j).....	53.0	66.3	53.8	57.7	28	80	28	k 67.67	6	31	■	41.00	5.5
CONNECTICUT—													
New London.....	53.90	67.60	54.60	58.70	13	79	28	63.00	7	34	7	43.00	6.0
Pomfret.....	53.67	64.54	54.67	57.63	28	77	16	66.33	6	30	■	36.67	5.1
Salisbury.....	53.19	67.32	54.96	58.49	15	81	28	69.33	7	29	6	36.00	—
West Cornwall.....	51.6	63.8	54.8	56.7	16	76	16	66.33	7	28	6	35.33	4.6
NEW YORK—													
Angelica.....	49.5	65.9	51.0	55.8	16	l 80	17	73.33	7	29	6	34.73	3.4
Baldwinsville.....	50.5	62.9	55.1	56.2	13	m 75	17	68.33	7	31	■	33.67	4.0
Beaver Brook.....	52.71	68.65	58.58	59.98	28	85	28	71.67	7	31	■	38.67	4.7
Beverly.....	56.39	63.55	58.94	59.63	28	77	28	70.67	■	37	■	43.33	5.2
Buffalo, [Salisbury] (n).....	42.08?	59.26?	48.82?	50.06?	13	82	13	71.00	7	o 31	■	36.00	3.7
Canton.....	53.1	67.5	56.5	59.03	17	92	17	78.67	7	26	6	29.67	4.4
Chatham.....	53.20	67.30	54.60	58.37	29	81	19	70.00	6	d 30	■	34.33	4.8
Fishkill.....	56.45	70.09	67.09	64.54	—	85	—	—	—	38	—	—	—

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Observations taken at sunrise, 7 a. m., 2 and 9 p. m. Mean at sunrise, 43.45.

d Same temperature on the 7th.

e Same temperature on the 17th.

f Same temperature on the 13th.

g Same temperature on the 16th and 28th.

h Same temperature on the 20th.

i Same temperature on the 15th, 16th, and 28th.

j Observations taken at sunrise, 1 p. m., and 10 p. m.

k Same temperature on the 16th.

l Same temperature on the 24th.

m Same temperature on the 19th.

n Imperfect.

o Same temperature on the 8th.



No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1854.—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date.	M'n temp.	Date	Temp.	Date.	Mean temp	
NEW YORK—Continued.	°	°	°	°		°		°		°			
Gouverneur	55.50	67.90	57.00	60.13	10	a 80	17	75.67	6	28	6	30.00	4.6
Leroy (h)	48.29?	65.50?		56.90?	27	79			7	32			5.8
Lodi	55.3	65.9	55.1	58.77		78	17	71.00		29	6	32.67	4.4
Madrid	54.0	61.6	55.2	56.93	17	84	17	77.43	6	30	6	32.10	4.0
New York city (c)	54.39	68.40	58.87	62.33		80	28	72.40		35	6	47.20	
New York city, [D. & D. Ins.]	58.03	66.46	58.06	60.85	28	80	28	73.53	6	38	6	45.80	4.2
Penn Yan (d)	45.74	67.13	55.97	56.28		79	29	63.00		28	6	34.67	4.7
Sag Harbor	56.7	68.3	54.2	59.73	16	81	13	67.00	7	35	7	45.33	5.1
Troy	56.0	70.0	60.9	62.3	28	83	17	71.83	7	34	6	38.97	5.3
Wales	49.84				17	70			8	24			
Wampsville	54.6	67.9	53.8	58.77	29	82	17	72.67	6	30	6	33.33	4.8
NEW JERSEY—													
Bloomfield	55.18	69.44	60.00	61.54	19	80	28	70.50	7	34	7	45.67	3.6
Burlington	56.1	72.9	61.5	63.5	28	84	17	73.00	7	36	7	48.00	5.5
Lambertville	58.39	73.63	59.26	63.76	28	88	28	74.83	7	38	7	47.50	5.5
Newark (e)				61.18		81				34			
PENNSYLVANIA—													
Bedford	54.2	71.4	59.9	61.83	12	82	30	72.33	8	37	6	50.67	4.6
Brookville (f)	48.19	69.13	61.32	59.55	28	g 89	28	77.67	8	22	8	44.33	
Gettysburg	58.2	74.9	58.3	63.80	30	86	29	73.33	7	39	3	47.67	4.8
Harrisburg	61.0	75.8	66.2	67.67	29	87	15	77.00	7	42	3	52.67	4.0
Lima	58.35	69.40	59.26	62.34	28	79	29	72.27	7	38	7	47.17	4.6
Morrisville	57.0	70.5	59.0	62.17	28	82	28	71.00	7	39	7	49.00	3.2
Moss Grove	51.04	70.14	52.75	57.98	28	g 90	17	75.33	6	28	7	37.33	4.6
Norristown	57.67	70.82	59.77	62.75	15	80	15	71.67	6	42	3	48.43	4.8
Paradise				69.00									
Philadelphia	60.0	72.5	63.8	65.43	10	h 82	29	74.50	7	40	7	50.00	4.8
Pittsburg, [M. H.] (i)	60.45	74.03	63.71	62.88	27	91	28	73.25	7	35	3	44.75	
Pittsburg, [O. S.]	55.2	67.5	57.3	60.0	28	83	16	72.33	7	34	3	41.00	
Pocopson (j)	54.77	73.52		64.14	29	86	29	75.00	7	36	7	48.50	5.2
Sugar Grove	52.7	63.2	52.1	56.0	24	77	17	66.67	6	29	6	38.00	4.5
Warrior's Mark	48.7	69.5	55.8	58.00	29	85	29	71.80	7	32	7	43.63	4.5
West Haverford	55.5	74.24		64.87	18	k 84	18	76.00	?	?	1	49.00	4.5
MARYLAND—													
Frederick	60.80	73.70	63.01	65.84	30	85	30	74.57	7	43	3	49.77	5.0
Schellman Hall	60.80	74.00	61.70	65.50	15	85	16	75.33	3	45	3	48.33	4.3
DISTRICT OF COLUMBIA—													
Washington	60.60	71.10	64.70	68.80	10	l 83	30	77.50	1	43	3	50.67	5.1
VIRGINIA—													
Alexandria	62.29	73.80	65.05	67.05	10	g 83	29	76.50	1	43	3	50.17	4.9
Ashland	61.03	75.52	67.10	67.88	16	m 87	28	77.33	1	45	2	53.33	3.2
Crichton's Store	63.45	75.63		69.54	16	92	16	84.00	1	45	7	62.33	5.1
Lewisburg	58.1	75.2	62.7	65.33	16	n 87	28	74.00	1	o 39	3	50.67	4.8
Lynchburg	60.7	77.1	68.1	68.63	11	p 87	20	75.00	6	35	3	59.00	
Winchester	61.3	73.8	62.2	65.76	27	g 84	29	76.33	1	42	3	52.33	4.2
NORTH CAROLINA—													
Chapel Hill	62.8	77.2	66.1	68.7	9	l 86	26	76.00	1	43	1	57.00	5.2
Thornbury	64.90	79.17	65.10	69.72	16	89	16	77.00	7	49	7	55.80	4.7
SOUTH CAROLINA—													
Camden	68.1	81.7	69.7	73.17	27	92	27	81.47	1	45	4	63.47	5.1
St. John's (g)	63.53	78.00	67.80	69.78		84	15	77.33		40	1	53.67	
GEORGIA—													
Augusta (r)	72.20	79.20	75.10	75.50	26	84	26	79.33	29	68	19	73.33	1.5
Culloden	73.10	84.30	76.70	78.0	27	90	27	83.00	1	55	1	62.00	4.5
Savannah	68.90	81.20	71.20	73.43	27	90	28	80.20	1	51	1	59.73	4.6

a Same temperature on the 13th and 14th.

b Very imperfect.

c Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

Mean at noon, 66.77; mean at sunset, 63.23.

d Observations taken at sunrise, 2 p. m., and sunset.

e Observations taken at 7 a. m. and 5 p. m.

f Observations taken at 6 a. m., noon, and 6 p. m.

g Same temperature on the 29th.

h Same temperature on the 17th, 18th, and 29th.

i Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at sunrise, 53.32.

j Observations taken at daybreak and 2 p. m.

k Same temperature on the 30th.

l Same temperature on the 16th.

m Same temperature on the 28th.

n Same temperature on the 27th and 28th.

o Same temperature on the 27th.

p Same temperature on the 20th.

q Observations taken at sunrise, 2 p. m., and 9 p. m.

r For the last 23 days of the month only.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—Continued.	°	°	°	°	°		°		°		°		
Sparta.....	64.9	82.6	71.4	72.97	16	95	26	81.67	1	40	1	56.00	5.6
Whitemarsh Island.....	68.9	77.5	69.7	72.0	27	86	28	78.00	1	51	1	57.00	4.3
FLORIDA—													
Cedar Keys.....	78.4	81.6	74.2	78.1	23	a 85	31	82.00	1	b 64	1	68.33	3.0
Jacksonville.....	74.09	82.00	73.00	76.36	16	c 87	17	82.00	2	56	1	64.33	3.8
Key West.....	76.81	84.01	.....	80.41	29	d 90	29	85.00	1	b 72	1	75.00	3.1
Knox Hill.....	69.50	81.50	72.90	74.63	21	89	21	80.33	1	54	1	59.25	5.3
Warrington (e).....	70.50	80.75	76.33	75.86	30	87	30	82.00	2	52	2	64.00	3.1
MISSISSIPPI—													
Garlandsville.....	68.39	85.34	72.48	75.40	16	f 93	28	85.67	1	49	1	63.33	5.1
Jackson.....	65.60	78.30	67.20	70.37	22	g 85	16	77.33	1	44	2	47.00	5.1
Lake Washington.....	67.7	78.8	72.2	72.9	30	88	30	78.70	4	58	5	61.67	7.3
LOUISIANA—													
New Orleans.....	67.20	80.40	69.20	72.27	14	88	14	81.00	1	56	1	62.67	5.0
TEXAS—													
Austin.....	68.13	81.39	69.06	72.86	31	93	31	83.00	5	h 59	5	64.33	6.4
New Wied.....	70.6	83.7	20.9	75.07	31	97	31	87.00	5	59	4	66.00	3.8
TENNESSEE—													
Glenwood.....	60.38	73.18	65.32	66.29	■	85	30	75.33	3	42	2	52.60	5.7
Knoxville.....	60.4	75.8	65.2	67.13	26	83	26	73.00	1	37	1	52.67	4.5
Memphis.....	65.0	77.0	69.0	70.33	30	86	30	82.00	2	51	3	60.67	1.6
KENTUCKY—													
Ballardsville.....	61.33	72.68	65.90	66.64	29	87	28	75.33	3	46	2	55.00	4.8
Danville.....	64.50	76.00	64.00	68.17	28	84	29	76.00	■	50	2	54.67	3.8
● Millersburg.....	58.65	72.07	61.28	64.00	26	89	26	75.33	3	j 44	2	50.67	5.2
Springdale.....	51.5	76.1	65.4	64.3	26	86	26	k 76.00	3	j 37	3	50.17	5.1
OHIO—													
College Hill.....	61.30	70.64	63.81	65.28	28	83	28	77.17	3	45	3	54.50	3.7
Gallipolis.....	61.9	74.4	62.8	66.37	28	86	27	77.00	3	47	3	52.00	---
Geneva Hall (l).....	53.9	68.8	52.7	58.47	14	84	14	74.00	2	36	2	39.33	5.0
Germantown.....	56.09	70.32	58.05	61.49	26	84	27	75.76	4	42	3	51.50	5.2
Granville.....	55.1	67.7	58.1	60.3	28	83	28	72.00	3	m 41	3	46.00	3.7
Hillsborough.....	56.90	68.74	59.35	61.66	28	83	13	72.67	3	43	3	48.33	3.9
Huron.....	56.00	64.00	52.16	57.39	17	84	13	74.33	7	36	7	42.33	4.0
Jackson.....	60.7	76.5	61.6	66.27	26	n 91	13	78.33	3	46	3	49.33	5.8
Marietta.....	55.9	71.7	60.2	62.6	16	85	13	73.33	1	39	3	45.67	4.0
Mount Vernon.....	55.30	71.70	55.70	60.90	16	87	25	75.67	1	37	2	41.00	3.9
Oberlin.....	55.7	65.5	57.2	59.47	16	81	16	n 70.00	6	m 40	7	43.00	3.6
Perrysburg.....	60.00	71.42	57.90	63.11	27	83	13	78.67	2	42	2	46.67	4.3
Richmond.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.5
Savannah.....	64.36	68.36	56.81	63.18	26	95	26	81.67	2	38	2	49.33	4.4
Urbana (o).....	53.39	72.29	.....	62.84	.....	86	.....	.....	.....	37	.....	.....	4.2
Zanesfield.....	54.00	68.86	60.90	61.25	26	n 82	28	71.33	7	38	3	49.33	3.0
MICHIGAN—													
Ann Arbor, [Woodruff].....	52.3	67.2	56.7	58.7	26	80	25	69.33	2	40	2	45.33	4.5
Battle Creek.....	55.35	70.61	54.42	60.13	27	90	26	76.00	■	40	2	43.00	3.5
Detroit.....	58.58	65.45	54.16	59.40	13	78	13	74.00	6	34	6	42.00	5.1
Flint.....	55.4	69.9	54.3	59.87	.....	85	.....	.....	.....	35	.....	.....	---
Grand Rapids.....	54.03	69.22	58.20	60.48	27	88	27	78.67	h 5	39	5	49.00	3.6
Monroe, [Whelpley].....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.9
St. James.....	49.01	53.92	46.64	49.86	24	75	24	64.33	6	31	6	36.00	5.4
Saugatuck.....	54.35	65.35	55.70	58.47	.....	92	.....	.....	.....	41	.....	.....	---
INDIANA—													
Kendallville.....	54.93	71.03	54.40	60.12	26	p 88	27	72.67	3	36	2	40.33	2.6
La Fayette.....	63.65	73.48	60.00	65.71	27	87	27	n 77.00	2	44	2	52.00	4.4
Milton.....	58.55	71.55	58.55	62.88	29	85	26	75.16	2	44	2	47.50	3.0

- a Same temperature on the 27th, 28th, and 31st.  
b Same temperature on the 2d.  
c Same temperature on the 17th, 26th, 27th, and 28th.  
d Same temperature on the 30th.  
e Observations taken at sunrise, noon, and sunset.  
f Same temperature on the 21st.  
g Same temperature on the 24th.  
h Same temperature on the 6th.

- i Same temperature on the 27th and 28th.  
j Same temperature on the 4th.  
k Same temperature on the 29th.  
l For the first 24 days of the month only.  
m Same temperature on the 7th.  
n Same temperature on the 28th.  
o Observations taken at sunrise, and 2 p. m.  
p Same temperature on the 27th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—Continued.	°	°	°	°		°		°		°		°	
New Harmony.....	61.10	76.10	63.70	66.97	30	90	30	73.67	11	48	2	53.33	5.0
Richmond (a).....	58.40	70.36	59.60	62.79	28	87	28	74.67	1	38	1	45.00	4.9
ILLINOIS—													
Athens.....	59.48	75.71	63.77	66.32	3	90	30	78.00	2	43	17	50.67	4.2
Augusta.....	56.19	71.74	60.87	62.93	9	82	28	73.00	2	47	17	47.67	3.9
Batavia.....	51.64	71.71	55.71	59.69	28	84	28	75.00	3	33	2	38.00	3.2
Ottawa.....	58.70	70.70	57.48	62.29	25	88	27	74.00	6	40	2	48.67	5.3
Upper Alton.....	60.17	70.90	63.45	64.87	30	84	30	74.00	2	44	2	53.33	3.0
MISSOURI—													
Hannibal.....	52.71	70.35	62.30	61.79	22	b 90	26	75.33	2	37	17	47.67	4.5
St Louis.....	62.0	75.9	66.0	67.97	30	88	30	76.33	2	46	2	54.33	5.7
WISCONSIN—													
Bellefontaine.....	53.58	69.19	56.26	59.68	26	c 83	27	73.33	3	38	2	d 50.00	4.8
Beloit.....	56.19	70.32	56.09	60.87	26	84	27	74.00	8	37	2	45.00	3.6
Janesville.....	53.77	70.01	52.42	58.73	26	86	27	b 72.67	5	38	2	45.67	4.3
Madison.....	52.5	64.5	55.0	57.33	28	78	28	70.50	2	39	6	e 49.00	4.3
Milwaukee.....	52.10	58.84	52.19	54.38	4	f 73	9	63.33	6	37	6	41.00	4.0
Platteville.....	54.50	73.71	57.03	61.75	28	93	28	77.67	1	38	18	49.67	4.3
IOWA—													
Dubuque.....	55.20	69.00	58.00	60.73	25	c 82	28	74.33	2	42	19	52.33	4.4
Fort Madison (g).....	58.52	74.64	64.71	65.96	25	90	25	78.00	2	40	17	53.00	4.2
Muscatine.....	51.10	69.55	55.00	58.55	25	86	27	75.00	2	h 35	17	45.67	4.1
Pella (i).....	46.48	70.42	---	58.45	25	88	29	73.00	2	28	17	41.00	---
Poultney.....	51.30	67.48	53.60	57.46	25	j 80	29	71.00	2	38	17	47.00	5.1
Quasqueton.....	54.23	68.81	56.27	59.77	25	83	27	73.87	2	39	17	46.76	5.0
MINNESOTA—													
Lac qui Parle.....	---	---	---	---	---	---	---	---	---	---	---	---	4.1
St. Anthony's Falls.....	50.42	66.03	51.65	56.03	25	k 86	28	74.00	1	35	1	36.00	4.3
St. Joseph's.....	46.00	59.84	51.00	52.28	23	88	23	72.00	10	32	10	33.67	5.4
NEBRASKA—													
Fort Pierre.....	54.48	70.32	64.03	62.94	25	90	25	77.67	9	40	8	47.00	4.9
Fort Union (l).....	46.48	62.94	55.81	55.08	24	c 80	24	68.00	6	m 32	8	39.67	---
CALIFORNIA—													
Sacramento, [Logan].....	---	---	---	62.00	---	77	---	---	---	48	---	---	---
San Francisco (n).....	48.95	64.01	50.60	55.66	---	---	---	---	---	---	---	---	---
Stockton.....	54.61	76.55	56.45	62.54	---	90	3	73.33	---	44	6	52.00	---
MEXICO—													
Mirador (o).....	---	---	---	76.55	---	---	---	82.62	---	---	---	64.62	---
SOUTH AMERICA—													
Assumption, Paraguay.....	67.55	75.26	70.90	71.24	n	83	8	80.00	9	50	9	59.00	3.6
Colonia Tovar (p).....	57.96	68.10	62.30	63.92	1	78	6	68.80	1	55	18	58.00	---
EASTERN CONTINENT—													
Mosul, Mesopotamia.....	---	---	---	76.72	---	96.8	---	---	---	55.6	---	---	---

a Observations taken at 7 a. m., 1 p. m., and 8 p. m.

b Same temperature on the 26th.

c Same temperature on the 27th.

d Same temperature on the 16th and 20th.

e Same temperature on the 6th.

f Same temperature on the 9th.

g Observations taken at 6 a. m., 12 m., and 7 p. m.

h Same temperature on the 3d.

i Observations taken at sunrise and 2 p. m.

j Same temperature on the 27th and 28th.

k Same temperature on the 28th.

l Observations taken at 6½ a. m., noon, and 6 p. m.

m Same temperature on the 8th and 11th.

n Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at 9 a. m., 59.00.

o Hours of observation not given.

p Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and sunset.

Mean at 9 a. m., 64.65. Mean at 3 p. m., 66.60.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	°	°	°	□		□		°		□		□	
Halifax (a) -----	53. 20	62. 70	55. 90	57. 27	14	77	-----	-----	1	43	-----	-----	-----
CANADA EAST—													
St Martin's -----	57. 6	74. 2	60. 9	64. 23	19	88	13	73. 5	1	41	8	50. 7	3. 8
CANADA WEST—													
Hamilton (b) -----	69. 0	-----	67. 5	68. 25	-----	85	28	78. 50	-----	53	8	55. 5	-----
MAINE—													
Carmel -----	60. 8	78. 0	58. 2	65. 43	5	90	20	72. 7	1	42	1	52. 3	5. 9
Fryeburg -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4. 5
Perry (c) -----	52. 5	63. 8	53. 4	56. 57	15	72	12	62. 7	1	37	10	52. 0	7. 0
Steuben -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6. 9
Windham -----	61. 4	75. 5	60. 2	65. 70	19	93	19	76. 0	1	37	1	49. 7	4. 3
NEW HAMPSHIRE—													
Concord -----	61. 1	74. 2	66. 2	67. 17	5	86	28	74. 7	1	46	23	57. 0	3. 7
Hanover -----	55. 2	72. 2	60. 0	62. 47	3	83	5	67. 9	1	42	1	53. 2	7. 1
Exeter -----	57. 2	72. 7	59. 0	62. 97	5	d 84	19	70. 0	4	46	1	56. 0	5. 5
Great Falls -----	60. 1	75. 0	59. 0	64. 70	5	90	19	75. 3	1	e 48	23	54. 3	5. 2
Londonderry -----	60. 4	74. 5	62. 3	65. 73	5	d 85	19	74. 3	1	49	23	55. 3	5. 0
Manchester -----	60 60	78. 3	60. 0	68. 30	19	92	19	77. 3	1	44	1	57. 7	5. 2
Salmon Falls -----	62. 3	74. 4	61. 7	66. 13	5	89	19	76. 7	3	52	23	54. 3	3. 9
VERMONT—													
Brandon -----	58. 2	70. 9	62. 1	63. 73	5	85	5	72. 5	1	44	10	52. 0	3. 5
Burlington -----	61. 9	64. 5	61. 9	66. 10	4	86	4	73. 7	25	51	25	55. 3	3. 2
Castleton -----	61. 8	74. 1	63. 8	66. 57	5	90	7	77. 3	30	44?	30?	55. 3	4. 4
Craftsbury -----	56. 3	69. 1	62. 2	62. 53	3	f 80	28	71. 0	1	g 45	25	h 51. 0	4. 6
Fairfax -----	62. 8	73. 6	63. 8	66. 77	13	i 84	14	76. 0	10	51	25	53. 3	-----
St. Johnsbury -----	55. 0	71. 8	60. 9	62. 57	5	j 82	19	71. 3	1	32	1	48. 7	3. 4
MASSACHUSETTS—													
Amherst -----	61. 0	75. 5	63. 9	66. 80	19	87	19	76. 7	1	40	1	53. 6	4. 7
Mendon -----	61. 2	74. 2	62. 0	65. 80	5	86	19	78. 1	1	49	22	55. 0	4. 8
Nantucket -----	62. 4	68. 5	59. 5	63. 47	20	83	20	74. 2	1	47	1	51. 7	4. 6
New Bedford -----	62. 7	71. 9	61. 4	65. 33	20	83	20	75. 8	1	48	1	54. 3	7. 0
Newburyport -----	60. 9	71. 6	61. 7	64. 73	19	86	19	76. 7	1	49	23	53. 1	8. 1
North Attleboro' -----	63. 5	74. 2	60. 6	66. 10	19	89	19	75. 8	1	51	1	55. 9	4. 1
Princeton -----	59. 7	69. 2	60. 8	63. 23	19	82	20	70. 7	22	k 51	22	52. 7	5. 1
Richmond -----	56. 4	79. 3	66. 5	67. 40	5	96	18	76. 7	1	40	9	52. 3	5. 4
Southwick -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3. 4
Springfield -----	61. 6	76. 1	65. 5	67. 73	19	88	19	76. 3	1	46	1	54. 0	3. 9
Taunton -----	64. 6	80. 4	64. 7	69 90	19	95	19	81. 7	1	50	1	58. 7	3. 4
Worcester -----	63. 0	73. 7	64. 9	67. 20	28	87	28	78. 5	1	49	22	55. 3	3. 8
RHODE ISLAND—													
North Scituate -----	61. 1	72. 6	62. 1	65. 27	19	86	19	77. 7	1	49	1	54. 7	5. 3
Providence -----	61. 0	75 1	61. 5	65. 9	19	88	19	74. 0	1	46	1	55	5. 5
CONNECTICUT—													
New London -----	63. 1	74. 6	63. 6	67. 10	20	91	20	78. 2	1	50	1	54. 0	-----
Pomfret -----	62. 2	72. 2	61. 8	65. 4	19	84	19	75. 3	1	45	1	52. 7	4. 8
Salisbury -----	63. 6	76. 4	63. 3	67. 77	28	88	28	76. 0	1	50	1	58. 0	-----
Saybrook -----	63. 5	74. 0	63. 2	66. 90	20	85	20	76. 0	1	52	1	57. 0	4. 2
West Cornwall -----	58. 6	72. 6	63. 3	64. 83	28	84	28	73. 0	1	44	1	54. 6	4. 3
NEW YORK—													
Angelica -----	60. 6	76. 7	60. 3	65. 87	27	m 90	27	80. 3	2	41	1	52. 5	3. 7
Baldwinsville -----	59. 7	74. 0	64. 9	66. 20	28	84	28	76. 3	1	46	1	55. 0	3. 9
Beaver Brook (n) -----	60. 7	77. 7	66. 7	68. 37	27	92	27	79. 00	1	o 48	22	58. 67	5. 2
Beverly -----	65. 0	73. 3	63. 6	67. 30	20	p 82	27	p 75. 0	1	50	1	58. 0	4. 6

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Observations taken at sunrise, 7 a. m., and 2 p. m. Mean at sunrise, 49 0.

d Same temperature on the 19th.

e Same temperature on the 3d.

f Same temperature on the 4th and 19th.

g Same temperature on the 26th.

h Same temperature on the 25th.

i Same temperature on the 15th.

j Same temperature on the 14th.

k Same temperature on the 23d.

l Same temperature on the 5th and 15th.

m Same temperature on the 29th.

n Observations taken at 5½ a. m., 12 m., and 7½ p. m.

o Same temperature on the 2d.

p Same temperature on the 28th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	○	○	○	□	○		○	□		□			
Buffalo, [Salisbury] (a).....	50.9	67.2	58.5	58.87	5	77	11	65.3	1	40	1	54.7	4.2
Canton.....	61.6	75.5	63.9	67.00	18	90	19	78.3	1	48	0	54.7	5.2
Fishkill (b).....	66.2	79.9	75.2	73.7		90				53			
Gouverneur.....	62.1	76.7	61.3	66.70	18	c 88	28	78.3	17	50	1	57.3	5.1
Leroy (d).....	65.5	77.5		71.50	27	90	20	77.0	1	51	1	51.0	4.2
Lodi.....	66.3	73.0	65.0	68.10	28	88	28	82.00	1	50	1	56.7	4.9
Madrid.....	61.5	71.9	60.8	64.73	18	85	28	74.6	1	49	5	52.0	4.5
New York city (e).....	62.8	76.4	67.5	70.72		85	20	79.6		49	1	59.6	
New York city, [D. & D. Inst.]	67.7	75.7	66.6	70.0	19	87	20	77.7	1	55	1	58.6	4.9
Penn Yan (f).....	56.10	76.76	65.83	66.23		90	27	79.33		36	1	51.0	5.2
Sag Harbor.....	65.2	78.5	62.6	68.77	19	90	19	79.00	1	48	1	59.7	4.6
Troy.....	63.9	79.0	69.5	70.80	5	91	19	79.6	1	50	1	61.6	6.0
Wampsville.....	62.6	78.1	62.8	67.83	6	g 89	28	79.0	1	47	1	58.0	4.4
NEW JERSEY—													
Bloomfield.....	64.1	78.1	64.3	68.83	19	88	28	77.3	1	48	1	57.3	4.6
Burlington.....	64.6	80.2	68.5	71.10	27	93	19	79.7	1	50	1	56.3	6.0
Lambertville.....	67.46	84.00	65.76	72.41	27	98	27	82.67	1	53	1	59.00	5.0
Newark.....				69.47			27	78.5			1	58.2	
PENNSYLVANIA—													
Bedford.....	66.15	82.59	69.23	72.99	29	96	27	86.5	2	53	9	58.3	5.7
Brookville (h).....	55.1	80.1	66.3	67.17	21	96	27	79.0	1	34	1	52.3	
Gettysburg.....	65.6	80.6	68.9	71.70	27	i 97	27	86.0	1	j 53	9	59.7	4.3
Harrisburg (k).....	68.7	82.5	74.6	75.27	28	96	27	87.7	1	56	10	67.7	4.2
Lima.....	66.4	77.2	66.6	70.07	27	90	27	81.5	1	52	1	56.6	4.9
Morrisville.....	63.8	77.2	65.2	68.73	27	94	27	78.3	1	52	1	56.7	3.3
Moss Grove.....	61.7	80.3	62.3	68.10	29	94	26	83.0	1	40	1	54.7	4.3
Norristown.....	64.9	78.8	67.8	70.50	28	93	27	80.3	2	52	1	57.5	4.8
Paradise.....				77.00									
Philadelphia.....	68.2	79.7	71.5	73.13	27	94	27	83.0	1	54	1	60.3	5.1
Pittsburg, [M. H.] (l).....	70.0	83.5	72.7	72.37	27	100	28	87.75	1	48	9	56.75	
Pittsburg, [O. S.].....	66.0	78.4	66.3	70.23	27	92	27	83.7	1	51	0	55.3	
Pocopson (m).....	61.8	81.8		71.80	28	95	28	83.0	2	45	1	60.0	5.9
Randolph.....	65.2	82.3	63.7	70.40	20	n 92	27	84.0	9	50	9	53.3	3.6
Warrior's Mark.....	61.3	76.7	63.6	67.20	27	91	27	82.4	1	43	1	55.9	4.7
West Haverford.....	60.3	80.2		70.25	28	94	28	81.0	2	44	1	55.5	4.0
MARYLAND—													
Frederick.....	70.0	82.1	70.1	74.07	28	98	28	88.17	1	j 56	1	60.5	3.8
Schellman Hall.....	67.2	79.1	67.9	71.40	27	94	27	i 84.7	1	54	1	59.3	3.9
DISTRICT OF COLUMBIA—													
Washington.....	71.2	81.4	72.0	74.87	28	96	27	88.3	1	58	1	63.5	4.1
VIRGINIA—													
Alexandria.....	70.6	81.1	71.4	74.37	28	95	27	86.8	1	j 57	1	61.2	3.9
Ashland.....	67.5	80.6	72.6	73.57	27	o 93	28	85.7	8	55	8	59.7	2.3
Crichton's Store.....	72.8	80.0		76.40	28	99	28	93.0	1	51	1	57.5	4.7
Lewisburg.....	65.4	79.8	67.6	70.93	27	92	27	83.0	1	52	1	59.0	3.5
Lynchburg.....	68.6	81.7	76.0	75.43	30	93	29	88.3	1	53	1	63.3	
Winchester.....	69.9	81.2	69.9	73.67	27	96	27	87.0	1	54	1	58.3	4.3
NORTH CAROLINA—													
Chapel Hill.....	70.4	84.5	72.9	75.93	30	100	28	88.3	1	50	1	56.3	6.4
Thornbury.....	69.6	84.8	71.0	75.13	27	i 99	30	87.9	1	52	1	55.8	4.9
SOUTH CAROLINA—													
Camden (p).....	72.3	85.5	76.9	84.90	29	103	29	93.0	3	54	2?	63.00?	5.1
St. John's (q).....	69.73	81.00	72.60	74.44		94	29	85.00		55	2	55.33	

a No observations after the 14th.

b Observations taken at 7 a. m., noon, and 6 p. m.

c Same temperature on the 19th and 21st.

d Very imperfect.

e Observations at sunrise, noon, 3 p. m., sunset, and 10 p. m. Mean at noon, 75.8; mean at sunset, 71.1.

f Observations taken at sunrise, 2 p. m., and sunset.

g Same temperature on the 29th.

h Observations taken at 5 a. m., noon, and 7 p. m.

i Same temperature on the 28th.

j Same temperature on the 2d.

k No observation at 9 p. m. on the 1st.

l Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at sunrise, 63.30.

m Observations taken at daybreak and 2 p. m.

n Same temperature on the 27th.

o Same temperature on the 28th and 29th.

p No observation at 9 p. m. on the 1st.

q Observations taken at sunrise, 2 p. m., and 9 p. m.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
GEORGIA—	°	°	°	°		°		□		□		°	
Culloden .....	79.7	85.4	78.7	81.27	27	100 <sup>a</sup>	27	93.3	1	b 57	1	59.3	4.9
Savannah .....	74.3	85.1	76.4	78.60	28	100	29	88.6	2	55	2	56.0	5.2
Sparta .....	69.8	88.2	76.3	78.1	29	98	29	86.3	1	52	1	54.3	5.0
Whitemarsh Island .....	73.8	80.7	75.2	76.57	30	93	29	85.0	2	c 55	2	56.0	4.8
FLORIDA—													
Cedar Keys .....	80.0	84.9	81.1	82.00	27	91	29	87.0 <sup>d</sup>	3	65	3	70.3	4.4
Jacksonville .....	78.2	85.5	77.8	80.50	28	94 <sup>e</sup>	30	87.3 <sup>f</sup>	3	61	3	65.7	4.1
Key West .....	80.03	87.13		83.58	11	91	11	86.50	2	g 78	20	79.0	4.7
Knox Hill .....	74.4	82.4	76.9	77.9	28	98	28	89.00 <sup>h</sup>	2	59	2	65.0	5.4
Warrington (i) .....	76.2	86.8	82.7	81.90	28	94	28	89.7	2	63	2	69.3	3.2
ALABAMA—													
Tuscaloosa .....	70.1	84.8	77.5	77.47	28	95	27	86.4	2	60	2	?	2.8
MISSISSIPPI—													
Garlandsville .....	78.4	91.3	79.3	83.00	28	103 <sup>h</sup>	29	92.3 <sup>a</sup>	2	74	2	65.5	4.1
Lake Washington .....	74.7	80.5	76.8	77.33	28	94	28	86.9	8	63	2	68.1	3.9
LOUISIANA—													
New Orleans (j) .....	74.4	83.9	77.5	78.60	28	k 95	29	88.3	2	63	2	69.7	4.2
TEXAS—													
Austin .....	74.7	85.1	75.8	78.53	23	92	21	86.7	10	68	10	71.0	5.9
New Wied .....	79.0	91.4	77.0	82.47	17	100 <sup>k</sup>	17	88.4	10	70	10	72.7	5.1
TENNESSEE—													
Glenwood .....	67.6	79.5	71.8	72.97	30	92	30	84.0	8	54	9	60.6	4.0
Knoxville .....	67.0	79.0	71.4	72.47	30	88	30	83.0	8	56	8	62.5	3.5
Memphis .....	77.3	85.8	76.4	79.83	28	96 <sup>l</sup>	29	91.3	2	m 64	10	66.7	3.6
KENTUCKY—													
Ballardsville .....	69.0	79.9	73.2	74.03	27	92 <sup>n</sup>	30	85.3	8	52	8	52.7	4.3
Danville .....	71.4	80.8	69.9	74.03	28	95	28	85.0	8	54	8	56.3	3.1
Millersburg .....	65.9	80.9	67.5	71.43	27	95	28	84.3	8	50	8	52.7	4.5
Springdale .....	60.9	82.1	72.0	71.67	27	95 <sup>a</sup>	30	84.2	10	46	8	53.0	4.3
OHIO—													
College Hill (o) .....	67.0	71.1	68.0	68.70	20	87	20	82.8	7	p 51	8	?	3.3
Gallipolis .....	70.2	80.3	71.2	73.57	28	92	28	85.0	8	55	8	57.3	---
Germantown .....	66.53	79.6	66.5	70.87	27	94	28	83.7	1	51	8	52.9	4.5
Granville .....	65.1	77.5	67.7	70.10	27	91	27	82.3	3	50	8	53.7	4.1
Hillsborough .....	65.1	76.0	66.7	69.27	27	90	27	81.6	8	49	8	51.8	3.2
Huron .....	67.2	76.0	64.8	69.33	27	97	27	84.0	1	45	1	53.3	3.3
Jackson .....	69.1	84.0	68.7	73.93	27	96 <sup>a</sup>	27	83.0 <sup>a</sup>	8	q 54	8	57.0	4.4
Marietta .....	63.6	78.5	66.4	69.50	---	92	27	83.0	---	50	9	56.7	4.1
Oberlin .....	65.8	77.4	66.2	69.8	27	93	27	85.3	1	51	1	55.0	3.0
Perrysburg (r) .....	69.3	83.2	67.7	73.40	27	96	27	86.7	8	51	8	53.3	4.8
Richmond .....													4.0
Savannah .....	75.4	83.0	65.0	74.47	28	100	26	88.00	1	s 52	8	56.7	3.9
Urbana (t) .....	62.4	81.07		71.73	---	93	---	---	---	44	---	---	4.2
Yankeetown .....	63.8		68.4	66.10	27	95	27	83.7	8	48	8	48.0	4.9
MICHIGAN—													
Ann Arbor, [Woodruff] .....	62.6	77.0	65.8	68.47	27	93	27	85.00	1	b 51	8	55.6	4.2
Ann Arbor, [Winchell] .....													3.9
Battle Creek .....	65.8	81.3	66.0	71.03	27	96	27	87.3	1	50	7	53.0	3.2
Cooper .....	68.4	75.6	64.3	69.43	27	91	27	87.3	7	48	7	q 51.7	3.8
Detroit (u) .....	69.13	77.53	66.23	70.96	27	94	27	87.6	1	52	9	v 59.0	5.2
Flint .....	66.3	81.3	63.9	70.50	---	94	27	86.0	---	48	7	50.0	---
Grand Rapids .....	64.2	75.9	66.9	69.00	27	89	27	84.0	7	48	7	49.7	3.8
Monroe, [Whelpley] .....													5.0
Saugatuck .....	61.36	73.63	62.30	65.76	---	91	---	---	---	48	---	---	---

<sup>a</sup> Same temperature on the 28th.<sup>b</sup> Same temperature on the 2d.<sup>c</sup> Same temperature on the 3d.<sup>d</sup> Same temperature on the 30th.<sup>e</sup> Same temperature on the 30th and 31st.<sup>f</sup> Same temperature on the 26th.<sup>g</sup> Same temperature on the 3d, 4th, 5th, 20th, 21st, 22d, and 28th.<sup>h</sup> Same temperature on the 29th.<sup>i</sup> Observations taken at sunrise, noon, and sunset.<sup>j</sup> No observations from the 17th to the 25th, inclusive.<sup>k</sup> Same temperature on the 24th and 29th.<sup>l</sup> Same temperature on the 29th and 30th.<sup>m</sup> Same temperature on the 9th and 10th.<sup>n</sup> Same temperature on the 28th and 30th.<sup>o</sup> No observations after the 21st.<sup>p</sup> Same temperature on the 8th.<sup>q</sup> Same temperature on the 9th.<sup>r</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.<sup>s</sup> Same temperature on the 8th and 9th.<sup>t</sup> Observations taken at sunrise and 2 p. m.<sup>u</sup> Observations taken at 8 a. m., 2 p. m., and 9 p. m.<sup>v</sup> Same temperature on the 1st.



No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
INDIANA—	°	°	°	°		°		°		°			
Kendallville (a).....	69.0	80.0	66.3	71.77	27	94	27	88.0	8	48	8	50.3	3.3
La Fayette.....	68.1	81.6	68.6	72.77	27	97	27	86.00	7	b48	8	52.0	4.6
Milton.....	68.3	79.8	66.8	71.63	27	96	27	85.3	8	50	8	50.7	3.7
New Harmony.....	71.1	83.7	71.8	75.53	30	97	30	88.3	8	51	8	56.3	4.7
Richmond (c).....	69.3	79.7	66.7	71.90	27	94	27	85.3	8	50	8	50.7	4.8
ILLINOIS—													
Athens.....	68.4	80.4	69.6	72.80	26	d92	27	85.7	7	46	7	52.7	4.2
Augusta.....	66.5	78.9	69.3	71.57	26	d91	27	84.0	7	46	7	53.3	3.6
Batavia.....	63.5	76.7	66.3	69.00	26	93	26	85.0	1	42	7	47.0	3.1
Ottawa.....	69.4	78.9	67.3	71.87	29	93	27	86.00	7	46	7	49.3	5.1
Upper Alton.....	69.5	79.0	70.9	73.13	27	e90	29	84.7	7	50	7	56.3	2.4
MISSOURI—													
Hannibal.....	70.3	79.9	70.0	73.40	29	f92	29	84.67	7	47	7	51.7	4.2
St. Louis.....	71.4	83.8	74.4	76.53	27	96	27	88.0g	8	50	7	57.3	3.1
WISCONSIN—													
Bellefontaine.....	64.97	78.67	66.77	70.11	26	95	28	86.67	7	45	7	45.33	4.7
Beloit.....	66.1	78.8	66.3	70.40	26	h92	27	86.0	7	i45	7	46.7	2.4
Janesville.....	64.7	77.5	64.7	68.97	26	h92	27	85.3	7	44	7	45.0	4.2
Madison.....	64.4	74.1	64.6	67.70	26	89	27	82.8	7	44	7	44.3	3.4
Milwaukee.....	65.2	70.7	62.7	66.20	27	91	27	86.0	8	43	7	44.0	3.7
Platteville.....	68.1	83.0	67.2	72.77	23	100	27	86.3	7	46	7	46.3	4.9
IOWA—													
Dubuque.....	65.0	77.4	68.3	70.23	26	h92	27	86.0	7	42	7	45.0	4.9
Fort Madison (j).....	71.5	83.5	74.0	76.33	19	100	26	89.6	7	47	7	50.0	4.0
Muscatine.....	61.70	79.63	65.73	69.02	26	h92	27	82.33	7	43	7	47.0	3.4
Pella (k).....	58.0	81.9	---	69.95	26	92	26	81.0	8	39	7	48.0	---
Poultney (l).....	62.4	78.3	62.3	67.67	23	96	27	82.3	7	41	7	43.0	5.2
Quasqueton.....	66.0	78.8	68.3	71.03	23	94	27	85.6	7	43	7	44.1	4.7
MINNESOTA—													
St. Anthony's Falls.....	62.9	77.8	62.5	67.73	26	h92	26	82.0	6	m42	6	46.0	3.1
St. Joseph's.....	59.9	73.9	63.4	65.77	13	88	13	75.7	22	48	22	51.67	5.3
NEBRASKA—													
Fort Pierre (n).....	62.5	73.9	67.8	68.07	18	85	18	74.3	7	b54	3	61.3	5.1
Fort Union (o).....	60.4	75.0	66.4	67.27	30	86	25	77.3	6	p53	6	58.3	---
CALIFORNIA—													
Sacramento, [Hatch] (q).....	54.1	76.0	65.3	66.86	---	87	10	78.2	---	46	6	55.2	---
Sacramento, [Logan].....	---	---	---	67.0	---	90	---	---	---	49	---	---	---
San Francisco (r).....	50.10	66.80	51.50	57.56	---	---	---	---	---	---	---	---	---
Stockton.....	60.9	82.6	63.7	69.07	---	88	10	76.3	---	50	6	57.0	---
MEXICO—													
Mirador (s).....	---	---	---	73.87	---	---	---	81.50	---	---	---	66.91	---
SOUTH AMERICA—													
Assumption.....	---	---	---	---	---	---	---	---	---	---	---	---	3.8
Colonia Tovar (t).....	56.90	67.50	61.40	63.00	9	78	9	68.40	23	54	20	58.40	---
EASTERN CONTINENT—													
Mosul, Mesopotamia (s).....	---	---	---	87.42	---	105	---	---	---	71	---	---	---

a Imperfect.

b Same temperature on the 8th.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Same temperature on the 27th and 29th.

e Same temperature on the 29th and 30th.

f Same temperature on the 30th.

g Same temperature on the 29th.

h Same temperature on the 27th.

i Same temperature on the 8th.

j Observations taken at 6 a. m., noon, and 7 p. m.

k Observations taken at sunrise and 2 p. m.

l Observations taken at 6 a. m., 1 p. m., and 8 p. m.

m Same temperature on the 7th.

n No observations after the 21st; observations at 8 p. m.

o Observations taken at 6½ a. m., noon, and 6 p. m.

p Same temperature on the 7th and 28th.

q Observations taken at sunrise, noon, sunset, and 10 p. m.; mean at sunset, 72.05.

r Observations taken at sunrise, 9 a. m., noon, and 10 p. m.; mean at 9 a. m., 61.83.

s Hours of observation not given.

t Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and sunset; mean at 9 a. m., 63.10; mean at 3 p. m., 66.10.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	°	°	°	°		°		°		°			
Halifax (a) .....	61. 10	65. 00	63. 60	63. 23	21	84	---	---	1	53	---	---	---
CANADA EAST—													
St Martin's .....	73. 2	87. 4	70. 4	77. 00	19	b 98	8	86. 0	12	57	2	64. 5	1. 7
CANADA WEST—													
Hamilton (c) .....	75. 6	---	75. 0	75. 30	---	86	19	82. 5	---	63	12	64. 0	---
MAINE—													
Carmel .....	69. 7	85. 3	66. 6	73. 87	20	96	4	82. 7	1	d 55	13	66. 0	4. 4
Fryeburg .....	---	---	---	---	---	---	---	---	---	---	---	---	3. 3
Perry (e) .....	62. 0	72. 5	64. 1	66. 2	5	86	5	75. 3	28	50	1	59. 3	4. 8
Steuben .....	---	---	---	---	---	---	---	---	---	---	---	---	4. 9
NEW HAMPSHIRE—													
Concord .....	69. 0	75. 3	70. 7	71. 67	20	f 94	3	84. 3	12	g 58	14	60. 0	3. 0
Hanover .....	62. 4	79. 9	67. 1	69. 80	20	89	4	78. 1	28	51	12	61. 5	4. 1
Exeter .....	64. 5	77. 8	68. 3	70. 20	4	92	1	80. 0 h	14	i 54	15	58. 0	4. 2
Londonderry .....	68. 4	80. 4	70. 5	73. 1	20	93	4	83. 6	14	54	14	56. 0	4. 3
Manchester .....	67. 5	85. 5	73. 9	75. 63	20	103	4	86. 3 ?	28	55	14	61. 8 ?	4. 5
Salmon Falls .....	70. 8	84. 4	71. 3	75. 50	4	96	4	85. 5	14	58	14	61. 8	4. 4
VERMONT—													
Brandon .....	67. 7	80. 5	70. 4	72. 87	20	92	20	82. 9	2	j 57	1	64. 3	3. 3
Burlington .....	71. 0	86. 0	71. 8	76. 27	20	98	4	85. 0	6	61	1	67. 3	1. 7
Castleton .....	71. 7	85. 4	70. 9	76. 00	20	102	20	90. 0	13	55	1	65. 3	2. 9
Craftsbury .....	64. 7	80. 8	70. 6	72. 03	20	94	20	85. 0	13	55	?	?	3. 5
St. Johnsbury .....	64. 4	80. 1	69. 3	71. 27	4	b 90	4	80. 0	2	36	1	62. 0	2. 1
MASSACHUSETTS—													
Amherst .....	68. 9	82. 0	71. 8	74. 23	4	94	4	85. 10	14	58	12	d 65. 7	3. 9
Mendon .....	70. 5	81. 3	69. 6	73. 80	4	98	4	83. 1	14	54	14	57. 1	4. 6
Nantucket .....	70. 0	77. 0	68. 2	71. 73	19	89	4	77. 7	16	k 60	15	63. 6	4. 3
New Bedford .....	69. 4	78. 5	69. 0	72. 30	5	92	5	82. 2	15	59	14	60. 8	6. 4
Newburyport .....	67. 7	80. 5	69. 2	72. 47	4	98	5	85. 0	14	56	14	57. 0	6. 0
North Attleboro' .....	70. 8	80. 7	68. 2	73. 23	---	96	4	85. 9	---	56	14	57. 7	4. 8
Princeton .....	66. 9	77. 1	68. 8	70. 93	4	89	4	81. 2	15	53	14	53. 9	4. 7
Richmond (k) .....	62. 8	85. 9	72. 4	73. 33	4	l 96	4	80. 7	11	54	13	65. 7	4. 5
Southwick .....	---	---	---	---	---	---	---	---	---	---	---	---	4. 1
Springfield .....	68. 5	82. 9	73. 7	75. 03	4	f 95	4	87. 0	14	55	14	58. 3	3. 8
Taunton .....	74. 1	86. 1	74. 2	77. 13	4	100	4	90. 3	14	59	14	60. 7	2. 9
Worcester .....	70. 9	80. 3	73. 4	74. 87	4	93	4	87. 8	15	53	14	56. 0	3. 2
RHODE ISLAND—													
Providence .....	67. 8	81. 4	69. 4	72. 9	4	94	4	83. 7	16	51	14	58. 0	4. 5
CONNECTICUT—													
New London .....	71. 3	83. 3	71. 0	75. 20	20	92	4	83. 0	14	52	14	64. 7	4. 3
Pomfret .....	69. 2	78. 7	68. 4	72. 10	4	f 90	4	82. 7	14	55	14	57. 0	4. 1
Salisbury .....	69. 6	83. 8	69. 8	74. 4	9	93	4	85. 7	15	50	14	64. 3	---
Saybrook .....	70. 0	82. 2	72. 0	74. 33	7	94	20	81. 67	2	62	14	64. 3	4. 1
West Cornwall .....	64. 1	80. 0	69. 4	71. 17	20	90	20	82. 6	14	i 56	14	60. 6	4. 2
NEW YORK—													
Angelica .....	64. 9	84. 6	68. 5	72. 67	20	94. 5	25	86. 0	11	51	12	j 61. 6	2. 2
Baldwinsville .....	66. 2	79. 5	71. 5	72. 4	19	b 88	20	81. 0	13	55	13	m 64. 6	2. 5
Beaver Brook (n) .....	65. 7	85. 1	77. 2	76. 00	21	95	21	85. 3	28	52	13	68. 0	---
Beverly .....	71. 4	80. 7	73. 8	78. 66	21	94	21	84. 3	14	61	14	64. 0	4. 8
Buffalo, [Hunt] .....	---	---	---	---	---	---	---	---	---	---	---	---	1. 7
Buffalo, [Salisbury] (o) .....	66. 3	80. 5	70. 6	72. 47	---	---	---	---	---	---	---	---	3. 1
Canton (p) .....	69. 8	84. 3	72. 9	75. 67	8	91	17	85. 3	13	50	1	68. 0	3. 0
Fishkill (q) .....	72. 5	86. 5	85. 5	81. 50	---	101	---	---	---	63	---	---	---
Gouverneur .....	71. 4	87. 2	70. 7	76. 43	22	97	20	86. 7	13	50	13	62. 0	4. 3
Leroy (r) .....	70. 7	83. 7	---	---	8	92	8	?	12	56	12	?	3. 1

a Observations taken at 6 a. m., 8 p. m., and 8 p. m.

b Same temperature on the 20th.

c Observations taken at 9 a. m. and 9 p. m.

d Same temperature on the 10th.

e Observations taken at sunrise, 7 a. m., 2 and 9 p. m. Mean at sunrise, 57. 10.

f Same temperature on the 21st.

g Same temperature on the 14th.

h Same temperature on the 5th.

i Same temperature on the 15th.

j Same temperature on the 13th.

k Observations omitted from the 22d to the 29th.

l Same temperature on the 19th and 20th.

m Same temperature on the 27th.

n Observations taken at 5 a. m., noon, and 7 p. m.

o Observations taken at sunrise, 2 p. m., and 9 p. m. Very imperfect.

p No observations after the 18th of the month.

q Observations taken at 7 a. m., noon, and 6 p. m.

r Very imperfect.



No. 20 —THERMOMETER AND FACE OF SKY, JULY, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Lodi .....	72.2	83.1	72.1	75.80	22	93	20	86.0	10	58	10	63.0	3.2
Madrid .....	73.6	83.5	70.4	75.83	19	92	4	86.0?	1	60	13	?	3.2
New York city (a) .....	71.5	83.3	76.2	78.39	102	19	19	88.6	72	10	10	79.0	---
New York city, [D. & D. Ins.] .....	74.4	82.2	75.0	77.20	95	20	20	86.6	60	14	14	62.0	4.7
Penn Yan (b) .....	63.52	83.39	72.93	73.28	95	20	20	79.67	51	13	13	65.33	4.7
Sag Harbor .....	71.3	82.7	70.1	74.70	94	4	4	85.7	61	14	14	65.0	4.7
Spencertown .....	69.8	85.0	71.4	74.73	20	98	21	85.5	14	56	14	63.0	2.8
Troy .....	71.9	87.7	78.3	79.30	20	100	20	89.8	20	59	14	69.9	4.7
Wampsville .....	69.3	84.4	69.7	74.47	8	c 94	21	84.0	12	d 58	10	e 66.0	4.2
NEW JERSEY—													
Bloomfield .....	72.2	84.0	71.5	75.90	21	101	21	87.0	12	61	11	60.3	3.9
Burlington .....	71.7	84.4	74.5	76.87	21	98	21	87.0	14	63	12	f 70.0	4.3
Lambertville .....	73.89	89.11	71.60	78.20	21	100	21	88.50	14	63	14	66.25	5.7
Newark (g) .....				75.72	21	98	21	86.62	28	57	14	62.9	---
PENNSYLVANIA—													
Bedford .....	71.9	82.7	75.9	78.83	20	100 h	20	88.0	11	60	11	70.3	5.2
Brookville .....	70.0	87.7	68.2	75.30	21	100 i	19	84.6 j	13	52	13	63.3	---
Freeport .....	73.1	89.1	76.6	79.60	22	102	20	88.7	9	k 60	10	68.7	3.1
Gettysburg .....	72.8	88.0	76.2	79.00	21	100	21	88.0	12	64	13	71.0	3.5
Harrisburg .....	77.0	82.6	82.3	80.63	22	100	21	90.6 i	12	l 70	11	m 78.6	3.3
Lima .....	73.8	83.5	72.5	79.93	21	95	7	89.1	16	63	13	67.7	4.2
Morrisville .....	70.3	83.0	71.7	75.00	21	98	21	85.0	13	62	14	65.0	2.7
Moss Grove .....	67.9	88.2	66.0	74.03	21	102	20	82.0	10	m 52	12	62.7	2.5
Norristown .....	72.2	84.7	73.7	76.87	21	97	21	85.6	14	63	14	67.3	3.9
Paradise .....				84.10									
Philadelphia .....	75.4	86.5	78.2	80.37	21	99	21	91.3	13	n 67	14	69.8	4.7
Pittsburg, [M. H.] (o) .....	77.5	86.5	82.9	81.26	22	96	20	88.0	13	68	13	72.2	---
Pittsburg, [O. S.] .....	71.8	86.5	75.5	77.93	20	k 98	22	87.3	13	59	12	67.7	---
Pocopson (p) .....	70.77	88.85		79.81	21	101	21	88.5		60	14	72.2	5.0
Randolph .....	72.2	87.5	69.3	76.33	21	103	20	87.0	10	55	10	64.7	2.8
Warrior's Mark .....	68.0	85.0	69.4	74.13	20	97	19	82.6	15	51	14	62.8	3.2
West Havenford (q) .....	69.1	85.9		77.50	21	98	21	89.5		60	15	70.0	3.1
MARYLAND—													
Frederick .....	76.5	89.1	78.4	81.33	21	100	21	90.7	14	67	13	71.5	4.1
Schellman Hall .....	74.6	85.6	75.7	78.63	21	97	21	87.6	13	65	13	69.3	4.0
DISTRICT OF COLUMBIA—													
Washington .....	75.2	89.4	79.0	81.2	21	100	20	89.8	13	67	13	68.5	4.2
VIRGINIA—													
Alexandria (r) .....	76.6	87.3	78.6	80.83	21	99	21	89.8	13	67	13	69.0	4.1
Ashland .....	72.6	87.6	79.5	79.90	21	100	31	87.33	11	f 64	10	72.0	2.0
Crichton's Store (t) .....	76.8	88.8	84.0	83.2	5	102	5	93.3	13	68	13	68.7	5.6
Lewisburg .....	73.4	90.3	75.3	79.70	18	99 u	5	85.0	12	l 64	12	71.3	3.2
Lynchburg .....	77.6	90.4	83.4	83.80	4	96 v	20	90.7	11	67	11	71.3	---
Montcalm (w) .....	79.14	93.24	77.77	83.38	21	106		?	29	70		?	4.8
Smithfield .....				79.21		94	5	87.25		65	13	72.0	---
NORTH CAROLINA—													
Chapel Hill .....	76.3	88.9	78.0	81.07	6	100	5	89.6	13	x 68	13	71.6	4.9
Thornbury (y) .....	75.1	87.6	75.9	79.53	5	100	5	88.9	12	l 68	13	69.7	5.0
SOUTH CAROLINA—													
Camden .....	79.2	88.1	80.1	82.47	6	96	6	87.3	28	71	28	74.5	5.0
St. John's (z) .....	73.71	82.58	76.39	77.56		93	9	85.33		68	27	73.67	---

a Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

Mean at noon, 81.97; mean at sunset, 79.00.

b Observations taken at sunrise, 2 p. m., and sunset.

c Same temperature on the 20th.

d Same temperature on the 25th.

e Same temperature on the 27th.

f Same temperature on the 15th.

g Observations taken at 7 a. m. and 5 p. m.

h Same temperature on the 21st.

i Same temperature on the 22d.

j Same temperature on the 4th.

k Same temperature on the 10th and 13th.

l Same temperature on the 13th.

m Same temperature on the 13th.

n Same temperature on the 14th.

o Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at sunrise, 78.13.

p Observations taken at daybreak and 2 p. m.

q Observations taken at 7 a. m. and 2 p. m.

r No observations for the first six days.

s Same temperature on the 11th.

t Observations taken at 6½ a. m., noon, and 6½ p. m.

u Same temperature on the 20th and 21st.

v Same temperature on the 31st.

w Imperfect.

x Same temperature on the 26th.

y Observations omitted after the 25th.

z Observations taken at sunrise, 2 p. m., and 9 p. m.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1854—Continued.

NAME AND STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—	°	□	°	°		□		°		□			
Augusta.....	76.8	88.0	81.9	82.23	1	94	1	83.0	22	a70	28	75.3	1.6
Richmond Hill.....	76.9	92.9	78.3	82.70	17	b98	16	87.3	27	70	28	71.6	5.1
Savannah.....	77.9	90.0	80.1	82.67	9	101	9	88.0	12	73	12	76.3	4.4
Sparta.....	73.7	92.8	79.1	81.87	21	98	18	88.0	14	c69	27	76.0	4.9
Whitemarsh Island.....	77.2	87.2	77.8	80.73	9	96	9	87.1	22	71	12	75.0	3.4
FLORIDA—													
Cedar Keys.....	82.6	87.0	83.5	84.37	9	d90	9	88.0	23	e77	24	79.7	4.0
Jacksonville.....	81.6	87.6	80.8	83.33	9	95	10	89.3	28	73	12	76.7	2.9
Key West.....	80.36	88.11		84.23	20	91	5	f88.7	9	b78	19	81.0	4.6
Knox Hill.....	77.19	85.84	78.20	80.41	5	94	2	85.0	20	g73	26	75.7	5.4
Warrington (h).....	81.8	88.1	85.7	85.20	1	i93	17	91.6	21	j76	21	79.3	4.2
ALABAMA—													
Tuscaloosa.....	77.1	88.6	79.9	81.53	18	95	1	86.0	13	72	12	73.9	3.8
MISSISSIPPI—													
Garlandville.....	80.7	94.3	81.9	85.63	1	106	1	92.5	12	k74	12	76.3	4.2
Lake Washington.....	76.7	89.1	79.4	81.73	1	l93	1	85.5	12	72	11	76.6	4.1
Vicksburg.....	80.0	90.2	80.4	83.53		95	1	89.7		70	12	m76.7	1.9
LOUISIANA—													
New Orleans.....	75.9	84.8	79.3	80.00	18	91	18	83.7	21	73	19	n76.3	4.1
TEXAS—													
Austin.....	76.7	88.5	77.0	80.57	25	95	20	o83.6	13	p70	13	75.3	5.0
New Wied.....	81.0	94.9	77.7	84.43	21	q102	19	88.6	21	72	10	79.0	6.5
TENNESSEE—													
Glenwood.....	75.8	87.9	77.7	80.50	21	95	25	86.67	11	68	11	71.80	3.6
Knoxville.....	76.7	85.3	74.7	78.90	18	93	1	82.7	15	67	26	73.6	3.8
Memphis.....	83.8	91.3	81.8	85.63	1	r97	1	92.3	10	s72	10	76.5	1.2
KENTUCKY—													
Ballardsville.....	77.1	89.4	80.5	82.33	4	t98	20	88.7	10	67	10	72.7	2.7
Danville.....	76.0	88.0	79.2	81.07	18	94	20	u85.3	27	68	10	73.3	
Springdale.....	65.5	91.8	80.9	79.40	20	n101	31	87.3	11	v53	11	68.5	2.7
OHIO—													
College Hill.....	81.1	86.6	79.4	82.37	21	96	31	88.8	10	68	10	72.8	2.1
Gallipolis.....	74.7	86.4	81.5	80.87	21	w94	31	88.6	11	65	11	x72.6	
Germanstown.....	71.4	88.0	72.1	77.17	20	98	30	85.5	12	57	13	66.9	3.1
Hillsborough.....	70.4	87.9	74.5	77.60	21	98	31	84.6	13	58	12	68.6	1.4
Jackson.....	73.1	90.6	73.8	79.17	21	101	31	86.3	11	62	11	69.7	4.0
Marietta.....	69.3	86.2	73.2	76.23	30	94	4	82.7	13	56	13	67.3	2.7
Oberlin.....	70.8	86.3	72.9	76.67	19	100	20	87.0	13	56	12	63.7	2.4
Perrysburg (y).....	75.5	91.4	74.6	80.50	17	799	31	88.0	12	59	12	67.0	3.3
Richmond.....													3.2
Savannah.....	85.1	92.7	72.1	83.30	18	z102	19	92.0	10	z54	9	73.3	2.7
Urbana (aa).....	66.77	88.29	80.4	77.53		97				55			2.5
Zanesville.....	71.0	91.0	78.00	80.00	20	104	20	88.0	13	62	13	70.0	3.6
MICHIGAN—													
Ann Arbor, [Woodruff].....	68.6	84.4	72.3	75.10	31	97	31	85.3	13	56	12	62.0	2.9
Ann Arbor, [Winchell].....													3.1
Battle Creek.....	72.8	88.7	75.2	78.90	31	100	31	90.0	27	51	12	63.0	2.3
Cooper.....	75.0	80.0	74.9	77.97	5	w94	19	86.3	12	56	12	63.3	2.6
Detroit (bb).....	75.95	83.77	70.44	76.72	19	96	4	87.67	12	57	12	61.67	3.4
Flint.....	72.7	85.4	69.4	75.83		99				55			
Grand Rapids.....	74.3	83.4	74.5	77.40	3	94	31	86.0	27	51	26	63.3	3.3

a Same temperature on the 23d and 28th.

b Same temperature on the 19th.

c Same temperature on the 26th and 29th.

d Same temperature on the 17th.

e Same temperature on the 29th.

f Same temperature on the 6th.

g Same temperature on the 28th.

h Observations taken at sunrise, noon, and sunset.

i Same temperature on the 5th, 6th, 7th, and 17th.

j Same temperature on the 24th and 31st.

k Same temperature on the 13th and 23th.

l Same temperature on the 20th.

m Same temperature on the 13th.

n Same temperature on the 21st.

o Same temperature on the 25th.

p Same temperature on the 14th and 15th.

q Same temperature on the 26th.

r Same temperature on the 24th and 25th.

s Same temperature on the 11th.

t Same temperature on the 17th, 20th, and 30th.

u Same temperature on the 30th.

v Same temperature on the 16th.

w Same temperature on the 31st.

x Same temperature on the 12th.

y No observations after the 22d of the month.

z Same temperature on the 19th and 20th.

aa Observations taken at sunrise and 2 p. m.

bb Observations taken at 8 a. m., 2 and 9 p. m. The 9 p. m. observations were omitted after the 17th.



## No 20.—THERMOMETER AND FACE OF SKY, JULY 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp	
MICHIGAN—Continued.	°	°	°	°	°	°			°				
Monroe, [Whelpley].....	68.5	73.3	64.6	68.80	17	90	17	80.67	11	54	12	56.0	4.2
St. James.....	72.22	84.0	72.26	76.16	---	94	---	---	---	56	---	---	5.0
Saugatuck.....													
INDIANA—													
Kendallville.....	75.16	90.3	71.4	78.95	21	102	18	88.7	9	a 55	26	b 65.3	1.9
Logansport.....	77.1	90.0	80.7	82.60	30	100	30	93.3	10	c 64	26	71.33	2.9
Milton.....	72.8	89.4	75.9	79.33	30	97	30	87.7	13	61	9	71.33	1.3
New Harmony.....	78.4	92.9	79.2	83.50	25	d 100	30	90.0	26	66	10	72.3	3.0
Richmond (e).....	71.2	89.2	70.0	76.80	19	f 100	21	87.0	12	62	12	67.3	3.7
ILLINOIS—													
Athens.....	76.16	90.8	77.4	81.45	17	g 97	31	89.0	27	65	10	70.6	3.1
Augusta.....	64.0	89.1	76.9	76.67	29	h 98	31	88.3	10	61	9	68.0	1.9
Batavia (i).....	70.1	82.8	73.0	75.3	7	j 95	7	85.0	27	53	27	60.3	1.7
Manchester (k).....	77.3	90.3	80.5	82.70	17	l 98	31	89.7	10	m 67	9	71.0	2.9
Ottawa.....	76.5	88.38	74.3	79.73	3	97	3	88.0	12	61	21	67.3	3.7
Upper Alton.....	76.5	89.9	78.1	81.50	29	99	31	89.3	10	65	9	69.3	4.9
MISSOURI—													
Hannibal.....	78.4	91.0	77.0	82.13	18	h 102	18	88.6	10	63	12	c 70.6	2.5
St. Louis.....	77.9	92.7	81.5	84.03	20	n 100	31	90.5	10	65	9	71.2	1.5
WISCONSIN—													
Bellefontaine.....	71.5	82.2	73.4	75.75	18	96	31	87.0	13	58	24	65.3	4.5
Beloit.....	72.5	84.4	72.9	76.60	2	p 94	18	88.0	12	58	21	65.0	3.1
Ceresco.....	73.0	79.48	67.11	73.20	18	98	18	89.3	26	53	26	61.0	5.3
Janesville.....	71.4	85.9	72.7	76.67	18	98	18	87.0	21	m 58	26	q 65.0	4.5
Milwaukie, [Lapham].....	72.2	78.3	71.8	74.10	3	93	3	86.7	21	57	12	f 62.3	3.0
Milwaukie, [Pickard] (r)...	73.48	87.71	74.67	78.62	18	100	3	89.33	10	53	9	67.0	4.3
Platteville.....	73.5	87.7	74.7	78.63	18	100	3	89.1	10	58	21	69.1	4.2
IOWA—													
Dubuque.....	72.2	84.7	74.9	77.27	2	99	31	87.7	9	s 61	21	67.7	3.9
Fort Madison (t).....	80.6	94.8	81.9	85.77	17	105	17	95.0	9	60	9	67.0	3.1
Muscataine.....	68.35	87.81	73.0	76.39	30	h 98	30	84.67	10	46	10	62.0	3.5
Pella.....	71.1	87.9	72.2	77.07	30	h 96	17	84.67	9	56	9	60.3	
Poultney (u).....	70.4	82.9	67.7	73.67	17	v 92	3	83.3	11	55	26	63.0	4.2
Quasqueton.....	72.3	84.6	72.9	76.60	18	95	18	86.23	9	60	9	66.0	4.2
MINNESOTA—													
Lac qui Parle (w).....	70.9	80.4	68.3	73.20	27	x 89	31	81.0	8	58	8	61.7	4.3
St. Anthony's Falls.....	68.3	82.5	69.2	73.33	2	93	30	88.0	11	52	8	60.7	4.1
St. Joseph's.....	68.3	72.4	64.2	65.63	26	80	8	70.6	2	y 56	20	60.0	4.2
CALIFORNIA—													
Sacramento, [Hatch] (x)...	61.2	88.7	74.9	76.24	---	---	---	---	---	---	---	---	---
Sacramento, [Logan].....				80.63	---	101	---	---	---	51	---	---	---
San Francisco (aa).....	51.87	70.65	54.16	60.15	---	---	---	---	---	---	---	---	---
Stockton (bb).....	69.0	89.77	73.71	77.49	---	98	24	85.33	---	62	20	68.0	---
MEXICO—													
Mirador.....				69.12	---	---	---	73.24	---	---	---	65.37	---
CENTRAL AMERICA—													
Truxillo, Honduras (cc)....	82.7	82.8	---	82.75	---	88	?	?	---	78	?	?	---
SOUTH AMERICA—													
Assumption.....	64.29	69.45	66.32	66.69	---	80	12	73.7	---	54	26	56.7	5.3
Colonia Tovar (dd).....	56.30	66.60	60.10	62.40	7	75	7	68.20	2	52	12	59.0	
EASTERN CONTINENT—													
Mosul, Mesopotamia (ee)....				92.13	---	109.6	---	---	---	76.6	---	---	---

a Same temperature on the 12th and 26th.

b Same temperature on the 12th.

c Same temperature on the 26th.

d Same temperature on the 30th.

e Observations taken at 7 a. m., 1 p. m., and 9 p. m.

f Same temperature on the 21st.

g Same temperature on the 18th, 19th, 29th, 30th, and 31st.

h Same temperature on the 31st.

i Observations omitted from the 13th to the 19th.

j Same temperature on the 19th.

k Observations taken at 7 a. m., 1 p. m., and 9 p. m.

l Same temperature on the 29th and 31st.

m Same temperature on the 27th.

n Same temperature on the 29th.

o Same temperature on the 18th.

p Same temperature on the 3d and 17th.

q Same temperature on the 25th.

r Observations omitted after the 21st.

s Same temperature on the 20th.

t Observations taken at 6 a. m., 12 m., and 7 p. m.

u Observations taken at 6 a. m., 1 p. m., and 8 p. m.

v Same temperature on the 18th and 31st.

w No observations for the first five days.

x Same temperature on the 28th and 31st.

y Same temperature on the 9th and 20th.

z Observations taken at sunrise, noon, sunset, and 10 p. m. Mean at

sunset 60.17.

aa Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at

9 a. m. 63.94.

bb Observations taken at 8 a. m., 2 p. m., and 9 p. m.

cc Observations taken at 9 a. m. and 3 p. m.

dd Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and sunset.

Mean at 9 a. m. 64.00. Mean at 3 p. m. 65.00.

ee Hours of observation not known.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	□	○	■	□		○		□		○			
Halifax (a) .....	56.60	60.90	58.80	58.77	1	79	---	---	28	47	---	---	---
CANADA EAST—													
St. Martin's .....	62.6	77.7	63.5	67.93	12	91	4	77.5	28	52	26	55.7	3.6
CANADA WEST—													
Hamilton (b) .....	71.3	---	70.0	70.65	---	85	22	81.0	---	60	7	63.0	---
MAINE—													
Carmel (c) .....	57.0	76.4	54.6	62.67	20	87	20	73.0	27	44	28	54.7	4.0
Fryeburg .....													3.6
Perry (e) .....	57.8	69.2	59.5	62.17	2	93	2	77.0	29	43	28	54.3	3.4
Steuben .....	59.7	72.6	57.8	63.37	2	89	2	78.0	28	45	28	53.3	5.1
NEW HAMPSHIRE—													
Concord .....	61.7	79.3	67.7	69.57	1	90	2	81.7	30	47	28	59.7	2.3
Hanover .....	56.6	76.1	66.2	66.30	24	87	24	77.4	29	45	28	59.2	4.0
Exeter .....	59.4	76.0	61.8	65.73	22	87	2	77.0	30	46	28	57.3	3.5
Great Falls .....	60.5	81.5	62.9	68.30	2	92	2	79.0	29	48	29	58.0	2.3
Londonderry .....	65.2	78.1	66.1	69.80	---	88	2	78.3	---	52	27	58.0	2.9
Manchester .....	60.0	81.4	69.9	70.43	13	93	13	80.7	30	49	29	60.3	4.2
Salmon Falls .....	64.2	79.7	66.4	70.1	2	93	2	83.0	28	50	29	57.3	3.3
VERMONT—													
Brandon .....	59.8	76.3	65.5	67.20	1	86	24	78.2	9	49	14	60.3	3.0
Burlington .....	68.8	79.5	67.2	71.83	1	91	24	79.0	23	55	26	61.0	2.2
Castleton .....	65.3	81.2	66.7	71.07	24	98	1	80.0	22	50	28	62.0	4.1
Craftsbury .....	59.1	72.1	63.0	64.73	30	88	30	72.7	7	50	7	53.0	3.7
St. Johnsbury .....	56.5	75.1	63.9	65.17	1	86	2	76.0	---	44	14	58.0	2.5
MASSACHUSETTS—													
Amherst .....	61.4	78.2	66.8	68.80	22	88	13	78.9	29	50	29	60.7	3.5
Mendon .....	61.5	76.7	64.0	67.40	22	90	13	77.1	29	50	29	56.0	4.5
Nantucket .....	67.8	74.0	65.9	69.23	2	84	2	77.5	23	58	29	61.3	3.4
New Bedford .....	67.1	77.8	67.9	70.93	22	86	2	77.7	30	55	29	61.3	6.1
Newburyport .....	62.5	76.7	65.4	68.20	2	94	2	82.2	28	53	29	57.9	5.5
North Attleboro' .....	64.5	75.2	62.9	67.53	21	90	21	77.3	29	49	29	56.0	4.7
Princeton (k) .....	61.4	74.2	63.4	66.33	22	83	5	73.4	30	49	27	56.5	4.4
Richmond .....	60.3	80.1	68.1	69.5	24	94	1	78.7	18	46	8	60.7	4.3
Southwick .....													2.7
Springfield .....	62.7	79.9	68.1	70.23	22	92	2	79.3	29	49	29	60.3	2.9
Taunton .....	63.5	82.5	62.4	69.47	22	94	2	78.7	30	50	29	59.7	2.3
Worcester .....	64.1	76.7	68.1	69.63	13	87	2	78.6	30	52	29	59.5	3.0
RHODE ISLAND—													
Providence (l) .....	63.1	77.3	65.5	68.6	2	87	2	81.0	29	50	29	58.7	4.3
CONNECTICUT—													
New London .....													4.3
Pomfret .....	63.4	74.2	63.5	67.03	22	87	2	76.3	28	54	27	57.3	3.4
Salisbury .....	64.0	78.0	65.7	69.23	22	90	22	77.3	52	52	29	59.3	---
Saybrook .....	67.5	79.6	60.0	69.03	2	90	2	81.3	30	50	27	62.0	3.8
West Cornwall .....	59.7	76.4	65.4	67.17	26	87	26	76.3	30	49	29	57.3	3.1
NEW YORK—													
Angelica .....	59.9	80.9	64.3	63.37	24	92	1	82.3	8	40	7	53.3	3.2
Baldwinsville .....	61.9	74.5	67.3	67.90	24	86	24	78.0	9	52	14	58.7	3.2
Beaver Brook (o) .....	59.5	81.0	74.2	71.57	22	94	22	81.0	8	45	7	60.0	---
Beverly .....	68.0	78.4	71.4	72.60	22	91	2	79.7	30	55	29	63.3	4.4
Buffalo, [Salisbury] (p) .....	61.6	76.7	65.7	68.00	30	84	1	76.3	8	47	7	58.0	3.5
Canton .....	64.1	79.9	68.1	70.70	30	93	24	80.7	14	52	15	57.7	4.9
Fishkill .....	67.7	74.4	78.5	73.53	---	100	---	---	---	57	---	---	---
Gouverneur .....	65.4	79.9	65.8	70.37	12	90	11	78.7	8	54	17	59.3	5.2
Leroy .....													3.1
Lodi .....	67.3	79.3	68.8	71.80	24	94	22	82.0	7	54	7	57.0	4.2

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c No observations for the first nine days.

d Same temperature on the 28th and 29th.

e Observations taken at sunrise, 7 a. m., 2 and 9 p. m. Mean at sunrise, 54.7.

f Same temperature on the 23d.

g Same temperature on the 30th.

h Same temperature on the 9th.

i Same temperature on the 18th.

j Same temperature on the 1st.

k Observations omitted after the 27th.

l Observations taken at 6 a. m., 2 p. m., and 10 p. m. Incomplete.

m Same temperature on the 29th.

n Same temperature on the 21st.

o Observations taken at 5 a. m., noon, and 7 p. m.

p Observations taken at sunrise, 2 and 9 p. m.

q Same temperature on the 11th.



No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	□	□	□	□	○		○		□		○		
Madrid												3.2	
New York city (a)	68.5	80.6	73.2	75.63	22	90	22	82.6	22	56	29	67.0	
New York city, [D. & D. Ins.]	70.9	79.8	71.6	74.10	22	92	22	83.5	22	60	29	63.0	
Penn Yan (b)	60.58	79.35	70.55	70.16		94	24	81.67		49	7	60.0	
Sag Harbor	67.7	81.3	67.3	72.10	22	93	2	81.3	29	52	29	62.3	
Smithville	62.4	78.1	65.6	68.70	30	90	30	77.3	8	50	15		
Spencertown	65.7	81.4	65.5	70.87	2	93	2	81.4	8	52	8	58.4	
Troy	65.2	82.2	72.8	73.40	22	92	1	81.5	9	56	7	66.1	
Wampsville	64.2	81.0	65.1	70.10	24	93	24	80.3	17	52	8	60.3	
NEW JERSEY—													
Bloomfield	66.6	82.6	68.4	72.53	25	99	22	85.2	29	55	29	60.5	
Burlington	66.4	82.1	70.2	72.90	22	94	22	82.7	8	55	8	62.7	
Lambertsville	68.19	85.91	68.90	74.33	25	97.5	1	85.17	8	54	9	65.17	
Newark (f)				71.56			2	82.5			30	62.0	
PENNSYLVANIA—													
Bedford	67.5	84.5	73.3	78.43	1	100	1	85.3	8	53	7	62.7	
Brookville	67.2	83.7	65.1	72.00	1	99	1	86.3	7	48	7	57.0	
Byberry	67.6	82.4	71.2	73.73	22	96	22	82.7	30	53	29	63.3	
Freeport	70.3	88.2	73.3	77.27	24	100	1	89.3	7	50	7	61.7	
Gettysburg	67.8	86.1	73.6	75.83	25	100	25	85.7	8	52	7	62.0	
Harrisburg	72.1	84.1	77.9	78.03	25	95	1	85.7	8	59	8	68.3	
Lima	68.5	79.2	69.0	72.23	25	89	1	81.9	30	59	8	64.5	
Morrisville	64.8	80.9	69.2	71.67	22	94	22	81.3	8	56	8	64.3	
Moss Grove	65.6	84.4	63.9	71.30	31	99	1	81.3	8	48	7	56.3	
Norristown	66.2	80.6	70.5	72.43	25	94	1	83.5	30	55	9	62.7	
Paradise				79.00									
Philadelphia	70.8	82.7	76.4	76.63	25	94	1	85.7	8	60	7	68.0	
Pittsburg	68.6	85.2	73.9	75.90	31	98	1	87.0	8	51	7	60.3	
Pocopson (i)	65.9	85.2		75.55	2	96	2	86.7?	8	51	8	65.7?	
West Haverford	64.2	82.7		73.30	2	97	2	88.0	8	51	8	62.0	
MARYLAND—													
Frederick	70.8	85.1	75.4	77.10	25	98	1	89.1	8	54	8	63.9	
Schellman Hall	70.6	83.4	73.0	75.67	22	98	25	86.3	7	58	8	65.7	
VIRGINIA—													
Alexandria	72.6	84.8	77.1	78.17	1	99	2	90.3	7	60	8	65.3	
Ashland	70.3	86.6	76.1	77.67	25	98	1	87.3	8	58	7	66.7	
Crichton's Store (l)	75.0	89.7	84.7	83.13	2	102	2	94.0?	8	62	8	68.0?	
Lewisburg	68.3	86.2	70.2	74.90	2	98	1	85.3	9	58	18	66.7	
Lynchburg	76.1	86.0	79.0	80.37	1	98	1	93.7	10	65	10	72.7	
New Creek Depot	69.2	79.5	73.9	74.20	25	93	?	?	?	60	?	?	
Smithfield				77.3		93	2	86.65		65	19	70.25	
NORTH CAROLINA—													
Chapel Hill	71.9	87.1	75.9	78.30	3	98	2	88.7	10	59	8	68.0	
SOUTH CAROLINA—													
Camden	75.1	87.1	76.1	79.43	27	96	1	86.8	30	66	19	73.0	
St. John's	73.80	84.35	77.42	78.52		92	2	84.67		67	30	72.33	
GEORGIA—													
Augusta (g)	77.7	87.3	87.46	84.15	27	98	3	90.0	10	70	10	76.5	
Savannah	76.9	89.0	79.6	81.83	3	101	3	90.3	31	71	20	75.7	
Sparta	74.1	90.5	79.5	81.37	3	99	2	87.7	19	69	19	72.7	
The Rock (t)	83.5					84				72			
Whitemarsh Island	76.2	84.1	77.7	79.33	3	95	3	87.0	20	70	20	73.3	
FLORIDA—													
Cedar Keys	81.0	85.7	82.0	82.90	1	91	2	88.3	9	71	22	76.0	

a Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.  
Mean at noon, 79.03; mean at sunset, 76.84.

b Observations taken at sunrise, 2 p. m., and sunset.

c Same temperature on the 18th.

d Same temperature on the 25th.

e Same temperature on the 1st.

f Observations taken at 7 a. m. and 5 p. m.

g Same temperature on the 30th.

h Same temperature on the 8th.

i Observations taken at daybreak and 2 p. m.

j Same temperature on the 22d.

k Same temperature on the 8th and 10th.

l Observations taken at 7 a. m., noon, and 6 p. m. Very imperfect.

m Same temperature on the 2d.

n Same temperature on the 11th.

o Same temperature on the 19th.

p Same temperature on the 2d and 3d.

q Observations taken at 7 a. m., 2 p. m., 4 p. m., and 9 p. m. Mean at

4 p. m., 87.5.

r Same temperature on the 4th.

s Same temperature on the 21st and 22d.

t Observations taken in the morning.

u Same temperature on the 3d.

No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	□	○	○	○		○		○		○		○	
Jacksonville	81.0	87.3	79.7	82.67	1	96	2	89.0 <sup>a</sup>	9	71	8	78.0	3.7
Key West (c)	80.16	87.38		83.77	4	93	4	86.5	25	78	28	80.0	4.7
Knox Hill (e)	79.4	87.3	79.7	82.13	3	100	2	89.3	9	74	10	76.3	5.0
Warrington (g)	79.5	86.6	84.7	83.6	1	94	2	89.0	23	74	23	76.3	3.3
ALABAMA—													
Tuscaloosa	77.4	91.6	80.8	83.27	4	100	4	88.7 <sup>i</sup>	7	71	18	?	3.0
Yorkville (j)				86.29	4	101			17	72			
MISSISSIPPI—													
Garlandville (k)	80.9	97.3	82.5	86.90		106	4?	?		76	17?	?	2.3
Lake Washington	76.2	88.3	79.3	81.27	4	94	11	85.6	23	71	17	74.5	2.2
LOUISIANA—													
New Orleans	76.9	86.1	80.1	81.03	4	93	3	85.0	29	73	31	77.3	4.5
TEXAS—													
Austin	76.7	90.7	78.4	81.93	16	96	13	84.7 <sup>m</sup>	29	70	27	75.0	4.3
New Wied	81.2	96.5	79.5	85.73	18	102 <sup>n</sup>	6	89.6 <sup>o</sup>	28	74	27	79.7	6.7
TENNESSEE—													
Glenwood	74.5	89.1	78.7	80.77	3	97	1	88.4	7	65	17	72.7	3.7
Knoxville	71.0	82.0	75.5	76.17	1	89	1	81.5	19	64	19	67.5	4.7
Memphis	82.3	92.0	82.1	85.47	29	99	2	90.7	18	72	17	75.0	1.3
KENTUCKY—													
Ballardsville	75.6	89.0	79.6	81.40	24	99	1	89.0	8	64	8	71.3	3.1
Danville	73.6	84.7	80.7	79.67	1	94	2	88.0	9	65	8	70.0	
Springdale	66.2	93.2	83.0	80.80	25	103	13	88.2	9	51	9	71.3	3.8
OHIO—													
College Hill	77.5	87.3	80.3	81.70	1	94	1	87.3	7	63	7	66.7	2.4
Gallipolis	73.8	83.9	78.3	78.67	1	98	2	92.3	18	62	8	68.3	
Germantown	69.1	87.1	70.9	75.70		98	1	85.3		58	8	63.0	4.0
Hillsborough (p)	69.8	85.5	72.8	76.03	24	97	1	85.5	7	59	7	64.6	3.7
Jackson	68.7	88.0	71.1	75.93	25	98	2	86.0	7	57	7	63.7	4.2
Marietta	65.9	83.1	70.2	73.07	25	95	2	85.0	8	50	8	60.3	3.0
Oberlin	69.2	80.9	69.0	73.03	30	100	1	85.7	9	55	7	60.7	2.2
Perrysburg													3.1
Richmond													3.2
Savannah	76.0	89.4	69.4	78.27	24	106	1	90.0	7	53	7	55.7	3.4
Urbana (r)	63.26	85.44		74.35		97				48			3.3
Yankeetown (s)	67.6	93.7	67.9	76.40	26	97	?	?	8	54	?	?	2.6
Zanesville	67.1	90.7	74.7	77.50	31	105	1	88.0	8	51	7	65.0	4.1
MICHIGAN—													
Ann Arbor, [Winchell]													2.8
Ann Arbor, [Woodruff]	65.8	85.7	70.2	73.90	30	100	1	86.6	18	52	8	61.0	2.7
Battle Creek	65.6	86.3	70.3	74.07	1	100	1	87.7	8	49	7	61.7	2.2
Cooper	68.7	82.3	68.4	73.13	30	98	1	89.7	9	52	9	62.3	2.3
Detroit (u)	68.5	82.7	69.0	73.40	30	96	1	?	7	56	7	60.0	4.0
Flint	68.2	83.9	68.9	73.67		100				50			
Grand Rapids	66.1	86.0	71.1	75.07	30	96	30	86.3	18	50	17	61.5	3.3
Monroe													4.3
St. James	65.6	73.4	63.5	67.50	29	88	29	79.2	14	50	14	57.3	4.3
Saugtuck	67.84	81.32	68.58	72.58		94				50			
INDIANA—													
Kendallville	68.8	89.2	69.1	75.70	30	100 <sup>w</sup>	30	86.0	7	52	8	62.0	1.9
Logansport	73.0	89.2	76.3	79.50	29	101	29	89.7	8	63	8	69.7	3.6
Milton	67.9	85.6	71.8	75.10	31	96	1	87.2	8	57	8	64.0	2.0

<sup>a</sup> Same temperature on the 1st.<sup>b</sup> Same temperature on the 9th.<sup>c</sup> Observations taken at 7 a. m. and 2 p. m.<sup>d</sup> Same temperature on the 28th, 29th, and 31st.<sup>e</sup> No observations after the 13th of the month.<sup>f</sup> Same temperature on the 10th and 11th.<sup>g</sup> Observations at sunrise, noon, and sunset.<sup>h</sup> Same temperature on the 2d.<sup>i</sup> Same temperature on the 3d.<sup>j</sup> Observations taken at 8 a. m., 2 p. m., and 8 p. m.<sup>k</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.<sup>l</sup> Same temperature on the 5th.<sup>m</sup> Same temperature on the 20th.<sup>n</sup> Same temperature on the 19th.<sup>o</sup> Same temperature on the 10th.<sup>p</sup> Observations at 9 p. m. omitted after the 14th.<sup>q</sup> Same temperature on the 17th and 18th.<sup>r</sup> Observations taken at sunrise and 2 p. m.<sup>s</sup> Observations omitted from the 10th to the 19th.<sup>t</sup> Same temperature on the 18th.<sup>u</sup> No observations at 9 p. m. for the first five days of the month.<sup>v</sup> Same temperature on the 7th.<sup>w</sup> Same temperature on the 31st.<sup>x</sup> Same temperature on the 15th.<sup>y</sup> Same temperature on the 16th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—Continued.	°	°	°	°		°		°		°		°	
New Harmony .....	75.5	89.9	76.6	80.67	8	101	3	92.5	8	65	9	70.5	3.1
Richmond .....	70.4	85.5	69.9	75.27	1	a 96	1	84.7	7	b 60	7	65.0	3.7
ILLINOIS—													
Athens .....	71.9	89.3	74.7	78.63	29	c 99	1	88.7	8	59	9	66.3	2.8
Augusta .....	69.3	88.0	74.5	77.27	31	99	31	88.3	8	55	8	66.3	2.0
Batavia (d) .....		95.2											2.5
Manchester (e) .....	73.2	86.9	77.4	79.17	1	f 98	1	90.0	8	60	9	65.3	3.2
Ottawa .....	69.9	86.2	71.5	75.87	30	98	30	85.0	7	58	7	62.7	4.1
Upper Alton .....	73.5	87.6	76.4	79.17	2	g 99	1	87.3	8	63	9	66.7	5.8
MISSOURI—													
Hannibal .....	75.2	90.5	83.9	83.20	29	104 g	29	92.3	9	59	9	67.3	2.7
St. Louis .....	75.9	91.1	79.9	82.3	1	100 f	1	91.4	8	63	9	70.7	2.2
WISCONSIN—													
Bellefontaine .....	66.9	83.6	70.2	73.57	22	98	29	84.0	7	51	7	58.3	4.4
Beloit .....	67.7	84.1	70.3	74.03	30	97	30	82.7	17	51	7	h 62.0	3.5
Ceresco .....	68.9	78.9	64.6	70.80	24	93	24	81.0	7	46	7	56.3	4.5
Janesville .....	66.4	83.8	69.4	73.20	29	f 95	29	83.2	7	i 53	7	60.0	3.4
Milwaukee .....	68.0	78.1	69.3	71.80	22	94	1	83.0	7	54	7	59.7	3.0
Platteville .....	71.2	87.2	71.6	76.67	28	f 98	31	86.3	8	52	16	65.0	3.8
IOWA—													
Dubuque .....	68.0	83.8	72.0	74.60	30	97	29	84.7	8	56	7	62.0	3.3
Fort Madison (j) .....	72.3	92.1	80.3	81.57	1	105	31	91.3	8	55	7	67.0	2.9
Muscatine .....	64.87	84.84	69.87	73.19	29	g 99	31	81.67	8	46	8	62.33	2.6
Pella .....	65.7	84.7	69.4	73.27	1	95	31	82.0	8	56	7	62.3	---
Poultney .....	64.7	81.1	65.4	70.40	22	k 92	29	79.7	8	l 52	7	58.0	3.7
Quasqueton .....	68.2	82.6	70.2	73.67	23	95	31	83.3	8	56	7	62.0	3.4
MINNESOTA—													
Lac qui Parle .....	72.0	81.3	72.3	75.20	22	93	21	86.7	8	59	8	60.0	3.6
St. Anthony's Falls .....	63.7	80.0	64.4	69.37	21	95	22	83.0	7	50	16	59.0	2.7
St. Joseph's .....	59.7	74.5	65.7	66.63	20	94	20	80.0	6	m 46	6	54.3	4.8
CALIFORNIA—													
Sacramento, [Hatch] (n) .....	55.9	81.9	67.2	70.31	---	96	16	85.0	---	49	---	---	---
Sacramento, [Logan] .....				69.47	---	99	---		---	52	---	---	---
San Francisco (o) .....	52.42	68.29	53.81	59.23	---								---
Stockton .....	65.94	82.55	71.23	73.24	---	97	17	86.0	---	59	27	64.0	---
MEXICO—													
Mirador (p) .....				68.83	---			70.25	---			66.87	---
CENTRAL AMERICA—													
Truxilla, Honduras (q) .....	81.5	82.2	---	81.85	25	86	25	85.50	8	77	5	79.5	---
SOUTH AMERICA—													
Assumption, Paraguay .....	63.9	71.1	68.0	67.67	21	84	21	79.7	26	52	26	58.7	4.4
Colonia Tovar (r) .....	56.50	67.55	61.64	63.62	24	74	24	66.40	15	53	4	60.0	---
EASTERN CONTINENT—													
Mosul, Mesopotamia (p) .....				92.02	---	109.4	---		---	76.2	---	---	---

a Same temperature on the 24th.

b Same temperature on the 8th, 15th, 17th, and 18th.

c Same temperature on the 30th and 31st.

d For the last six days of the month only.

e Observations taken at 7 a. m., 1 p. m., and 9 p. m.

f Same temperature on the 30th.

g Same temperature on the 31st.

h Same temperature on the 17th.

i Same temperature on the 8th.

j Observations taken at 6 a. m., 12 m., and 7 p. m.

k Same temperature on the 23d and 30th.

l Same temperature on the 16th.

m Same temperature on the 16th and 17th.

n Observations taken at sunrise, noon, sunset, and 10 p. m. Mean at sunset, 76.25.

o Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at 9 a. m., 62.39.

p Hours of observation not given.

q Observations taken at 9 a. m. and 3 p. m.

r Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and sunset.

Mean at 9 a. m., 65.19; mean at 3 p. m., 67.25.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	□	○	○	□		○		○		○		□	
Halifax (a) .....	50. 10	59. 80	57. 20	55. 70	7	74	—	—	22	37	—	—	—
CANADA EAST—													
St. Martin's.....	52. 9	69. 0	55. 0	58. 97	6	91	6	75. 5	30	29	21	44. 7	3. 6
CANADA WEST—													
Hamilton (b) .....	63. 6	—	64. 3	63. 95	—	86	5	82. 0	—	48	21	52. 0	—
MAINE—													
Carmel (c) .....	52. 0	70. 1	50. 6	57. 57	6	98	6	79. 3	30	26	21	31. 5?	4. 1
Fryeburg (d) .....	—	76. 4	—	—	—	—	—	—	—	—	—	—	3. 8
Perry (e) .....	48. 8	61. 4	51. 4	52. 25	7	80	7	68. 0	22	31	21	40. 7	3. 9
Steuben .....	52. 3	63. 9	51. 9	56. 63	2	f80	7	69. 0	22	34	21	39. 0?	5. 5
NEW HAMPSHIRE—													
Concord .....	54. 4	69. 9	58. 8	61. 03	6	94	6	80. 0	22	g 38	22	49. 0	2. 8
Hanover .....	49. 9	65. 7	54. 7	56. 77	6	90	5	75. 9	21	30	21	38. 8	4. 9
Exeter .....	51. 6	67. 5	55. 3	58. 13	6	91	6	77. 7	22	30	21	42. 7	3. 9
Great Falls.....	53. 7	72. 6	55. 9	60. 73	6	98	6	80. 6	1	34	21	45. 3	3. 3
Manchester .....	52. 1	71. 3	60. 6	61. 33	6	99	8	83. 3	21	h 34	30	47. 7	4. 0
Salmon Falls.....	55. 8	70. 3	58. 3	61. 47	6	98	6	84. 0	22	38	30	44. 8	4. 0
VERMONT—													
Brandon .....	54. 2	66. 6	57. 6	59. 47	5	88	5	79. 0	21	33	29	47. 3	3. 6
Burlington.....	55. 9	68. 5	58. 9	61. 10	5	92	5	81. 7	21	37	21	43. 3	2. 3
Castleton.....	56. 0	69. 1	56. 0	60. 37	5	93	6	83. 3	16	i 40	21	45. 3	3. 4
Craftsbury.....	50. 7	64. 3	55. 7	56. 90	6	92	6	78. 0	21	31	21	40. 3	4. 2
St. Johnsbury.....	48. 8	65. 1	48. 5	54. 13	6	93	6	75. 3	21	28	21	36. 7	2. 8
MASSACHUSETTS—													
Amherst.....	55. 3	75. 9	58. 6	63. 27	6	90	6	77. 8	30	34	21	43. 8	4. 0
Mendon .....	56. 1	70. 2	58. 2	61. 50	6	90	6	78. 2	22	36	30	47. 0	3. 4
Nantucket.....	61. 4	66. 7	60. 1	62. 73	6	j 78	9	74. 5	21	h 48	30	51. 3	4. 0
New Bedford.....	59. 5	67. 8	59. 0	62. 10	7	84	7	75. 7	30	39	30	46. 5	5. 2
Newburyport.....	55. 6	71. 4	59. 0	62. 00	6	96	6	84. 9	21	40	21	46. 6	5. 7
North Attleboro'.....	57. 3	69. 4	56. 1	60. 93	6	91	11	80. 8	22	38	30	44. 6	3. 4
Princeton.....	54. 1	65. 6	56. 1	58. 60	6	89	6	76. 3	21	37	21	42. 3	4. 1
Richmond.....	47. 1	67. 8	55. 9	56. 93	6	92	6	75. 7	22	27	22	41. 0	4. 6
Southwick.....	—	—	—	—	—	—	—	—	—	—	—	—	3. 3
Springfield.....	56. 0	71. 4	59. 5	62. 30	11	94	6	78. 7	6	36	21	45. 3	3. 0
Taunton.....	59. 2	72. 8	58. 2	63. 40	3	k 90	6	78. 7	14	l 43	21	53. 0	3. 0
Williamstown (m).....	54. 2	67. 3	59. 2	60. 23	6	91	11	78. 9	20	30	21	37. 5?	3. 8
Worcester.....	57. 6	68. 7	59. 3	61. 87	6	89	6	79. 0	21	40	21	45. 0	3. 1
RHODE ISLAND—													
Providence (n).....	57. 4	69. 4	57. 4	61. 4	6	88	6	78. 33	22	37	21	44. 67	4. 0
CONNECTICUT—													
New London.....	61. 3	72. 0	61. 5	64. 93	7	89	7	79. 0	22	43	21	50. 3	4. 1
Pomfret.....	57. 0	65. 8	56. 8	59. 87	6	84	11	75. 3	21	39	21	44. 3	3. 8
Salisbury.....	57. 5	69. 8	58. 4	61. 90	6	92	6	80. 0	21	34	21	43. 3	—
West Cornwall.....	54. 2	67. 4	57. 5	59. 70	6	91	6	77. 0	21	36	21	43. 0	3. 4
NEW YORK—													
Angelica.....	51. 6	73. 9	56. 2	60. 57	5	94	2	77. 6	30	28	21	g 42. 6	3. 9
Baldwinsville.....	56. 4	67. 2	61. 0	61. 53	6	86	6	79. 0	30	37	21	45. 0	3. 4
Beaver Brook (o).....	54. 1	74. 0	67. 2	65. 10	6	97	5	86. 0	30	34	21	50. 0	—
Beverly.....	60. 3	71. 1	63. 5	64. 97	3	89	6	83. 0	21	42	21	47. 0	4. 1
Buffalo, [Salisbury].....	57. 7	71. 9	60. 4	63. 33	5	88	6	77. 3	21	37	21	50. 0	4. 2
Canton.....	55. 6	69. 9	57. 9	61. 13	5	95	5	83. 3	21	g 32	30	44. 0	4. 5
Fishkill (p).....	60. 9	83. 1	68. 7	70. 90	—	100	—	—	—	42	—	—	—
Gouverneur.....	53. 9	70. 0	55. 3	59. 73	5	92	5	81. 3	30	26	30	41. 3	4. 3

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c No observation at 2 p. m. on the 21st of the month.

d Observations taken for 7 days only.

e Observations taken at sunrise, 7 a. m., 2 p. m., and 9 p. m. Mean at sunrise, 47.4.

f Same temperature on the 7th.

g Same temperature on the 30th.

h Same temperature on the 22d.

i Same temperature on the 17th, 21st, and 22d.

j Same temperature on the 9th.

k Same temperature on the 6th and 7th.

l Same temperature on the 21st.

m Observations irregular from the 17th to the 21st, inclusive.

n Observations taken at sunrise, 1 p. m., and 10 p. m.

o Observations taken at 5½ a. m., noon, and 7 p. m.

p Observations taken at 7 a. m., noon, and 6 p. m.



No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°			
Lodi.....	59.4	71.4	60.5	63.90	5	a 93	6	84.0	21	38	21	45.3	4.5
Madrid.....	54.9	66.5	56.3	59.23	5	92	5	80.7	30	35	21	49.3	4.3
New York city, (b).....	61.8	73.8	65.7	68.58	---	92	6	84.6	---	46	21	54.0	---
New York city, [D. & D. Inst.]	62.2	71.4	65.3	66.30	9	89	9	83.8	21	48	21	51.1	4.2
Penn Yan, (c).....	56.0	73.5	64.36	64.62	---	95	6	85.3	---	36	21	46.7	5.4
Sag Harbor.....	61.0	73.7	60.2	64.97	9	85	9	78.7	22	38	21	49.0	3.8
Smithville.....	55.2	69.6	58.4	61.07	5	93	8	84.0	30	32	21	43.3	4.8
Wampsville.....	56.3	73.1	59.0	62.80	5	94	6	81.0	30	33	21	43.0	4.1
NEW JERSEY—													
Bloomfield.....	59.8	75.7	63.2	66.23	3	95	9	84.7	22	38	21	47.5	3.3
Burlington.....	61.3	76.1	66.7	68.03	6	d 93	9	86.3	22	44	21	50.7	5.5
Lambertville.....	61.09	78.92	63.50	67.84	6	97	9	85.0	30	39	21	49.50	6.0
PENNSYLVANIA—													
Bedford.....	60.6	77.7	67.9	68.73	2	96	4	85.0	22	37	22	50.5	4.2
Brookville.....	57.2	77.3	59.8	64.77	5	99	2	82.0	30	32	30	44.3	---
Byberry.....	61.7	76.1	65.2	67.67	6	91	5	d 83.0	22	42	21	51.5	5.3
Freeport.....	66.2	81.0	68.3	71.83	5	101	2	88.0	22	41	21	52.0	2.9
Gettysburg.....	62.3	79.1	67.4	69.60	5	98	5	84.3	22	40	21	50.7	3.8
Harrisburg.....	67.4	79.6	73.2	73.40	5	a 97	5	r 88.0	22	47	21	56.0	4.1
Lima.....	61.8	73.8	63.7	66.43	6	90	6	82.6	22	40	30	48.9	4.6
Morrisville.....	59.7	75.4	63.0	66.03	6	91	9	82.0	22	44	21	52.0	3.5
Norristown.....	62.2	75.7	65.7	67.87	6	92	6	d 82.3	22	41	21	49.0	3.9
Paradise.....				73.00									
Philadelphia.....	65.2	76.2	69.2	70.20	6	93	6	85.2	21	48	21	52.5	5.1
Pittsburg, [Oakland Station]	64.2	79.4	71.0	71.53	2	e 96	3	87.7	22	f 44	21	53.3	---
Pocopson (g).....	62.4	79.0	---	70.70	1	97	5	87.0	22	39	22	h 53.5	---
Randolph.....	60.6	79.2	61.9	67.23	5	104	5	86.7	21	h 42	30	53.7	4.0
West Haverford.....	62.3	77.0	---	69.65	6	94	6	83.5	12	i 48	30	55.5	3.7
MARYLAND—													
Frederick.....	63.7	78.4	68.8	70.30	5	96	4	85.6	22	42	30	52.7	4.3
Schellman Hall.....	64.8	79.2	67.2	70.40	3	a 96	6	86.0	22	45	30	55.0	4.4
VIRGINIA—													
Alexandria.....	66.2	77.7	70.0	71.30	3	95	4	87.7	23	h 46	30	52.0	3.7
Ashland.....	64.2	85.9	71.3	73.80	4	102 k	5	87.0	22	l 46	22	58.0	2.2
Crichton's Store (m).....	71.9	84.2	82.2	79.43	4	101	3	91.0	22	54	21	60.5?	4.2
Lewisburg.....	64.0	80.5	65.5	70.0	5	97	7	81.3	22	49	21	56.3	4.0
Montcalm (n).....	66.2	80.4	68.1	71.57	6	95	8	82.0	16	51	21	56.7	5.0
Smithfield.....	---	---	---	73.10	---	92	4	84.75	---	43	30	54.50	---
Winchester.....	67.6	81.3	70.4	73.10	3	98	3	88.0	22	h 48	22	56.7	4.4
NORTH CAROLINA—													
Chapel Hill.....	68.2	83.8	72.7	74.90	5	98	4	86.3	22	50	22	59.3	5.2
SOUTH CAROLINA—													
Camden.....	71.4	82.8	73.1	75.77	5	97	5	84.0	23	54	23	62.0	5.4
St. John's (o).....	71.23	80.0	74.9	75.37	---	89	10	84.0	---	56	30	62.67	---
GEORGIA—													
Augusta.....	73.0	83.7	79.7	78.8	3	p 94	5	88.0	22	60	22	66.7	2.0
Savannah.....	73.8	84.1	76.4	78.10	5	94	10	84.3	23	62	22	65.6	4.9
Sparta.....	70.3	84.9	74.8	76.67	7	97	7	85.3	24	51	23	63.3	5.5
The Rock (g).....	73.8	---	---	---	---	78	---	---	---	68	---	---	7.2
Whitemarsh Island.....	74.2	80.9	74.2	76.43	11	92	11	84.0	22	62	22	65.0	4.6
FLORIDA—													
Cedar Keys.....	78.9	85.7	81.5	82.03	5	91	9	r 85.7	24	72	23	76.7	3.4
Jacksonville.....	79.2	85.1	78.4	80.90	13	93	12	85.3	22	s 72	22	73.3	4.0
Key West.....	79.57	85.70	---	82.63	12	90	12	86.0	24	h 76	30	77.5	4.1

a Same temperature on the 6th.

b Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

c Mean at noon, 72.5; mean at sunset 69.1.

d Same temperature on the 9th.

e Same temperature on the 3d, 5th, and 6th.

f Same temperature on the 23d and 30th.

g Observations taken at daybreak and 2 p. m.

h Same temperature on the 30th.

i Same temperature on the 22d.

k Same temperature on the 5th.

l Same temperature on the 23d.

m Observations taken at 7½ a. m., 12 m., and 5 p. m. Very imperfect at 5 p. m.

n Observations omitted on the first five days and last four days of the month.

o Observations taken at sunrise, 2 p. m., and 9 p. m.

p Same temperature on the 4th and 5th.

q Observation taken in the morning.

r Same temperature on the 10th.

s Same temperature on the 23d and 24th.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA--Continued.	°	°	°	°		°		°		°		°	
Knox Hill	74.5	86.1	78.2	79.60	7	97	8	88.3 <i>a</i>	22	67	22	70.0	5.1
Warrington ( <i>b</i> )	77.1	84.9	83.1	81.70	8	94	8	89.0	23	70	22	76.0	3.6
ALABAMA--													
Tuscaloosa	74.4	82.9	76.7	78.0	9	100	9	90.0	22	65	21	67.1	5.0
Yorkville ( <i>d</i> )				79.93	7	100			21	64			
MISSISSIPPI--													
Garlandville	77.2	90.7	80.3	82.77	7	104	10	92.3	22	58	22	70.0	4.8
Oxford ( <i>e</i> )	69.9	77.7	71.5	73.03	29	86	29	80.0	21	59	20	63.7	6.1
Vicksburg	75.37	85.77	77.97	79.70	11	94	10	87.67	21	65	21	66.33	2.2
TEXAS--													
Austin	73.1	85.1	75.3	77.80	15	96	15	83.7	26	65	26	68.7	6.4
New Wied	76.3	89.4	76.9	80.87	8	99	11	86.3	26	67	22	70.3	4.0
TENNESSEE--													
Glenwood	68.7	85.8	74.9	76.47	9	98	3	85.1	22	51	21	63.6	4.5
Knoxville	74.5	86.1	78.2	79.60		97	8	88.3		61	22	70.0	4.2
Memphis	76.1	84.7	75.3	78.70	9	98	9	88.7	21	60	20	64.0	1.3
KENTUCKY--													
Ballardville	70.3	83.6	74.6	76.17	3	98	4	86.3	21	55	21	61.3	3.5
Panville	70.6	87.5	74.8	77.63	5	99	5	88.0	21	54	21	63.0	2.7
Millersburg	71.4	85.1	77.1	77.87	5	97	5	89.0	21	52	20	61.3	3.4
Springdale	63.2	88.2	78.5	76.63	3	102	3	87.3 <i>g</i>	22	42	21	60.0	3.6
OHIO--													
College Hill	68.7	83.8	72.7	75.07	9	98	4	88.0	21	45	20	55.8	2.4
Gallipolis	69.6	82.7	76.8	76.37	5	97	5	89.0	22	49	22	60.7	
Germantown	63.5	81.9	67.1	70.83	4	100	4	83.1	22	42	21	53.4	4.2
Granville	64.1	80.2	67.6	70.63	5	98	5	83.3	22	43	21	52.0	3.3
Hillsborough	63.8	79.7	67.7	70.40	4	95	4	85.5	21	47	21	55.6	2.5
Jackson	63.7	86.2	68.3	72.73	4	100	9	85.3	22	41	22	54.3	4.5
Marietta	60.9	80.7	68.1	69.90	5	98	4	82.0 <i>i</i>	23	41	23	52.7	3.1
Oberlin	63.0	78.5	64.3	68.60	2	98	2	87.0	21	45	21	49.6	3.1
Perrysburg ( <i>k</i> )	63.5	79.7	63.6	68.93	6	98	6	87.7	20	46	20	54.0	
Richmond													3.0
Savannah	67.5	82.9	65.5	71.97	2	106	2	90.0 <i>g</i>	20	48	20	54.7	3.7
Urbana ( <i>l</i> )	59.10	80.90		70.00		98				37			3.6
Zanesville	62.5	85.0	70.5	72.67	5	107	5	86.0		43	21	56.0	4.2
MICHIGAN--													
Ann Arbor, [Winchell]													3.6
Ann Arbor, [Woodruff]	58.4	76.2	63.3	65.97	1	100 <i>i</i>	5	84.3	21	38	21	49.0	4.4
Battle Creek	61.5	78.9	65.2	68.53	4	101	5	88.3	16	42	21	53.3	3.1
Cooper	65.4	76.0	63.5	68.30	2	96	3	86.3	20	48	20	52.7	3.1
Detroit	60.9	74.1	63.5	66.17	5	94	5	85.3	21	42	21	50.3	5.6
Flint	58.2	75.6	60.5	64.77		96				35			
Grand Rapids	61.4	76.7	65.4	69.50	1	96 <i>m</i>	5	86.7 <i>n</i>	21	38	21	50.7	3.6
Monroe, [Whelpley]													4.7
St. James	62.6	65.7	57.2	61.83	4	88	5	81.3	21	40	21	49.0	4.8
Saugatuck	62.06	76.13	64.13	67.44		95				40			
INDIANA--													
Kendallville	61.2	77.4	61.4	66.67	1	95 <i>o</i>	5	83.3	22	42	21	51.0	2.7
Milton	63.2	80.2	67.1	70.17	4	98	4	83.5	22	45	20	53.0	3.1
New Harmony	67.5	85.0	72.5	75.00	9	101	9	86.0	21	50	21	57.6	3.9
Richmond ( <i>p</i> )	68.3	84.4	68.5	73.40	3	98	3	86.5	16	52	16	59.3	5.3
ILLINOIS--													
Athens	66.1	83.8	70.8	73.57	1	99	4	85.3	21	50	21	57.0	3.6
Augusta	63.1	80.6	68.6	70.77	1	98	1	86.0	22	43	21	53.0	3.7
Ottawa	62.1	79.5	65.4	69.00	4	98	1	85.3	22	46	21	54.7	4.8
Upper Alton	67.2	82.1	69.7	73.00	3	96	4	84.3	21	48	21	56.0	2.2

*a* Same temperature on the 8th.*b* Observations taken at sunrise, noon, and sunset.*c* Same temperature on the 23d.*d* Observations taken at 8 a. m., 2 p. m., and 8 p. m.*e* For the last eleven days only.*f* Same temperature on the 21st.*g* Same temperature on the 4th.*h* Same temperature on the 23d and 23d.*i* Same temperature on the 5th.*j* Same temperature on the 23d.*k* Observations omitted on the first five days.*l* Observations taken at sunrise and 2 p. m.*m* Same temperature on the 4th and 5th.*n* Same temperature on the 1st.*o* Same temperature on the 2d.*p* Observations omitted after the 18th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
MISSOURI—	°	°	°	°		°		°		°		°	
Hannibal .....	68.7	83.8	72.0	74.83	1	102 <i>a</i>	1	93.33	20	<i>b</i> 50	20	55.6	4.0
St. Louis .....	69.6	85.3	73.2	76.03	1	98 <i>c</i>	1	88.3	20	<i>b</i> 53	20	<i>b</i> 60.0	3.4
WISCONSIN—													
Bellefontaine .....	61.0	75.5	61.3	65.93	4	95 <i>d</i>	4	83.3	20	43	20	52.3	4.6
Beloit .....	59.1	76.3	61.9	65.77	1	95	1	84.3	21	36	20	48.0	3.1
Ceresco .....	58.3	69.0	55.1	60.80	4	88 <i>d</i>	4	79.0	20	34	20	38.7	4.8
Janesville .....	59.1	76.6	63.4	66.37	1	95 <i>e</i>	5	85.0	21	40	20	47.3	4.0
Madison .....	59.8	73.6	62.5	65.30	5	93	1	81.3	21	42	21	46.7	3.5
Milwaukee .....	61.9	71.8	63.3	65.67	5	93	5	83.7	21	45	20	52.0	4.0
Platteville .....	63.0	80.3	64.9	69.37	1	100	1	88.2	21	42	21	54.7	4.3
IOWA—													
Dubuque .....	60.8	76.8	66.6	68.07	1	97	1	86.0	16	<i>f</i> 50	21	55.0	3.4
Fort Madison ( <i>g</i> ) .....	63.0	82.4	72.7	72.70	4	102	1	91.0	22	44	21	55.0	4.4
Muscatine .....	58.77	80.13	65.47	68.12	1	99	1	84.33	21	37	21	50.0	3.3
Pella .....	60.7	80.0	62.1	67.60	2	95 <i>h</i>	1	83.3	20	42	20	49.7	---
Poultney .....	59.4	73.3	58.7	63.80	1	93	1	79.7	21	43	20	50.7	4.7
Quasqueton .....	59.3	75.9	62.8	66.00	2	93	1	83.5	21	40	20	50.4	4.4
MINNESOTA—													
St. Anthony's Falls .....	53.5	71.7	56.9	60.70	1	88	2	76.3	15	<i>f</i> 36	15	48.7	3.4
CALIFORNIA—													
Sacramento, [Hatch] ( <i>i</i> ) .....	51.4	76.3	62.7	65.23	---	87	19	78.7	---	47	11	60.0	---
Sacramento, [Logan] .....				65.05	---	90	---	---	---	48	---	---	---
San Francisco ( <i>j</i> ) .....	53.30	67.73	54.40	59.21	---	---	---	---	---	---	---	---	---
Stockton ( <i>k</i> ) .....	63.13	78.93	66.63	69.56	---	90	18	78.00	---	58	15	62.0	---
MEXICO—													
Mirador ( <i>l</i> ) .....				69.35	---	---	---	71.73	---	---	---	68.0	---
SOUTH AMERICA—													
Colonia Tovar ( <i>m</i> ) .....	56.36	68.10	60.93	63.51	<i>n</i>	78	<i>n</i>	68.20	9	54	12	58.60	---
EASTERN CONTINENT—													
Mosul, Mesopotamia ( <i>l</i> ) .....	---	---	---	81.42	---	101.4	---	---	---	63.4	---	---	---

*a* Same temperature on the 4th and 8th.*b* Same temperature on the 21st.*c* Same temperature on the 8th.*d* Same temperature on the 5th.*e* Same temperature on the 3d, 4th, and 5th.*f* Same temperature on the 20th.*g* Observations taken at 6 a. m., 12 m., and 7 p. m.*h* Same temperature on the 3d.*i* Observations taken at sunrise, noon, sunset, and 10 p. m. Mean at sunset, 70.36.*j* Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at 9 a. m., 61.43.*k* Observations taken at 8 a. m., 2 p. m., and 8 p. m.*l* Hours of observation not given.*m* Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and sunset. Mean at 9 a. m., 65.90; mean at 3 p. m., 66.27.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7½ a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	°	°	°	°		°		°		°			
Halifax (a) .....	46.70	55.10	52.40	51.40	29	69	---	---	21	35	---	---	---
CANADA EAST—													
St. Martin's .....	41.92	59.69	48.90	50.17	7	78	30	63.1	18	25	19	35.0	4.5
CANADA WEST—													
Hamilton (b) .....	53.03	53.00	53.00	53.01	7	c 68	8	68.00	19	38	19	39.50	---
MAINE—													
Carmel .....	37.83	57.12	41.95	45.63	7	d 75	30	62.67	11	24	20	35.0	4.9
Fryeburg .....													4.7
Perry .....	41.35	55.13	45.13	47.20	5	e 65	30	58.67	21	27	20	36.33	4.8
Steuben .....	43.90	50.70	45.0	46.53	7	f 63	30	61.33	6	g 30	20	33.67	6.4
NEW HAMPSHIRE—													
Concord .....	43.68	58.68	49.55	50.64	7	h 72	30	63.0	20	26	19	37.67	4.0
Hanover .....	40.74	56.02	45.82	47.53	12	70	30	63.60	20	24	20	33.00	6.0
Exeter .....	42.71	57.39	46.29	48.80	7	71	12	63.33	20	i 28	20	35.0	4.5
Great Falls .....	44.90	61.94	49.45	52.10	7	78	12	66.67	20	30	20	40.67	4.7
Londonderry .....	43.61	60.58	50.35	51.51	7	j 75	12	67.0	5	g 28	19	39.67	4.1
Manchester .....	42.22	61.12	51.47	51.60	7	h 74	30	63.33	20	27	20	39.33	4.9
Salmon Falls .....	44.52	58.80	48.81	50.71	7	76	12	66.67	21	30	20	40.0	5.0
VERMONT—													
Brandon .....	44.65	58.47	49.81	50.98	7	f 74	30	67.0	22	32	19	39.0	5.0
Burlington .....	46.26	58.81	49.55	51.54	30	75	30	67.67	20	30	15	40.67	3.2
Castleton .....	43.93	60.13	49.19	51.08	11	h 78	30	66.67	18	30	19	38.33	5.3
Craftsbury .....	41.16	54.45	46.35	47.32	28	73	30	64.0	20	27	16	33.0	5.7
St. Johnsbury .....	38.77	52.58	46.03	45.79	7	70	31	63.0	22	25	19	35.0	3.8
MASSACHUSETTS—													
Amherst .....	44.4	59.54	50.59	51.51	h	76	12	66.0	20	27	20	37.2	4.7
Mendon .....	48.0	56.87	51.0	51.96	9	75	9	67.0	20	33	18	39.2	4.9
Nantucket .....	54.61	59.32	54.41	56.11	12	70	9	63.6	20	42	18	45.3	4.3
New Bedford .....	50.74	60.08	52.81	54.54	9	72	h	64.5	20	33	19	40.5	6.0
Newburyport .....	47.91	59.80	51.50	53.07	h	79	12	70.4	20	35	18	40.0	7.1
North Attleboro' .....	45.94	60.86	47.87	51.56	9	78	h	66.8	19	31	19	36.67	4.6
Princeton .....	51.71	57.80	48.93	52.81	9	73	12	64.33	15	30	15	36.67	4.8
Richmond .....													4.8
Springfield .....	44.52	62.93	49.42	52.29	9	80	h	66.0	20	25	20	38.0	4.2
Taunton .....	49.00	62.42	51.39	54.27	h	80	8	69.33	20	29	19	38.0	3.0
Williamstown .....	48.35	58.10	48.50	50.15	12	73	12	65.0	20	25	18	36.0	4.8
Worcester .....	46.90	59.81	50.11	52.30	9	77	12	66.0	20	k 30	19	38.0	4.4
RHODE ISLAND—													
Providence (l) .....	47.6	60.8	50.4	52.9	8	77	9	67.0h	20	33	19	38.7	4.8
CONNECTICUT—													
New London .....	49.74	63.08	52.13	54.98	h	m 75	9	67.0	20	36	20	43.33	4.9
Pomfret .....	47.00	59.03	49.93	51.99	9	73	12	64.33n	20	31	19	37.67	4.3
Salisbury .....	46.74	60.03	49.26	50.71	8	h 74	12	67.33	20	o 28	20	38.00	---
Saybrook (p) .....	51.16	60.70	53.77	55.21	8	75	8	68.0	20	36	18	42.0	4.8
West Cornwall .....	45.83	57.67	49.53	51.01	8	73	12	66.0	18	26	18	34.0	4.2
NEW YORK—													
Angelica .....	42.0	59.8	45.5	49.10	11	76	30	64.0	20	22	19	32.0	4.6
Baldwinsville .....	46.45	55.81	52.90	51.72	11	69	30	63.2n	20	30	19	36.2	3.8
Beaver Brook (q) .....	44.7	62.6	55.3	54.2	12	80	12	69.0	20	23	20	37.0	---
Beverly .....	49.58	60.77	54.48	54.94	h	75	12	70.0	20	32	19	40.0	4.7
Buffalo, [Salisbury] (r) .....	50.53	60.43	51.40	54.12	30	71	30	63.3	19	32	16	35.5	6.4
Canton .....	46.85	57.32	49.12	51.10	30	74	30	66.7	16	s 30	19	30.7	6.9
Fishkill (t) .....	51.06	72.03	57.45	60.18	---	87	---	---	---	34	---	---	---
Gouverneur .....	43.26	55.32	49.84	49.47	30	71	30	65.67	20	24	18	32.0u	6.6
Lodi .....	48.97	60.45	50.41	53.28	7	v 76	30	66.0	19	g 28	15	36.0	5.5

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Same temperature on the 8th.

d Same temperature on the 28th.

e Same temperature on the 12th and 28th.

f Same temperature on the 30th.

g Same temperature on the 20th.

h Same temperature on the 12th.

i Same temperature on the 22d.

j Same temperature on the 27th.

k Same temperature on the 25th.

l Observations taken at sunrise, 2 p. m., and 10 p. m.

m Same temperature on the 21st.

n Same temperature on the 9th.

o Same temperature on the 21st and 22d.

p Observations taken at 7 a. m., 2 p. m., and 10 p. m.

q Observations taken at 6 a. m., noon, and 6½ p. m.

r Observations very irregular.

s Same temperature on the 19th and 20th.

t Observations taken at 7 a. m., noon, and 6 p. m.

u Same temperature on the 19th.

v Same temperature on the 11th.



No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Madrid (a) .....	42.62	54.28	47.19	48.03	7	70	7	62.7	20	30	19?	32.7	6.5
New York city (b) .....	51.71	63.55	55.97	58.65	---	80	12	72.00	---	36	19	44.60	---
New York city, (D. & D. Inst.)	53.38	61.57	55.17	56.71	8	e76	9	68.67	20	37	20	41.67	4.0
Penn Yan (d) .....	45.84	60.81	53.00	53.22	---	80	7	68.67	---	30	19	35.0	6.4
Sag Harbor .....	50.8	66.46	54.5	57.25	9	82	10	69.3	21	38	21	45.3	4.6
Smithville .....	46.71	58.06	49.29	51.35	29	74	30	65.67	20	31	19	33.67	5.4
Spencertown .....	45.55	59.87	49.84	51.75	7	f78	12	71.0	20	25	20	34.0	4.0
Wampsville .....	45.87	60.48	50.39	52.25	7	e76	7	68.00	20	29	15	34.00	5.6
NEW JERSEY—													
Bloomfield .....	50.06	64.04	52.85	55.65	9	83	12	70.0	18	32	19	41.5	3.8
Burlington .....	49.10	64.81	58.77	57.56	8	f80	12	72.0	18	g32	20	39.33	6.4
Lambertville .....	47.10	66.66	50.97	54.91	12	80	12	72.33	20	28	19	38.67	5.8
Newark (h) .....	---	---	---	51.08	---	73	?	75.00	?	33	?	28.00	---
PENNSYLVANIA—													
Bedford .....	44.76	61.96	52.35	53.02	---	77	11	69.0	---	27	20	35.33	4.5
Brookville (i) .....	41.17	60.72	45.33	49.07	11	j72	12	60.0	6	k30	16	36.6	---
Byberry .....	49.39	64.08	53.97	55.81	9	79	12	69.67	20	31	19	40.0	4.3
Freeport .....	52.29	65.42	53.87	57.19	2	l82	2	79.67	20	m30	19	41.67	4.3
Gettysburg .....	46.76	66.05	53.81	55.54	12	83	12	70.33	20	26	20	37.0	3.4
Harrisburg .....	51.27	65.65	59.07	58.66	12	80	12	72.67	20	33	20	40.67	3.5
Lima .....	47.13	63.26	51.69	54.03	7	78	30	66.3	18	29	19	37.4	4.0
Morrisville .....	49.26	64.71	52.55	55.51	8	c80	12	69.0	20	32	18	42.67	2.9
Moss Grove .....	44.37	63.12	47.90	51.86	9	84	2	67.0	19	26	21	34.0	4.7
Norristown .....	48.25	62.71	53.10	54.69	12	78	12	71.33	20	29	19	38.67	4.5
Paradise .....	---	---	---	64.00	---	---	---	---	---	---	---	---	---
Philadelphia .....	53.81	64.90	58.65	59.13	9	79	12	73.7	20	37	19	43.0	4.5
Pittsburg, [M. H.] (n) .....	58.33	65.75	63.25	62.44	11	78	11	70.7	9	50	4	53.3	---
Pittsburg, [O. S.] .....	50.58	62.74	56.16	56.49	1	74	1	68.00	20	30	19	39.33	---
Pocopson .....	48.77	65.84	53.47	56.03	8	o81	12	73.0	20	32	19	39.0	4.2
Randolph .....	47.29	64.58	50.58	54.15	8	83	7	65.33	19	28	19	35.0	4.4
West Haverford .....	50.67	62.22	---	56.44	8	o78	12	71.0	20	30	19	40.0	4.2
MARYLAND—													
Frederick .....	48.47	64.75	54.28	55.83	12	80	12	70.63	20	29	20	37.40	3.5
Schellman Hall .....	52.48	68.39	54.55	58.47	8	c85	3	69.33	20	28	20	36.67	3.7
DISTRICT OF COLUMBIA—													
Washington .....	50.72	66.63	56.38	57.91	8	p79	3	72.0	21	33	20	41.5	---
VIRGINIA—													
Alexandria .....	50.66	65.50	55.84	57.33	12	78	3	73.33	20	m33	20	39.67	3.5
Ashland .....	50.22	69.29	55.51	58.34	9	l82	12	71.1	19	30	19	41.0	3.8
Crichton's Store (g) .....	59.62	74.20	64.00	65.94	12	r85	12	77.0	---	44	24	48.0	2.7
Lewisburg .....	48.06	67.58	53.78	56.47	3	80	3	69.33	18	s32	19	42.0	4.8
Montcalm (t) .....	54.77	69.94	58.70	61.14	9	86	10	76.6	20	39	16	49.0	2.5
Smithfield .....	52.48	---	---	60.72	---	84	---	---	---	38	---	---	---
Winchester .....	51.16	66.45	56.16	57.92	12	82	12	74.0	21	33	20	42.00s	4.0
NORTH CAROLINA—													
Chapel Hill .....	54.23	72.55	61.16	62.25	9	u87	13	76.67	20	38	20	48.67	6.5
SOUTH CAROLINA—													
Camden .....	55.19	73.35	58.39	62.31	11	r85	3	76.34	19	v39	20	49.67	2.8
St John's (w) .....	56.07	70.07	60.85	62.33	---	82	14	75.67	---	44	20	51.33	---
GEORGIA—													
Augusta (x) .....	57.79	69.25	60.42	62.49	---	?	---	?	---	?	---	?	---

a Observations very irregular.

b Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.; mean at noon, 61.61; mean at sunset, 60.42.

c Same temperature on the 9th.

d Observations taken at sunrise, 2 p. m., and sunset.

e Same temperature on the 29th.

f Same temperature on the 9th and 12th.

g Same temperature on the 20th, 21st, and 22d.

h Observations taken at 7 a. m. and 5 p. m.

i No observations after the 18th of the month.

j Same temperature on the 12th.

k Same temperature on the 16th.

l Same temperature on the 10th and 11th.

m Same temperature on the 21st.

n Observations omitted after the 14th.

o Same temperature on the 9th and 12th.

p Same temperature on the 9th, 10th, and 12th.

q Observations taken at 8 a. m., noon, and 5 p. m.; very irregular.

r Same temperature on the 13th.

s Same temperature on the 19th.

t Observations incomplete.

u Same temperature on the 10th and 12th.

v Same temperature on the 23d.

w Observations taken at sunrise, 2 p. m., and 9 p. m.

x Observations omitted the first half of the month.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
GEORGIA—Continued.	○	○	□	□		○		○		○		□	
Savannah.....	60.7	75.4	66.00	67.37	14	88	14	77.5	21	48	21	58.00	3.2
Sparta.....	55.57	74.23	61.97	63.92	14	87	3	77.00	17	41	20	53.67	2.9
The Rock (a).....	60.61					72				53			2.9
Whitemarsh Island.....	62.16	72.10	64.35	66.20	14	85	14	76.00	21	50	24	56.2	3.1
FLORIDA—													
Cedar Keys.....	69.07	79.20	72.80	73.69	11	85	15	79.6	21	59	27	71.33	3.1
Jacksonville.....	67.48	77.25	68.95	71.23	15	85	9	78.00	21	55	21	61.66	3.8
Key West.....	75.21	80.68		77.94	1	84	18	81.00	22	71	22	73.50	4.3
Knox Hill.....	61.76	77.10	67.45	68.77	2	85	2	79.00	20	50	25	59.67	3.1
Warrington (h).....	67.00	76.52	74.00	72.51		89	15	81.33		58	26	66.67	2.5
ALABAMA—													
Tuscaloosa.....	58.4	73.1	61.2	64.23	11	84	11	75.9	19	43	18	54.4	3.3
Yorkville (j).....				68.45	13	86			20	53			
MISSISSIPPI—													
Garlandville.....	65.36	80.11	64.44	69.97	3	90	3	81.83	20	55	18	58.00	3.1
Oxford.....	62.03	72.58	64.48	66.36	1	83	1	77.33	17	47	17	55.00	3.8
LOUISIANA—													
New Orleans (l).....	64.69	74.10	69.00	69.26		?		?		?		?	1.4
TEXAS—													
Austin.....	62.86	80.70	68.74	70.77	3	92	3	78.6	30	48	29	62.00	4.3
New Wied.....	68.11	83.63	69.06	73.60	3	92	14	81.00	29	50	29	66.00	6.3
TENNESSEE—													
Glenwood.....	53.98	69.09	58.11	60.39	13	85	13	76.69	18	m 38	19	48.00	3.9
Knoxville.....	51.74	66.23	55.03	57.67	12	79	12	71.00	18	36	18	44.67	5.0
Memphis (n).....	61.53	76.46	63.23	67.07	12	84	1	79.3	17	50	4	68.6	0.8
KENTUCKY—													
Ballardsville.....	55.55	66.74	57.74	60.01	11	81	12	74.00	5	p 40	15	46.00	4.0
Danville.....	56.50	71.45	58.26	62.07		q 83	12	75.67	19	41	17	49.33	3.3
Millersburg.....	54.45	68.26	58.52	60.41	7	r 80	12	75.00	5	m 34	19	46.67	3.9
Springdale.....	49.8	69.61	62.82	60.74	11	86	12	75.00	19	29	19	46.00	4.7
OHIO—													
College Hill.....	53.71	67.44	57.72	59.62	9	i 80	12	73.7	19	35	15	45.6	4.4
Gallipolis.....	55.03	67.52	58.84	60.46	12	77	1	73.00	19	37	19	43.67	
Germantown.....	47.07	65.52	55.17	55.92		80	12	70.02		30	15	41.67	4.7
Granville (s).....	49.87	62.09	53.09	55.02	11	77	1	69.67	19	32	19	40.67	4.4
Hillsborough.....	50.94	63.60	54.35	56.30	11	77	1	69.00	5	34	15	41.3	5.0
Jackson.....	49.42	68.16	54.10	57.23	12	83	12	70.7	19	32	19	42.00	5.4
Marietta.....	45.61	64.74	51.68	54.01	1	80	1	66.67	19	23	19	37.00	5.0
Norwalk (t).....	58.67	65.75	52.03	56.21	7	u 83	11	68.00	19	29	14	41.25	5.8
Oberlin.....	50.51	63.79	52.61	55.64	11	78	12	66.00	19	29	19	40.00	4.8
Perrysburg.....	52.67	71.23	56.13	60.01	10	84	11	67.33	14	m 32	18	46.33	
Richmond.....													3.4
Savannah.....	52.00	67.00	52.00	57.00		88				28			
Urbana (v).....	46.71	63.84		55.27		77				28			5.1
Zanesville.....	49.74	65.97	55.65	57.12	10	w 83	12	70.00	19	31	19	43.00	6.9
MICHIGAN—													
Ann Arbor, [Winchell].....	63.7	67.2	64.9	65.27		78		73.9		53	18	57.3	5.6
Ann Arbor, [Woodruff].....	52.3	61.9	55.2	56.47	9	76	10	62.6	19	22	19	38.3	5.5
Battle Creek.....	49.16	63.77	52.26	55.06	10	81	11	67.2	17	32	18	40.2	4.5
Detroit.....	50.07	60.39	52.93	54.56	7	z 74	11	65.00		28	15	37.67	7.6
Flint.....	47.3	64.4	51.00	54.23		80				19			
Grand Rapids.....	49.19	62.74	52.94	54.96	27	78	8	66.00	19	26	18	38.67	4.8
Monroe, [Whelpley].....													5.5
St. James.....	49.87	55.03	49.44	51.45	27	70	27	64.50	18	32	18	35.16	5.9
Saugatuck.....	51.5	62.2	53.8	58.83		73				28			

a Observations taken in the morning.

b Same temperature on the 23d.

c Same temperature on the 15th.

d Same temperature on the 2d and 13th.

e Same temperature on the 23d and 24th.

f Same temperature on the 24th.

g Same temperature on the 14th.

h Observations taken at sunrise, noon, and sunset.

i Same temperature on the 12th.

j Observations taken at 8 a. m., 2 p. m., and 8 p. m.

k Same temperature on the 3d and 13th.

l Incomplete.

m Same temperature on the 19th.

n Observations omitted after the 26th.

o Same temperature on the 13th.

p Same temperature on the 15th, 18th, and 19th.

q Same temperature on the 11th and 12th.

r Same temperature on the 10th and 11th.

s No observations after the 25th.

t Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at sunrise, 43.39.

u Same temperature on the 8th.

v Observations taken at sunrise and 2 p. m.

w Same temperature on the 11th.

x Same temperature on the 8th, 9th, and 11th.



No. 23 --THERMOMETER AND FACE OF SKY, OCTOBER, 1854--Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
INDIANA—	°	°	°	°		°		°		°			
Milton.....	48.98	63.46	53.56	55.33	11	80	12	68.67	19	32	17	42.83	3.6
ew Harmony.....	53.70	67.7	57.16	59.52	11	81	12	75.5	18	38	18	47.00	4.5
Richmond (a).....	46.65	60.93	47.75	51.78	26	71	30	64.00	19	32	17	36.00	6.6
ILLINOIS—													
Athens.....	51.80	70.80	56.54	59.71	10	b83	1	74.33	18	30	17	44.33	3.9
Augusta.....	50.51	67.03	55.00	57.51	11	c83	1	71.33	17	30	17	41.33	3.8
Manchester (d).....	53.46	67.48	57.54	59.49	11	e79	1	73.00	17	c38	17	45.33	4.3
Ottawa.....	48.48	66.74	53.51	56.24	11	80	1	70.67	15	c30	18	40.67	4.7
MISSOURI—													
Hannibal.....	34.64	68.50	59.16	54.10	21	84	1	78.00	17	34	15	43.67	3.9
St. Louis.....	54.4	69.2	59.2	60.93	12	82	12	75.00	18	38	17	48.67	3.9
WISCONSIN—													
Beloit.....	46.55	63.26	51.29	53.70	7	80	11	67.00	18	22	17	c38.33	3.7
Ceresco.....	48.63	59.31	46.23	51.39	7	b76	6	63.00	16	24	18	34.5?	5.7
Janesville.....	48.03	63.74	53.52	55.10	8	82	11	71.00	18	28	18	39.33	5.2
Madison.....	49.23	59.83	51.61	53.56	8	80	8	67.00	25	23	18	f43.00	4.1
Milwaukie.....	49.84	60.13	52.45	54.14	8	b78	11	69.33	15	c33	18	39.7	4.3
Platteville.....	50.00	67.09	53.87	56.99	11	85	11	71.67	15	25	17	40.00	5.6
IOWA—													
Dubuque.....	50.53	64.32	54.87	56.57	11	82	11	72.33	15	31	18	38.5?	4.3
Fort Madison (g).....	49.97	66.90	58.32	58.40	1	h82	1	75.00	15	26	17	41.00	3.9
Keokuk.....	50.38	68.76	54.86	58.00	11	88	11	75.67	17	30	14	43.33	3.8
Muscataine.....	47.61	65.90	52.71	55.41	5	c82	1	71.67	15	27	18	40.33	4.5
Pella.....	46.10	64.52	52.90	54.51	7	85	6	69.67	17	27	14	37.67	---
Poultney.....	48.89	62.34	49.39	53.54	8	82	8	67.70	18	23	14	34.7	4.9
Quasqueton.....	46.62	66.03	50.70	54.45	11	81	6	67.3	15	21	15	40.00	4.6
CALIFORNIA—													
Sacramento, [Hatch] (i).....	51.32	71.03	59.67	62.57	---	88	3	76.50	---	46	24	56.25	---
Sacramento, [Logan].....				60.01	---	90	---	---	---	49	---	---	---
San Francisco (j).....	53.32	68.13	55.42	59.46	---	---	---	---	---	---	---	---	---
Stockton (k).....	58.45	72.87	60.65	63.99	---	90	3	78.00	---	50	28	58.33	---
MEXICO—													
Mirador (l).....				66.06	---	---	---	68.00	---	---	---	63.50	---
CENTRAL AMERICA—													
Truxillo, Honduras (m).....	79.48	81.07	---	80.27	11	83	5	82.5	22	75	25	76.5	---
SOUTH AMERICA—													
Colonia Tovar (o).....	56.10	68.55	60.64	63.44	4	74	4	65.80	26	52	16	p61.00	---
EASTERN CONTINENT—													
Mosul, Mesopotamia (l).....	---	---	---	74.22	---	90.6	---	---	---	60.3	---	---	---

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.; very irregular; for the last 16 days only.

b Same temperature on the 11th.

c Same temperature on the 18th.

d Observations taken at 7 a. m., 1 p. m., and 9 p. m.

e Same temperature on the 12th.

f Same temperature on the 14th.

g Observations taken at 6 a. m., noon, and 7 p. m.

h Same temperature on the 11th.

i Observations taken at sunrise, noon, sunset, and 10 p. m. Mean at sunset, 68.25.

j Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at 9 a. m., 60.97.

k Observations taken at 8 a. m., 2 p. m., and 8 p. m.

l Hours of observation not given.

m Observations taken at 9 a. m. and 3 p. m.

n Same temperature on the 6th.

o Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and sunset. Mean at 9 a. m., 66.50 Mean at 3 p. m., 65.42.

p Same temperature on the 21st.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	°	°	°	°		°		°		°			
Halifax (a) .....	41.70	45.60	44.30	43.87	1	60	---	---	5	23	---	---	---
CANADA EAST—													
St. Martin's .....	31.28	36.63	30.86	32.92	1	56	1	52.30	5	10	5	20.10	5.5
CANADA WEST—													
Hamilton (b) .....	40.5	---	40.8	40.65	---	57	24	53.5	---	26	30	28.00	---
MAINE—													
Carmel .....	32.08	44.12	32.58	36.26	1	66	1	59.33	5	3	5	15.67	5.9
Fryeburg .....	---	---	---	---	---	---	---	---	---	---	---	---	5.6
Perry .....	36.27	42.80	38.10	39.06	8	60	13	54.00	6	19	5	24.00	7.7
Steuben (c) .....	35.65	42.14	37.00	38.26	13	57	13	55.67	5	21	5	24.33	7.4
Windham .....	---	---	---	---	---	---	---	---	---	---	---	---	5.0
NEW HAMPSHIRE—													
Concord .....	35.63	43.53	37.57	38.91	1	68	1	59.00	6	12	6	24.00	5.2
Hanover .....	31.94	39.31	33.30	34.85	1	57	13	55.40	6	11	5	17.93	6.8
Exeter .....	34.33	43.70	36.30	38.11	1	64	13	58.00	5	12	5	23.00	6.1
Great Falls .....	34.77	44.60	36.53	38.63	1	64	1	57.00	5	10	5	22.33	6.2
Londonderry .....	35.13	43.73	37.73	38.86	11	60	13	56.67	5	d 12	9	e 27.67	5.6
Manchester .....	34.00	46.10	40.16	40.09	1	68	13	59.67	6	12	5	24.67	6.1
Salmon Falls .....	36.08	44.83	37.78	39.56	1	67	1	59.00	5	f 16	5	22.67	5.8
VERMONT—													
Brandon .....	34.26	41.26	35.51	37.01	13	61	1	55.67	5	14	5	19.84	6.9
Burlington .....	35.37	41.97	35.70	37.68	1	63	1	56.67	5	13	5	20.00	4.2
Castleton .....	35.5	43.8	36.33	38.54	11	68	11	61.00	5	14	5	22.00	7.1
St. Johnsbury .....	30.64	37.86	32.69	33.73	1	60	1	59.00	5	8	5	18.38	4.1
MASSACHUSETTS—													
Amherst .....	36.37	43.89	39.19	39.82	1	66	13	60.27	5	17	5	22.67	5.9
Mendon .....	37.87	40.43	38.67	40.99	13	68	13	64.67	5	f 18	30	29.33	5.5
Nantucket .....	45.67	50.33	45.75	47.22	1	64	13	60.33	5	32	5	33.67	5.4
New Bedford .....	41.47	48.15	41.68	43.77	1	70	1	61.83	5	18	5	24.17	6.6
Newburyport .....	38.79	47.04	41.41	42.41	1	69	13	61.80	5	20	5	28.83	6.8
North Attleboro' .....	37.23	46.91	39.53	41.22	1	67	13	62.20	5	17	28	30.33	5.2
Princeton .....	34.61	41.55	35.82	37.38	1	65	13	57.67	5	16	5	20.50	6.6
Richmond .....	31.40	42.50	34.70	36.20	13	70	13	64.00	5	10	5	17.33	6.1
Springfield .....	36.33	46.83	38.70	40.62	1	68	13	61.67	5	10	5	22.33	5.3
Taunton .....	38.73	50.06	40.80	43.20	1	68	12	63.00	6	16	5	28.00	3.7
Williamstown .....	35.24	40.60	36.11	37.32	13	61	11	56.17	5	17	5	19.83	7.6
Worcester .....	37.13	44.87	38.70	40.23	1	65	11	58.00	5	f 16	5	22.33	5.3
CONNECTICUT—													
New London .....	39.73	48.97	43.23	43.98	1	69	13	61.67	5	20	5	27.00	5.8
Pomfret .....	36.83	43.53	38.92	39.76	13	64	13	61.67	5	16	5	22.33	5.3
Salisbury .....	36.53	43.97	36.13	38.88	13	68	13	60.00	5	16	5	21.33	---
Saybrook .....	40.03	46.40	41.80	42.74	13	62	13	58.33	5	22	5	27.33	5.3
West Cornwall .....	34.80	43.33	36.93	38.35	13	g 62	11	57.33	5	14	5	19.33	5.6
NEW YORK—													
Angelica .....	33.86	39.90	34.10	35.95	1	56	1	49.17	5	10	5	26.67	6.6
Baldwinsville .....	35.00	40.30	36.50	37.27	11	56	1	51.67	5	18	5	25.00	7.7
Beaver Brook (h) .....	35.37	43.57	39.23	39.39	1	63	1	58.33	5	16	6	27.33	---
Beverly .....	38.48	46.38	42.00	42.29	1	60	1	62.67	5	20	5	24.33	5.3
Canton .....	35.24	40.92	34.83	37.00	11	60	1	51.00	30	14	30	14.00	7.8
Fishkill (i) .....	39.76	50.13	44.56	44.82	---	73	---	---	---	19	---	---	---
Gouverneur .....	32.03	38.27	34.30	34.87	1	56	1	52.33	5	4	5	18.67	8.1
Lodi .....	34.80	40.20	35.10	36.70	1	56	1	53.33	5	19	30	22.00	7.9
New York city (j) .....	41.90	49.60	44.33	46.69	---	69	1	62.60	---	24	5	31.20	---
New York city, [D. & D. Ins.] .....	40.93	47.85	43.54	44.11	13	65	11	60.63	5	23	5	27.83	4.8
Penn Yan (k) .....	34.47	42.13	36.63	37.74	---	58	1	52.67	---	12	5	24.33	8.0

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Observations taken only from the 3d of the month to the 23d, inclusive.

d Same temperature on the 13th.

e Same temperature on the 30th.

f Same temperature on the 6th.

g Same temperature on the 25th.

h Observations taken at 6½ a. m., noon, and 5½ p. m.

i Observations taken at 7 a. m., noon, and 6 p. m.

j Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

Mean at noon, 49.33; mean at sunset, 48.27.

k Observations taken at sunrise, 2 p. m., and sunset.



## No. 24.--THERMOMETER AND FACE OF SKY, NOVEMBER, 1854--Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°			
Sag Harbor .....	41.30	50.27	43.70	45.09	1	a 70	13	61.67	6	18	5	28.67	5.3
Smithville .....	34.07	41.40	35.07	36.85	10	58	1	52.67	4	17	30	25.67	7.8
Spencertown .....	35.97	42.23	36.13	38.11	13	63	11	58.33	5	14	5	19.00	5.8
Wampsville .....	35.70	42.76	35.13	37.86	1	64	1	54.33	5	12	5	21.00	7.6
NEW JERSEY—													
Bloomfield .....	39.10	48.55	41.50	43.05	1	69	1	62.50	6	21	5	27.00	4.5
Burlington .....	40.67	49.87	42.73	44.42	13	72	11	63.00	5	26	5	30.33	6.5
Lambertville .....	30.13	51.67	41.53	41.11	1	70	11	62.50	5	22	5	26.67	5.0
PENNSYLVANIA—													
Bedford .....	36.45	44.92	38.04	39.39	1	b 61	1	58.33	21	c 22	6	27.33	6.7
Byberry .....	39.02	49.43	41.72	43.39	1	68	11	60.83	6	25	5	29.17	5.4
Freeport .....	38.03	45.10	37.97	40.37	2	77	2	58.33	5	24	30	30.00	7.0
Gettysburg .....	36.10	47.97	39.23	41.10	1	67	1	58.33	5	23	5	28.33	5.7
Harrisburg .....	42.00	48.34	44.73	45.02	1	70	1	63.00	5	c 30	29	36.67	6.1
Lima .....	37.68	48.02	41.17	42.29	1	67	11	59.83	6	22	5	27.73	5.2
Morrisville .....	37.97	49.53	40.60	42.70	1	72	1	59.00	5	d 24	5	28.67	3.8
Moss Grove .....	33.60	40.10	33.68	35.79	10	58	10	51.33	5	e 18	30	25.00	8.1
Norristown .....	41.25	47.39	41.47	43.37	1	69	11	61.33	28	26	28	31.83	5.3
Paradise .....				39.00									
Philadelphia .....	42.57	50.50	45.27	46.11	1	69	11	63.00	5	29	5	32.67	5.6
Pittsburg, [O. S.] .....	37.50	43.97	38.97	41.15	2	65	1	56.33	21	24	27	29.00	---
Pocopson .....	39.43	50.63	42.53	44.20	1	f 69	1	61.83	29	25	5	30.67	5.3
Randolph .....	32.23	39.63	34.77	35.54	10	62	24	50.67	5	e 20	30	24.33	7.7
West Haverford .....	38.07	50.00	---	44.04	1	70	13	62.50	5	22	5	30.00	4.7
DELAWARE—													
Newark (g) .....	38.55	48.69	41.25	42.83	11	h 68	2	50.67	6	23	5	29.00	4.6
MARYLAND—													
Frederick .....	38.39	48.33	41.57	42.78	1	67	1	59.43	21	25	5	31.37	5.3
Schellman Hall .....	39.00	51.03	41.07	43.70	1	73	1	62.67	21	i 24	5	31.00	4.6
DISTRICT OF COLUMBIA—													
Washington .....	40.07	51.27	44.57	45.30	1	69	1	60.5	28	26	28	32.5	---
VIRGINIA—													
Alexandria .....	39.18	51.00	43.97	44.38	1	70	1	60.50	28	24	28	31.00	5.0
Ashland .....	36.20	50.20	39.67	42.02	1	74	1	59.00	28	20	28	27.00	4.9
Crichton's Store (j) .....	45.85	50.92	---	---	1	72	11	68.50	21	c 32	29	40.67	3.8
Lewisburg .....	37.73	48.66	40.43	42.27	3	65	1	56.33	9	e 28	27	31.33	7.0
Montcalm (g) .....	39.44	54.18	45.71	46.44	22	62	24	55.67	28	26	28	33.50	4.4
Smithfield .....				47.15	---	72	11	65.50	---	26	20	35.00	---
Winchester .....	39.17	51.20	41.83	44.07	1	70	1	63.33	28	24	28	32.00	4.7
NORTH CAROLINA --													
Chapel Hill .....	41.27	58.57	47.67	49.17	3	75	11	67.00	28	26	19	36.00	5.7
Thornbury .....	40.08	57.15	42.93	46.72	11	74	11	66.63	29	25	27	34.37	3.7
SOUTH CAROLINA--													
All Saints .....	46.13	61.47	51.00	52.87	11	76	11	70.33	28	c 30	28	37.00	2.1
Camden .....	40.10	60.26	46.00	48.79	1	74	11	66.33	28	21	28	33.00	4.2
Columbia (k) .....	37.29	55.52	41.57	44.79	12	69	27	59.33	21	25	20	31.00	---
St. John's (l) .....	45.89	62.28	49.68	52.62	---	75	11	70.00	---	27	28	36.00	---
GEORGIA—													
Augusta .....	45.60	60.40	53.37	53.12	---	79	11	68.33	---	25	28	37.67	---
Savannah .....	48.40	64.00	54.50	55.63	11	77	11	70.77	28	32	28	40.10	2.4
Sparta .....	42.93	62.17	49.99	51.70	5	76	24	65.33	28	25	28	33.67	3.5
The Rock (m) .....	49.00				---	63				31			4.8
Whitmarsh Island .....	47.90	60.83	52.87	53.87	1	n 76	11	69.67	14	o 31	14	39.00	2.8
FLORIDA--													
Cedar Keys (p) .....	54.00	61.80	60.20	58.33	11	77	12	72.33	14	q 41	28	47.00	2.1

a Same temperature on the 3d.  
b Same temperature on the 9th.  
c Same temperature on the 29th.  
d Same temperature on the 6th.  
e Same temperature on the 21st.  
f Same temperature on the 2d.  
g Observations imperfect.  
h Same temperature on the 25th.  
i Same temperature on the 28th.

j Observations taken at 8 a. m., noon, and 4 p. m. Incomplete.  
k No observations before the 10th.  
l Observations taken at sunrise, 2 p. m., and 9 p. m.  
m Observations taken in the morning.  
n Same temperature on the 10th and 11th.  
o Same temperature on the 28th and 29th.  
p For the last 20 days of the month only.  
q Same temperature on the 20th and 28th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	°	°	°	°		°		°		°		°	
Jacksonville .....	53. 10	67. 40	57. 33	59. 28	11	81	11	73. 67	29	32	28	44. 33	2. 2
Key West .....	69. 03	73. 40	-----	71. 21	1	a 83	11	80. 50	20	56	29	59. 00	3. 2
Knox Hill (b) .....	51. 19	66. 29	57. 28	58. 25	3	c 75	10	70. 00	20	d 33	19	40. 33	2. 7
Warrington (e) .....	53. 00	68. 10	63. 20	61. 43	10	79	10	75. 00	28	36	19	46. 33	1. 8
ALABAMA—													
Greene Springs (f) .....	40. 59	58. 00	46. 28	48. 29	22	74	22	65. 00	28	27	27	34. 00	1. 6
Tuscaloosa .....	44. 27	60. 29	48. 63	51. 06	22	72	22	64. 27	28	27	13	36. 47	2. 6
Yorkville .....	55. 06	-----	-----	55. 06	-----	-----	-----	-----	-----	-----	-----	-----	-----
MISSISSIPPI—													
Garlandville .....	48. 90	68. 07	51. 17	56. 05	1	82	g 1	68. 33	28	25	2	38. 67	2. 3
Oxford .....	47. 73	60. 07	51. 43	53. 08	3	73	1	63. 00	27	30	27	36. 00	4. 3
LOUISIANA—													
New Orleans (h) .....	57. 70	61. 91	56. 22	58. 61	10	77	? ?	? ?	28	38	? ?	? ?	3. 3
TEXAS—													
Austin .....	48. 90	69. 10	53. 66	57. 22	24	82	3	68. 66	13	i 30	12	40. 00	3. 8
New Wied .....	53. 34	70. 87	55. 20	59. 80	1	j 81	3	72. 67	26	i 34	12	42. 50	6. 7
TENNESSEE—													
Glenwood .....	39. 14	53. 22	43. 55	45. 30	3	68	3	57. 30	27	26	27	29. 67	5. 2
Knoxville .....	39. 53	51. 28	42. 40	44. 40	1	67	1	58. 83	14	24	13	31. 83	5. 3
KENTUCKY—													
Ballardville .....	37. 28	45. 12	40. 29	40. 90	2	k 62	23	58. 00	13	l 24	13	25. 67	5. 6
Danville .....	41. 73	52. 00	44. 30	46. 01	23	66	23	61. 00	28	26	13	32. 00	4. 3
Millersburg .....	38. 26	46. 43	40. 16	41. 62	2	m 60	22	56. 00	14	25	13	28. 67	5. 5
Springdale .....	35. 77	48. 17	43. 77	42. 57	0	65	23	59. 17	14	22	13	26. 83	5. 7
OHIO—													
College Hill .....	35. 80	45. 18	40. 02	40. 33	9	64	2	59. 23	14	21	13	25. 40	5. 4
Gallipolis .....	39. 97	50. 00	40. 50	43. 49	-----	66	1	58. 33	-----	24	28	27. 33	-----
Germantown .....	32. 90	44. 82	36. 95	38. 22	-----	60	1	51. 57	-----	21	13	26. 82	6. 0
Granville .....	35. 57	43. 59	37. 61	38. 92	10	58	10	53. 00	14	23	30	27. 33	6. 9
Hillsborough .....	38. 13	44. 10	38. 13	40. 12	9	59	23	53. 50	14	22	13	26. 33	5. 8
Jackson .....	36. 30	48. 47	39. 50	41. 42	1	n 63	1	58. 33	14	o 24	28	29. 67	6. 5
Marietta .....	33. 87	45. 57	36. 57	38. 67	12	66	1	54. 00	21	19	28	24. 00	5. 1
Mount Vernon .....	36. 45	46. 28	39. 00	40. 58	10	68	10	59. 67	14	20	30	25. 00	5. 9
Norwalk (p) .....	39. 50	44. 50	37. 20	40. 40	-----	59	23	54. 50	-----	22	30	24. 75	-----
Oberlin .....	35. 6	44. 48	39. 48	39. 85	10	61	10	54. 67	14	24	26	30. 33	6. 0
Perrysburg (q) .....	35. 37	46. 67	38. 17	40. 07	9	65	23	55. 33	14	r 24	13	29. 33	3. 7
Richmond .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6. 7
Savannah .....	38. 5	44. 8	39. 0	40. 77	-----	60	-----	-----	-----	21	-----	-----	-----
Urbana (s) .....	33. 30	44. 23	-----	38. 76	-----	59	-----	-----	-----	22	-----	-----	6. 1
Zanesville .....	35. 81	45. 83	39. 47	40. 37	12	66	1	56. 67	28	24	28	26. 33	5. 8
MICHIGAN—													
Ann Arbor, [Winchell] .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7. 1
Ann Arbor, [Woodruff] .....	32. 06	41. 7	35. 2	36. 32	9	56	1	47. 00	30	19	30	22. 67	6. 8
Battle Creek .....	34. 17	44. 43	36. 30	38. 30	9	61	23	52. 33	14	o 21	12	27. 00	5. 7
Cooper (t) .....	31. 12	36. 00	29. 33	32. 15	1	48	1	43. 33	27	o 24	30	26. 33	4. 9
Detroit .....	35. 57	42. 90	37. 73	38. 73	24	58	24	53. 00	30	24	30	26. 33	-----
Flint .....	31. 20	43. 10	34. 80	36. 37	-----	59	-----	-----	-----	19	-----	-----	-----
Grand Rapids .....	33. 93	42. 27	37. 03	37. 74	9	64	9	50. 67	30	22	30	26. 67	5. 1
Grand Traverse .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0. 7
Monroe, [Whelpley] .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7. 0
St. James .....	34. 33	36. 90	34. 00	35. 08	10	48	10	45. 00	30	22	30	24. 00	8. 3
Saugatuck .....	37. 00	44. 00	38. 80	39. 93	-----	64	-----	-----	-----	24	-----	-----	-----
INDIANA—													
Madison .....	37. 75	46. 05	40. 65	41. 48	2	u 60	1	54. 17	14	25	13	29. 00	5. 8

a Same temperature on the 11th.

b For the first 25 days of the month only.

c Same temperature on the 4th and 10th.

d Same temperature on the 28th.

e Observations taken at sunrise, noon, and sunset.

f For the last 17 days of the month only.

g Same temperature on the 3d.

h No observations for the first seven days of the month.

i Same temperature on the 27th.

j Same temperature on the 3d and 24th.

k Same temperature on the 9th and 23d.

l Same temperature on the 14th.

m Same temperature on the 8th and 22d.

n Same temperature on the 10th and 23d.

o Same temperature on the 30th.

p Observations taken at 9 a. m., 3 p. m., and 9 p. m.

q Observations taken at 7 a. m., 1 p. m., and 9 p. m.

r Same temperature on the 21st.

s Observations taken at sunrise and 2 p. m.

t Thermometer observations omitted from the 3d to the 24th, inclusive.

u Same temperature on the 9th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA--Continued.	°	°	°	°		°		°		°			
Milton.....	33. 16	43. 97	37. 50	38. 21	17	74	17	57. 67	14	20	13	25. 00	4. 9
New Harmony.....	36. 9	48. 3	40. 7	41. 97	2	a 63	1	b 54. 33	13	25	13	27. 33	5. 2
Richmond (c).....	32. 41	44. 07	36. 74	37. 74	9	59	23	52. 00	27	17	13	24. 33	6. 3
ILLINOIS--													
Athens.....	34. 03	50. 37	38. 77	53. 12	2	69	9	58. 33	27	12	12	25. 33	4. 6
Augusta.....	32. 47	47. 40	38. 73	39. 53	23	68	2	56. 00	27	11	12	23. 33	4. 9
Manchester (c).....	32. 93	50. 27	39. 77	40. 99	2	69	6	53. 67	27	14	27	25. 00	5. 0
Ottawa (d).....	32. 37	46. 95	34. 63	37. 98	3	b 65	9	59. 80	27	14	12	23. 33	4. 9
Upper Alton.....	34. 97	48. 92	41. 19	41. 69	2	66	5	54. 67	13	e 21	27	27. 33	2. 8
MISSOURI--													
Hannibal (f).....	43. 35	53. 80	35. 89	44. 35	2	g 70	2	58. 67	13	15	18	29. 33	4. 1
St. Louis.....	37. 2	50. 1	42. 7	43. 33	2	69	9	56. 17	19	e 23	12	28. 17	5. 5
WISCONSIN--													
Beloit.....	30. 13	41. 50	31. 23	34. 29	2	65	9	50. 33	27	8	13	20. 00	2. 6
Ceresco.....	28. 81	37. 56	28. 43	31. 60	2	a 60	9	50. 00	30	8	30	17. 33	6. 2
Janesville.....	29. 20	41. 26	32. 96	34. 47	23	63	23	51. 00	27	27	27	19. 33	4. 3
Madison.....	32. 60	38. 93	36. 17	35. 90	2	65	9	56. 00	30	17	12	21. 33	4. 5
Milwaukie.....	34. 10	42. 60	36. 67	37. 79	2	62	2	52. 33	27	19	13	23. 00	4. 6
Platteville.....	29. 23	43. 57	32. 90	35. 23	1	62	23	49. 67	12	8	13	h 19. 00	4. 7
IOWA--													
Dubuque.....	32. 33	44. 32	37. 10	37. 92	2	68	2	a 53. 67	12	12	12	20. 33	3. 3
Fort Madison (i).....	31. 43	46. 30	40. 03	39. 25	9	66	9	56. 00	27	10	12	24. 00	4. 3
Keokuk.....	31. 89	46. 07	40. 00	39. 32	6	68	6	54. 00	27	14	12	23. 67	5. 2
Muscatine.....	30. 17	44. 80	35. 57	36. 85	2	69	9	j 53. 33	27	7	12	22. 67	4. 1
Pella.....	26. 87	44. 03	31. 53	34. 14	2	65	2	51. 33	27	6	26	19. 00	---
Poultney.....	27. 93	41. 47	31. 23	33. 54	2	64	2	51. 00	27	11	12	15. 33	4. 9
MINNESOTA--													
St. Anthony's Falls.....	27. 26	43. 90	30. 13	33. 76	1	70	11	70. 00	---	27	28	36. 00	---
CALIFORNIA--													
Sacramento, [Hatch] (k).....	44. 21	65. 25	54. 53	56. 78	---	70	26	60. 87	---	39	---	---	---
Sacramento, [Logan].....	---	---	---	55. 05	---	72	---	---	---	44	---	---	---
San Francisco (l).....	50. 67	65. 13	53. 00	56. 19	---	---	---	---	---	---	---	---	---
Stockton.....	51. 73	68. 97	55. 80	58. 83	---	75	6	66. 67	---	46	30	52. 00	---
MEXICO--													
Mirador (m).....	---	---	---	63. 50	---	---	---	70. 99	---	---	---	56. 75	---
CENTRAL AMERICA--													
Truxillo, Honduras (n).....	76. 81	77. 67	---	77. 24	11	h 83	12	82. 00	28	72	28	72. 00	---
SOUTH AMERICA--													
Colonia Tovar (o).....	55. 69	67. 16	60. 26	62. 52	23	73	18	65. 20	24	52	29	57. 80	---
EASTERN CONTINENT--													
Mosul, Mesopotamia (p).....	---	---	---	57. 70	---	74. 8	---	---	---	44. 6	---	---	---

*a* Same temperature on the 9th.*b* Same temperature on the 23d.*c* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*d* Hours of observation somewhat irregular.*e* Same temperature on the 27th.*f* For the first 18 days of the month only.*g* Same temperature on the 5th.*h* Same temperature on the 12th.*i* Observations taken at 6 a. m., noon, and 7 p. m.*j* Same temperature on the 2d.*k* Observations taken at sunrise, noon, sunset, and 10 p. m. Mean at sunset, 63.13.*l* Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at 9 a. m., 55.97.*m* Hours of observation not given.*n* Observations taken at 9 a. m. and 3 p. m.*o* Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and 9 p. m. Mean at 9 a. m., 64.86. Mean at 3 p. m., 64.66.*p* Hours of observation not known.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NOVA SCOTIA—	°	°	°	°		°		°		°			
Halifax (a).....	30.50	33.40	32.50	32.13	16	59	-----	-----	22	6	-----	-----	-----
CANADA EAST—													
St. Martin's.....	8.02	18.38	10.17	12.19	26	42	25	34.80	23	—36	22	—23.67	5.0
CANADA WEST—													
Hamilton (b).....	27.97	-----	27.97	27.97	-----	44	15	43.00	-----	1	19	5.50	-----
MAINE—													
Carmel.....	8.51	20.36	14.01	14.29	16	40	16	38.33	23	—32	22	—14.00	6.5
Fryeburg.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.7
Perry.....	21.06	25.81	23.90	23.59	15	42	15	39.33	23	—8	22	—3.33	6.9
Steuben.....	18.50	24.20	21.68	21.46	15	c 40	16	38.00	23	—14	22	—8.33	6.9
NEW HAMPSHIRE—													
Concord.....	15.32	26.81	19.71	20.61	16	42	16	35.67	21	—12	20	—1.67	5.9
Hanover.....	11.10	21.98	15.13	16.07	-----	40	28	35.40	-----	—25	20	—15.87	7.1
Exeter.....	17.03	28.46	19.35	21.61	14	d 44	26	36.00	20	—6	22	0.33	5.3
Great Falls.....	16.90	30.00	20.61	22.17	26	48	16	38.33	20	—7	22	—0.67	6.0
Londonderry.....	16.40	27.49	20.32	21.40	14	e 46	14	c 37.67	22	—12	22	—3.67	5.7
Manchester.....	16.06	29.80	23.58	23.15	26	48	16	38.33	20	—8	20	2.00	7.2
Salmon Falls.....	18.69	29.79	21.03	23.17	26	48	27	39.00	22	—7	22	—0.67	5.7
VERMONT—													
Brandon.....	13.45	23.71	16.16	17.77	15	41	27	38.00	23	—20	22	—11.00	5.4
Burlington.....	17.61	22.10	16.94	18.88	15	42	25	38.67	20	—20	22	—14.33	4.1
Castleton.....	14.77	28.00	17.29	20.02	10	f 44	25	39.33	g 22	—20	22	—10.67	7.3
St. Johnsbury.....	13.58	21.35	16.84	17.92	15	41	27	37.00	20	—25	20	—15.33	3.9
MASSACHUSETTS—													
Amherst.....	18.57	26.54	21.59	22.23	25	43	25	38.39	23	—9	19	—2.33	6.1
Mendon.....	20.48	27.90	22.71	23.70	15	50	15	38.67	20	—1	19	3.53	6.7
Nantucket.....	33.05	38.11	34.05	35.07	15	51	15	45.33	19	17	19	23.33	5.6
New Bedford.....	24.40	33.53	26.92	28.28	15	d 49	10	42.33	20	3	20	9.50	6.7
Newburyport (h).....	23.84	33.68	27.14	28.22	15	50	16	42.23	22	4	22	5.37	8.6
North Attleboro'.....	22.64	31.20	24.97	26.27	15	49	16	43.33	21	0.7	22	6.40	5.2
Princeton.....	18.66	24.55	19.76	20.99	16	42	16	36.93	19	i 1	22	2.33	6.2
Richmond.....	18.68	25.84	20.61	21.71	26	42	26	37.33	-----	10	20	0.00	7.1
Springfield.....	18.00	29.77	21.68	23.15	16	50	16	41.33	20	—8	20	1.67	5.5
Taunton.....	26.43	33.96	28.12	29.52	10	e 52	10	e 50.00	21	4	19	10.67	3.4
Westfield.....	19.06	26.81	21.24	22.37	16	45	16	38.33	20	—10	20	—1.67	-----
Williamstown (j).....	15.84	23.88	19.30	19.67	15	43	25	38.13	20	—19	20	—9.70	7.4
Worcester.....	20.71	29.06	22.93	24.23	16	55	16	43.00	20	0	22	4.33	4.8
RHODE ISLAND—													
Providence (k).....	23.00	31.80	24.80	26.50	10	48	10	40.30	l 19	3	19	7.00	6.0
CONNECTICUT—													
New London.....	25.48	33.35	27.81	28.88	15	50	15	42.33	20	4	20	10.33	5.9
Pomfret.....	20.35	28.00	22.87	23.74	15	45	16	38.33	20	—2	20	4.00	5.6
Salisbury.....	19.52	27.26	21.74	22.84	24	d 42	16	37.00	20	—7	20	0.33	-----
Saybrook.....	26.19	30.32	27.68	28.06	15	44	16	f 38.67	20	4	20	8.00	5.4
West Cornwall.....	19.29	24.84	21.61	21.91	16	d 42	15	37.00	20	—3	19	0.33	5.7
NEW YORK—													
Angelica.....	19.79	28.88	20.76	26.48	25	46	28	40.33	19	—16	19	—0.67	7.2
Baldwinsville.....	21.87	26.65	22.74	23.75	28	45	15	38.33	22	2	22	7.00	8.1
Beaver Brook (m).....	19.06	29.87	24.64	24.52	15	52	27	40.00	20	—6	20	9.00	-----
Beverly (n).....	22.19	27.52	24.46	24.72	25	43	25	39.33	23	—5	20	—0.50	6.3
Buffalo, [Salisbury] (m).....	22.18	29.60	30.86	27.55	28	46	10	38.00	19	1	19	6.67	8.5
Canton.....	13.19	20.16	14.55	15.97	15	46	15	40.33	23	—26	22	—17.33	7.1
Fishkill (o).....	21.64	32.32	25.06	26.34	-----	50	-----	-----	-----	—10	-----	-----	-----
Gouverneur (p).....	16.68	24.68	20.91	20.79	28	43	28	38.33	23	—30	19	—16.00	7.6
Lodi.....	19.61	26.90	21.74	22.75	15	q 45	28	39.33	20	—4	22	5.67	8.6
New York city (r).....	28.26	32.74	29.45	30.15	-----	46	27	s 42.00	-----	4	20	12.67	-----

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.

b Observations taken at 9 a. m. and 9 p. m.

c Same temperature on the 16th.

d Same temperature on the 26th.

e Same temperature on the 15th.

f Same temperature on the 27th.

g Same temperature on the 24th, 25th, 26th, 27th, and 28th.

h Observations taken at 8 a. m., 2 p. m., and 9 p. m.

i Same temperature on the 22d.

j No observations before the 7th.

k Observations taken at sunrise, 2 p. m., and 10 p. m. Incomplete.

l Same temperature on the 20th.

m Observations taken at 7 a. m., 1 p. m., and 9 p. m.

n No observations at 2 p. m. on the 20th.

o Observations taken at 7 a. m., noon, and 6 p. m.

p Observations doubtful.

q Same temperature on the 25th.

r Observations taken at 9 a. m., 3 p. m., and 10 p. m.

s Same temperature on the 14th.



No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1854.—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	°
New York city (a).....	26.64	31.68	31.55	29.96	----	45	14	42.00	----	4	20	12.00	----
New York city, [D. & D. Ins.]	24.90	30.84	28.46	28.07	16	48	16	42.00	20	3	20	10.00	5.7
Penn Yan (b).....	21.78	29.74	25.16	25.56	----	46	25	40.67	----	3	20	8.33	8.5
Sag Harbor.....	27.32	34.42	30.13	30.62	10	52	10	43.67	20	9	20	13.67	5.5
Smithville.....	18.00	23.35	18.00	19.78	28	48	28	42.33	22	—16	22	—11.00	7.9
Spencertown.....	17.74	23.68	19.81	20.41	14	c 40	15	37.00	23	—11	20	— 2.33	5.6
Wampsville.....	20.90	28.00	22.27	23.72	28	46	28	39.67	20	— 6	22	5.67	9.0
NEW JERSEY—													
Bloomfield.....	24.02	32.34	26.76	27.71	25	47	27	41.33	20	1	20	8.17	5.4
Burlington.....	26.10	34.13	29.06	29.76	10	d 46	27	40.33	20	4	20	10.00	6.7
Lambertville.....	23.68	34.75	26.55	28.33	16	48	27	41.00	20	1	20	10.67	4.2
PENNSYLVANIA—													
Bedford.....	24.88	32.31	27.27	28.15	25	50	27	44.33	9	7	20	13.67	6.7
Gettysburg.....	24.66	34.08	26.58	28.44	25	46	28	41.00	20	0	20	12.00	5.2
Harrisburg.....	28.48	33.94	30.37	30.93	25	47	27	41.00	20	11	20	16.67	5.8
Lima.....	25.50	33.32	28.05	28.96	27	45	27	43.07	20	5	20	8.00	5.7
Morrisville.....	23.80	34.63	25.57	28.00	25	46	27	40.67	20	5	20	11.00	4.4
Moss Grove.....	22.84	29.03	24.28	25.38	28	46	27	39.67	9	8	19	11.67	7.8
Norristown.....	27.41	32.48	27.24	29.04	25	47	27	40.17	20	5	20	8.67	5.1
Paradise.....				30.00									
Philadelphia.....	28.45	34.50	30.87	31.27	14	48	27	44.33	20	7	20	14.33	6.1
Pittsburg, [O. S.].....	26.87	34.32	28.55	29.91	28	56	27	48.00	9	4	19	11.33	6.2
Pittsburg, [M. H.] (e).....	35.68	37.58	34.58	35.95	14	50	25	f 45.33	20	16	19	18.00	6.2
Pocopson.....	25.73	34.24	27.95	29.31	27	46	27	42.00	20	5	20	10.83	6.2
West Haverford.....	26.42	34.61	-----	30.52	27	48	27?	44.50?	20	3	20?	11.00?	5.1
DELAWARE—													
Newark (g).....	34.25?	34.06?	31.90?	33.40?	14	47?	11	h 35.67	19	10?	9?	24.33?	5.5
MARYLAND—													
Bladensburg (g).....	28.00	40.19	30.57	32.92	14	54	27?	46.33?	20	10	20?	17.42?	5.4
Frederick.....	28.58	35.35	30.76	31.56	25	51	25	46.67	20	11	20	18.00	5.7
Schellman Hall.....	25.32	37.39	29.03	30.58	14	52	27	44.33	20	5	20	14.67	4.9
DISTRICT OF COLUMBIA—													
Washington.....	28.58	37.58	31.87	32.68	14	53	27	i 45.33	20	11	20	18.67	----
VIRGINIA—													
Alexandria.....	28.18	37.03	31.37	32.16	14	51	28	45.00	20	13	20	19.00	4.6
Ashland.....	28.16	40.19	31.97	33.44	28	57	26	52.33	8	6	8	16.00	5.5
Crichton's Store (j).....	36.65	40.63	47.63	41.64	26	67	26	62.00	20	20	20	23.00	4.8
Lewisburg.....	29.26	40.52	33.52	34.43	28	58	28	52.67	8	k 15	8	30.33	5.9
Montcalm (l).....	31.50	42.86	35.12	36.49	14	60	27	51.00	20	14	20	23.67	4.2
Smithfield.....	-----	-----	-----	34.35	-----	59	10	50.15	-----	15	20	20.50	----
Winchester.....	28.77	39.22	31.64	33.21	25	m 52	27	46.00	9	12	8	20.00	5.3
NORTH CAROLINA—													
Chapel Hill.....	32.39	48.68	37.45	39.51	25	67	26	59.67	9	n 20	5	o 28.00	6.0
Thornbury.....	31.47	46.02	35.64	37.70	26	64	26	56.83	8	k 18	20	23.50	4.9
SOUTH CAROLINA—													
All Saints.....	39.57	53.03	43.39	45.33	25	65	27	57.00	6	24	20	31.67	3.2
Camden.....	31.50	52.84	38.41	40.92	25	69	26	58.33	6	14	21	p 28.33	4.2
St. John's.....	34.68	52.14	40.86	42.56	----	67	26	59.00	----	18	5	32.00	----
GEORGIA—													
Savannah.....	41.90	56.30	47.50	48.57	25	72	26	62.53	6	24	20	35.88	3.8
Sparta.....	35.03	53.81	42.00	43.61	25	74	25	60.67	6	18	5	28.67	3.4
The Rock (q).....	36.60					49				35			2.0
Whitemarsh Island.....	39.68	54.45	45.32	46.48	3	r 68	26	59.00	6	21	20	p 33.67	3.5

a Observations taken at sunrise, noon, and sunset.  
b Observations taken at sunrise, 2 p. m., and sunset.  
c Same temperature on the 15th, 16th, and 28th.  
d Same temperature on the 13th and 27th.  
e No observations before the 12th.  
f Same temperature on the 14th.  
g Observations incomplete.  
h Same temperature on the 15th.  
i Same temperature on the 28th.

j Observations taken at 9 a. m., noon, and 4 p. m. Very irregular.  
k Same temperature on the 9th.  
l Observations irregular.  
m Same temperature on the 27th.  
n Same temperature on the 21st and 22d.  
o Same temperature on the 8th.  
p Same temperature on the 5th.  
q Observations taken in the morning.  
r Same temperature on the 25th.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—	°	°	°	°		°		°		°	°		
Cedar Keys.....	51.03	58.29	55.77	55.03	24	70	3	64.67	11	32	11	a41.33	3.8
Jacksonville.....	37.96	59.99	50.38	49.44	1	72	1	66.33	6	28	20	39.67	1.3
Key West.....	63.65	67.68	-----	65.66	11	80	11	77.00	6	b52	21	55.00	4.2
Warrington (c).....	45.55	60.74	55.87	54.05	1	d72	1	e62.67	20	28	5	f40.00	2.6
ALABAMA—													
Greene Springs.....	36.37	52.41	43.61	44.13	24	60	24	59.00	11	16	11	29.33	3.9
Tuscaloosa.....	38.51	53.40	42.80	44.90	25	68	25	63.83	6	20	20	30.07	4.0
MISSISSIPPI—													
Garlandville.....	42.56	60.31	45.20	49.36	28	73	25	66.33	6	19	5	33.67	4.7
Oxford.....	39.11	50.72	43.71	44.51	25	66	25	62.33	11	17	6	g31.00	3.9
LOUISIANA—													
New Orleans.....	47.26	57.70	51.80	52.25	24	h73	25	67.00	20	31	20	35.67	4.2
TEXAS—													
Austin.....	37.74	58.32	43.97	46.68	26	i74	1	60.00	20	j25	5	28.33	4.0
New Wied.....	41.09	60.55	45.68	49.11	26	78	2	64.67	20	27	5	29.67	6.8
TENNESSEE—													
Glenwood.....	33.43	45.04	37.59	38.69	31	62	25	56.66	20	14	5	20.80	4.9
Knoxville.....	31.59	41.73	35.00	36.10	28	56	26	51.83	11	f16	5	22.33	4.9
KENTUCKY—													
Hallardsville.....	32.16	39.52	34.64	35.44	26	60	26	56.33	8	a16	5	19.67	6.4
Danville.....	36.00	45.84	38.87	40.24	26	65	26	59.33	8	18	5	26.00	4.8
Millersburg.....	32.81	39.45	34.32	35.53	26	57	26	55.00	8	14	5	21.00	6.1
Springdale.....	31.31	41.21	36.08	36.20	26	59	26	57.33	8	14	5	22.00	5.9
OHIO—													
Gallipolis.....	29.39	40.29	32.71	34.13	27	59	27	53.33	5	k12	11	18.67	---
Germantown.....	27.95	36.72	29.97	31.55	---	55	26	50.00	---	8	8	16.32	6.3
Granville.....	29.19	35.93	31.81	32.31	15	58	26	49.33	8	7	8	16.33	5.9
Hillsborough.....	29.10	36.53	31.47	32.37	26	54	26	53.67	8	10	19	17.00	6.2
Madison.....	28.45	33.48	28.44	30.12	13	52	24	40.67	20	10	18	17.00	8.1
Marietta.....	26.45	36.81	29.26	30.84	27	56	27	50.67	8	6	8	12.67	6.2
Mount Vernon.....	25.77	35.83	28.93	26.84	28	52	26	45.00	8	3	8	10.67	6.3
Norwalk (l).....	28.26	33.35	27.19	28.28	28	49	26	45.67	8	m2	18	8.00	3.3
Oberlin.....	26.00	33.63	28.73	29.45	28	51	26	46.33	18	n	18	10.33	6.1
Perrysburg (n).....	25.39	39.32	27.77	30.83	14	56	25	44.67	8	—2	18	12.00	4.0
Richmond.....	---	---	---	---	---	---	---	---	---	---	---	---	6.1
Savannah.....	24.00	36.00	28.00	29.33	---	50	---	---	---	12	---	---	---
Urbana (o).....	---	---	---	---	---	55	---	---	---	4	---	---	6.3
Zanesville.....	26.90	37.13	31.00	31.67	31	56	27	47.33	8	9	8	16.67	6.5
MICHIGAN—													
Ann Arbor, [Winchell].....	20.93	29.13	23.39	24.48	25	44	24	38.67	19	—9	18	1.33	6.4
Ann Arbor, [Woodruff].....	20.95	29.98	23.89	24.94	13	p43	15	38.33	19	—10	18	0.33	6.5
Battle Creek.....	22.16	32.26	26.10	26.84	13	r44	27	39.33	18	—2	13	9.00	5.9
Cooper.....	24.32	30.00	27.77	27.36	25	43	25	39.00	18	6	18	9.33	5.7
Detroit.....	24.65	30.35	26.26	27.09	25	45	24	h39.67	18	1	18	5.67	8.5
Flint.....	21.40	29.90	22.60	24.63	---	44	---	---	---	—13	---	---	---
Grand Rapids.....	22.00	31.29	25.45	26.25	15	45	15	41.67	19	—3	18	10.00	5.5
Grand Traverse.....	---	---	---	---	---	---	---	---	---	---	---	---	3.0
Monroe, [Whelpley].....	---	---	---	---	---	---	---	---	---	---	---	---	7.3
Monroe, [Perkins].....	23.10	30.52	27.48	27.03	13	46	24	41.33	18	—5	19	6.33	---
St. James.....	22.75	25.85	23.09	23.90	25	42	14	39.67	17	1	17	4.67	9.0
Saugatuck.....	25.80	32.12	27.10	28.34	---	42	---	---	---	8	---	---	---
INDIANA—													
Madison (n).....	32.82	39.21	34.74	35.59	26	54	26	52.67	11	20	5	23.33	7.1
Milton.....	28.47	36.53	31.01	32.00	27	56	27	51.00	8	12	19	18.83	6.0
New Harmony.....	31.3	41.0	34.8	35.70	26	59	26	56.00	19	10	19	18.33	5.8
Richmond (q).....	27.04	35.08	---	31.06	27	50	25	r44.00	8	8	8?	16.00	---

a Same temperature on the 20th.

b Same temperature on the 21st.

c Observations taken at sunrise, noon, and sunset.

d Same temperature on the 28th.

e Same temperature on the 26th.

f Same temperature on the 6th.

g Same temperature on the 19th.

h Same temperature on the 25th.

i Same temperature on the 27th.

j Same temperature on the 29th and 30th.

k Same temperature on the 8th.

l Observations taken at sunrise, 9 a. m., 1 p. m., and 9 p. m.; mean at sunrise, 24 34.

m Same temperature on the 18th.

n Observations taken at 7 a. m., 1 p. m., and 9 p. m.

o Observations taken at sunrise and 2 p. m.

p Same temperature on the 14th and 25th.

q Observations taken at 7 a. m. and 1 p. m.

r Same temperature on the 24th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—	°	°	°	°		°		°		°			
Athens .....	25.45	40.68	32.77	32.97	30	57	26	51.67	18	a 3	19	15.67	4.9
Augusta .....	24.45	37.58	30.77	30.97	31	58	31	47.00	5	7	18	15.00	4.4
Manchester (b) .....	26.08	40.21	33.27	33.19	31	64	26	51.67	18	5	19	14.33	5.1
Ottawa .....	21.87	32.54	27.63	27.35	14	c 50	26	43.33	5	d 7	18	13.33	5.2
Upper Alton .....	29.31	41.87	35.17	35.45	26	59	26	55.50	19	12	19	20.00	8.3
MISSOURI—													
Hannibal .....													5.1
St. Louis .....	31.71	42.85	36.90	37.15	31	60	26	54.33	19	15	19	17.50	5.7
WISCONSIN—													
Beloit .....	18.90	30.22	24.03	24.38	15	44	26	37.33	5	— 1	19	10.00	4.2
Janesville .....	16.29	29.32	20.74	22.12	15	e 42	26	35.67	19	— 3	19	5.67	6.1
Milwaukee .....	23.56	31.48	27.20	27.41	22	46	14	f 38.67	18	— 2.5	18	6.17	4.8
Platteville .....	18.93	32.10	24.48	25.17	13	48	14	39.33	5	— 1	17	9.67	4.7
ICWA—													
Dubuque .....	22.22	32.03	27.81	27.69	13	50	13	38.33	19	g 9	28	12.00	4.7
Fort Madison (h) .....	23.23	36.94	31.16	30.44	26	53	26	45.00	19	4	19	9.33	4.4
Keokuk .....	24.10	39.26	27.70	30.35	26	55	25	42.00	19	0	19	12.67	5.3
Muscatine .....	20.03	34.65	25.84	26.84	26	50	15	40.00	5	4	19	13.33	3.5
Pella .....	18.65	35.09	22.03	25.26	25	52	13	38.33	5	— 4	28	8.00	—
Poultney .....	17.48	33.73	21.86	24.36	14	54	14	39.33	22	— 4	19	11.67	5.3
Quasqueton .....	17.68	33.04	22.86	24.53	13	50	26	36.00	—	— 1.5	28	9.83	4.9
MINNESOTA—													
St. Joseph's (i) .....	11.57	17.17	11.30	13.35	14	49	12	40.67	17	— 26	28	14.67	5.0
CALIFORNIA—													
Sacramento, [Hatch] (j) .....	37.25	55.12	47.41	48.42	—	66	1	57.75	—	28	29	42.00	—
Sacramento, [Logan] .....	47.93	—	—	47.93	—	68	—	—	—	29	—	—	—
San Francisco (k) .....	47.03	60.65	49.39	52.10	—	—	—	—	—	—	—	—	—
Stockton (l) .....	41.61	59.45	48.23	49.76	—	70	1	60.00	—	30	29	42.67	—
MEXICO—													
Mirador (m) .....	—	—	—	59.52	—	—	—	63.50	—	—	—	54.50	—
CENTRAL AMERICA—													
Truxillo, Honduras (n) .....	73.47	74.69	—	74.08	29	78	29	77.50	17	68	17	70.50	—
SOUTH AMERICA—													
Colonia Tovar (o) .....	53.45	66.56	59.13	61.26	9	73	3	p 63.20	2	46	22	59.20	—
EASTERN CONTINENT—													
Mosul, Mesopotamia (q) .....	—	—	—	50.60	—	61.4	—	—	—	42.8	—	—	—

a Same temperature on the 22d.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Same temperature on the 26th.

d Same temperature on the 11th, 12th, and 18th.

e Same temperature on the 15th and 26th.

f Same temperature on the 15th.

g Same temperature on the 29th.

h Observations taken at 6 a. m., noon, and 7 p. m.

i Doubtful, from obscurity of record.

j Observations taken at sunrise, noon, sunset, and 10 p. m.; mean at sunset, 53.90.

k Observations taken at sunrise, 9 a. m., noon, and 10 p. m.; mean at 9 a. m., 51.32.

l Observations taken at 8 a. m., 2 p. m., and 8 p. m.

m Hours of observation not given.

n Observations taken at 9 a. m. and 3 p. m.

o Observations taken at sunrise, 9 a. m., 12 m., 3 p. m., and sunset; mean at 9 a. m., 63.58; mean at 3 p. m., 63.58.

p Same temperature on the 5th.

q Hours of observation not known.

## No. 26.—PSYCHROMETER, JANUARY, 1854.

NAME OR STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
NOVA SCOTIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Albion Mines.....	.092	.103	.103	12	.375	30	.012	81	71	82	55	47	53
Halifax (a).....								73	63	57			
CANADA EAST—													
St. Martin's.....	.064	.082	.072	12	.292	25	.008	85	85	82	00	50	29
St. Martin's (b).....	.072	.094	.083	12	.312	29	.005	81	83	87	55	60	75
VERMONT—													
Burlington.....	.074	.097	.085	12	.348	22	e. 000	54	60	65	00	5	17
MASSACHUSETTS—													
Amherst.....	.104	.122	.117	12	.365	29	.028	92	75	87	63	54	51
Nantucket.....	.160	.172	.162	12	.361	29	.011	82	75	83	34	8	14
New Bedford.....	.147	.163	.151	12	.332	29	.029	93	83	90	71	50	73
Newburyport.....	.099	.119	.095	6	.453	25	.005	66	61	63	22	27	17
North Attleboro'.....	.121	.128	.121	12	.376	29	.029	85	65	81	5	35	48
Princeton.....	.102	.110	.106	12	.372	28	d. 026	88	77	82	52	53	49
Worcester.....	.084	.111	.093	12	.361	28	.000	48	57	56	0	0	0
CONNECTICUT—													
Pomfret.....	.117	.147	.126	12	.374	29	.032	91	84	83	70	61	53
NEW YORK—													
Madrid.....	.070	.097	.081	12	.276	26	.004	83	77	86	49	25	68
New York city, [D. & D. Inst.]	.133	.158	.128	12	.383	28	.029	82	76	74	44	61	32
Troy.....	.124	.097	.115	12	.402	29	.039	80	62	77	54	32	51
NEW JERSEY—													
Bloomfield.....	.125	.144	.138	12	.335	25	.037	78	70	79	49	40	53
PENNSYLVANIA—													
Lima.....	.130	.152	.139	12	.441	3	.029	83	70	83	41	31	47
Norristown.....	.139	.142	.140	12	.439	23	.019	75	61	76	40	28	20
Philadelphia.....	.159	.180	.167	12	.483	3	.070	89	85	86	66	48	57
Youngsville.....	.114	.123	.109	12	.309	1	e. 044	90	77	89	49	33	49
VIRGINIA—													
Alexandria.....	.164	.183	.166	21	.488	23	.055	79	67	73	49	37	43
NORTH CAROLINA—													
Thornbury.....	.196	.211	.194	12	.404	23	.039	82	53	68	41	17	22
SOUTH CAROLINA—													
Camden.....	.239	.273	.241	27	.648	23	.068	88	58	78	59	25	44
St. John's.....	.274	.313	.306					81	65	79	54	27	48
GEORGIA—													
Culloden.....	.258	.289	.270	17	.787	23	.071	80	66	75	46	32	36
Savannah.....	.314	.339	.338	18	.607	23	.101	84	62	78	51	28	46
Sparta.....	.313	.300	.305	20	.644	27	.118	89	63	84	62	40	48
FLORIDA—													
Jacksonville.....	.384	.527	.410	15	.897	8	.040	91	82	86	73	59	13
Warrington.....	.460	.502		20	.733	1	.238	99	91		71	42	
ALABAMA—													
Tuscaloosa.....	.235	.282	.259	20	.886	4	.000?	83	61	72	00	25	20
MISSISSIPPI—													
Jackson.....	.217	.281	.242	16	.771	8	f. 000	75	61	68	4	00	00
LOUISIANA—													
New Orleans.....	.367	.414	.390	15	.772	20	.130	90	74	86	56	39	53
TEXAS—													
Austin.....	.250	.282	.253	15	.599	21	.036	84	63	77	36	24	32
New Wied.....	.210	.268	.204	20	.612	26	g. 000	63	52	57	28	00	00
TENNESSEE—													
Glenwood.....	.166	.178	.165	19	.535	2	.031	74	59	73	4	26	40
Knoxville.....	.166	.201	.181	20	.405	23	.042	91	79	80	50	41	36
Lebanon.....	.157	.196	.176	16	.522	7	.026	72	56	68	24	32	25

a Observations taken at 6 a. m., 3 p. m., and 8 p. m.; and humidity calculated from Glaisher's tables.

b These values are computed from the observer's reductions of the same observations as the preceding, but by the use of a different set of tables.

c Same amount on the 25th and 29th.

d Same amount on the 30th.

e Same amount on the 21st, 23d, and 25th.

f Same amount on the 17th, 21st, 23d, and 31st.

g Same amount on the 7th.



No. 26.—PSYCHROMETER, JANUARY, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
KENTUCKY—													
Springdale.....	.160	.195	.191	11	.556	23	.008	83	80	86	20	40	44
OHIO—													
Germantown.....	.126	.138	.131	20	.427	21	.040	85	68	81	52	43	55
Hillsborough.....	.144	.156	.156	20	.451	23	.035	89	75	90	57	34	54
Keene ( <i>a</i> ).....	.113	.144	.118	16	<i>b</i> .309	13	<i>c</i> .034	72	71	75	46	54	54
Zanesville.....	.154	.194	.174	20	.546	23	.051	85	83	80	49	60	49
MICHIGAN—													
Brooklyn.....	.089	.118	.098	20	.225	23	.015	79	82	83	52	65	54
INDIANA—													
New Harmony.....	.146	.151	.145	19	.459	20	.039	90	70	85	55	33	41
MISSOURI—													
St. Louis.....	.111	.126	.118	5	.288	21	.025	76	64	68	37	30	41
IOWA—													
Dubuque.....	.067	.082	.085	3	.309	11	.007	86	71	84	28	51	53

*a* No observation after the 27th.*b* Same amount on the 20th.*c* Same amount on the 23d.

## No. 27.—PSYCHROMETER, FEBRUARY, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
NOVA SCOTIA—													
Albion Mines.....	.090	.099	.085	9	.327	5	.017	86	74	84	57	51	50
Halifax (a).....								69	65	69			
CANADA EAST—													
St. Martin's.....	.053	.096	.073	1	.275	25	.006	77	78	83	30	21	66
St. Martin's (b).....	.060	.109	.082	9	.217	4	c. 009	80	81	86	53	53	75
NEW HAMPSHIRE—													
Hanover (d).....	.081	.072	.083	26	.192	25	.026	84	62	75	71	47	62
VERMONT—													
Burlington.....	.073	.079	.066	1	.215	3	e. 000	53	57	54	00	9	00
MASSACHUSETTS—													
Amherst.....	.256	.301	.279	27	.233	23	.034	56	76	82	71	50	47
Nantucket.....	.129	.130	.130	26	.290	3	.000	72	64	71	23	27	00
New Bedford.....	.132	.145	.145	1	.322	7	.038	95	81	93	85	50	77
Newburyport.....	.097	.116	.110	1	.280	12	.013	74	65	71	29	30	22
North Attleboro'.....	.105	.102	.091	26	.283	2	f. 00	85	59	66	56	00	00
Princeton.....	.087	.092	.087	9	.187	9	.020	88	74	85	39	45	49
Worcester.....	.077	.081	.082	26	.295	3	g. 000	62	51	50	00	00	00
CONNECTICUT—													
Pomfret.....	.108	.129	.121	26	.311	5	.046	92	81	81	67	53	70
NEW YORK—													
Madrid.....	.076	.075	.078	8	.205	9	h. 000	89	69	83	00	00	00
New York city, [D. & D. Inst.]	.127	.171	.132	8	.308	23	.025	81	79	76	63	46	22
Penn Yan.....		.102							59			31	
Troy.....	.108	.106	.104	15	.209	11	i. 049	85	63	79	61	38	47
NEW JERSEY—													
Bloomfield.....	.114	.143	.145	8	.328	23	.049	78	66	80	46	34	40
PENNSYLVANIA—													
Lima.....	.129	.144	.147	14	.437	3	.017	83	65	79	61	27	33
Northtown.....	.115	.164	.133	14	.365	4	j. 036	72	70	70	36	34	36
Philadelphia.....	.153	.195	.171	14	.456	10	.076	89	77	83	63	33	40
Youngs ville.....	.119	.173	.129	1	.321	3	.042	98	96	97	78	62	84
MARYLAND—													
Frederick (k).....	.121	.133	.147	26	.253	23	.059	80	57	75	60	37	46
DISTRICT OF COLUMBIA—													
Washington.....	.200	.237	.231	15	.502	3	.061	81	65	81	38	37	51
VIRGINIA—													
Alexandria.....	.144	.179	.159	15	.448	5	l. 000	77	56	65	57	00	00
NORTH CAROLINA—													
Thornbury.....	.183	.193	.176	26	.594	11	m. 000	71	43	61	00	00	00
SOUTH CAROLINA—													
Camden.....	.240	.263	.253	26	.554	12	.000	85	57	69	61	12	00
St. John's.....	.292	.361	.305					84	63	78	73	17	19
GEORGIA—													
Culloden.....	.258	.311	.285	15	.531	3	.114	84	64	71	67	41	45
Savannah.....	.304	.308	.328	26	.590	3	.094	83	51	75	55	26	47
Sparta.....	.245	.292	.279	14	.478	3	.118	82	57	83	54	41	67
FLORIDA—													
Jacksonville.....	.367	.506	.418	15	.731	12	.020	88	75	85	52	61	5
MISSISSIPPI—													
Jackson.....	.238	.386	.292	6	.583	4	.088	90	82	00	62	45	65
Lake Washington (n).....	.260	.250		14	.556	3	.073	79	49		55	22	

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table 26.

c Same amount on the 5th.

d For the last five days of the month only.

e Same amount on the 23d and 24th.

f Same amount on the 9th, 18th, 19th, and 28th.

g Same amount on the 4th, 7th, 9th, 10th, 18th, 19th, 23d, 25th, and 28th.

h Same amount on the 18th, 19th, and 23d.

i Same amount on the 25th.

j Same amount on the 23d.

k For the last 16 days of the month.

l Same amount on the 12th, 17th, 30th, 24th, and 27th.

m Same amount on the 17th, 19th, 23d, 24th, and 28th.

n Imperfect.



No. 27.—PSYCHROMETER, FEBRUARY, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
LOUISIANA—													
New Orleans.....	.345	.397	.393	15	.708	17	.139	89	73	86	56	40	43
TEXAS—													
Austin.....	.302	.291	.319	14	.596	2	.079	89	51	77	64	23	28
New Wied.....	.277	.385	.316	12	.666	26	.053	72	62	72	18	31	45
TENNESSEE—													
Glenwood.....	.179	.201	.197	14	.493	7	<i>a</i> .000	69	54	69	00	00	36
Knoxville.....	.176	.211	.214	26	.469	18	.000	75	59	77	37	17	00
Lebanon.....	.167	.196	.184	14	.480	3	.051	69	49	64	21	14	24
KENTUCKY—													
Springdale.....	.163	.236	.222	14	.492	4	.000	79	71	78	00	40	48
OHIO—													
Germantown.....	.147	.176	.155	14	.462	3	.071	81	64	76	56	31	53
Hillsborough.....	.151	.191	.170	14	.456	23	.059	81	65	77	43	25	35
MICHIGAN—													
Brooklyn.....	.120	.138	.112	13	.348	4	.005	87	75	78	17	50	51
St. James <sup>a</sup> ( <i>b</i> ).....	.093	.119	.099	21	.267	16	.038	100	95	93	100	49	26
INDIANA—													
Greencastle ( <i>c</i> ).....	.158	.105	.135	13	.361	6	<i>d</i> .000	76	52	79	00	00	00
New Harmony.....	.196	.201	.188	14	.589	17	.040	86	64	80	16	18	5
ILLINOIS—													
Ottawa.....	.137	.217	.148	12	.423	17	.022	90	85	88	45	62	58
MISSOURI—													
St. Louis.....	.155	.163	.159	12	.367	3	.070	76	57	64	53	20	30
IOWA—													
Dubuque.....	.108	.138	.127	20	.263	3	.053	85	65	79	68	48	52

<sup>a</sup> Same amount on the 15th and 16th.<sup>b</sup> For the last 22 days of the month only.<sup>c</sup> Only 24 observations during the month.<sup>d</sup> Same amount on the 19th

\*In this table, and several which follow, the force of vapor and relative humidity of the air at this place were computed from a comparison of the wet bulb and open air thermometer, which is probably incorrect, the observations indicating that the two instruments were differently exposed.

J. H. C.

## No. 28.—PSYCHROMETER, MARCH, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
NOVA SCOTIA—													
Albion Mines.....	.109	.115	.115	16	.225	3	.043	86	69	87	55	23	69
Halifax (a).....								65	84	77			
CANADA EAST—													
St. Martin's.....	.107	.164	.126	12	.277	22	.035	87	50	86	68	60	52
St. Martin's (b).....	.119	.182	.137	16	.343	21	.041	85	82	85	73	70	70
NEW HAMPSHIRE—													
Hanover.....	.110	.113	.112	16	.242	19	.035	84	57	74	37	27	23
VERMONT—													
Burlington.....	.102	.124	.119	15	.282	20	.008	68	53	67	19	8	27
MASSACHUSETTS—													
Amherst.....	.137	.163	.148	16	.376	19	.056	88	72	82	53	19	38
Nantucket.....	.128	.129	.142	3	.267	21	.003	61	47	64	12		00
New Bedford.....	.151	.187	.175	16	.383	21	.067	89	72	94	63	38	78
Newburyport.....	.135	.144	.140	15	.270	21	.043	82	63	75	41	38	44
North Attleboro'.....	.132	.147	.142	16	.321	22	.000	80	58	75	41	00	30
Princeton (c).....	.114	.136	.117	29	.310	19	.049	84	74	82	62	52	61
Worcester.....	.103	.130	.113	16	.260	19	.000	52	55	58	00	12	00
CONNECTICUT—													
Pomfret.....	.140	.187	.166	16	.420	21	.060	90	79	91	70	51	70
NEW YORK—													
Madrid.....	.125	.136	.133	15	.251	2	.000	77	67	77	27	36	00
New York city, [D. & D. Inst.]	.160	.196	.165	16	.388	28	.040	74	69	74	48	41	31
Penn Yan.....		.155							60			27	
Troy.....	.135	.148	.160	15	.297	18	.041	78	55	71	47	21	31
NEW JERSEY—													
Bloomfield.....	.141	.182	.170	14	.433	29	.041	72	57	75	38	23	37
PENNSYLVANIA—													
Lima.....	.159	.224	.175	10	.465	29	.046	76	59	70	42	20	34
Norristown.....	.183	.256	.201	14	.644	18	.043	80	71	74	33	26	31
Philadelphia.....	.193	.220	.214	10	.487	27	.034	82	62	75	35	23	35
Yonkersville.....	.145	.164	.133	3	.348	27	.044	94	76	79	62	18	23
MARYLAND—													
Frederick.....	.177	.206	.199	10	.446	28	.056	76	54	70	28	22	21
DISTRICT OF COLUMBIA—													
Washington.....	.240	.259	.233	10	.618	28	.064	86	61	72	49	21	32
VIRGINIA—													
Alexandria.....	.195	.232	.228	10	.580	26	.077	75	54	69	44	20	33
NORTH CAROLINA—													
Thorbury.....	.262	.257	.280	3	.633	26	.000	77	41	63	30	13	00
SOUTH CAROLINA—													
Camden.....	.320	.338	.350	10	.601	26	.093	81	46	71	36	20	37
St. John's.....	.326	.314	.359					77	49	71	30	19	10
GEORGIA—													
Culloden.....	.350	.402	.371	10	.653	26	.063	72	57	61	29	27	28
Savannah.....	.412	.401	.437	22	.632	27	.134	81	47	73	38	18	33
Sparta.....	.363	.426	.399	17	.707	26	.131	80	53	77	43	29	51
FLORIDA—													
Jacksonville.....	.522	.649	.556	18	.909	26	.273	89	70	87	56	56	73
MISSISSIPPI—													
Jackson (f).....	.369	.518	.410	17	1.079	23	.127	88	73	83	51	36	25
Lake Washington (g).....	.321	.333		15	.629	26	.048	66	48		19	11	
LOUISIANA—													
New Orleans.....	.505	.569	.547	9	.827	26	.263	92	74	89	62	53	64
TEXAS—													
Austin.....	.458	.418	.495	30	.706	11	.177	83	51	86	54	25	54
New Wied.....	.509	.605	.532	30	.963	4	.077	80	67	82	28	11	58
TENNESSEE—													
Glenwood.....	.272	.270	.272	9	.606	18	.076	76	52	66	32	21	20
Knoxville.....	.277	.407	.313	16	.788	18	.000	81	75	74	00	42	00
Lebanon.....	.261	.271	.278	9	.594	26	.031	70	47	64	20	12	22

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table No. 26.

c Observations omitted on the 7th and 14th to the 17th, inclusive.

d Same amount on the 21st.

e Same amount on the 24th, 27th, 28th, and 29th.

f Incomplete.

g Imperfect.

h Same amount on the 25th and 26th.



No. 28.—PSYCHROMETER, MARCH, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
KENTUCKY—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Springdale .....	.239	.270	.265	15	.591	5	.041	82	58	71	53	19	36
OHIO—													
College Hill (a) .....	.249	.303	.235	16	.523	17	.074	78	58	61	26	25	25
Germantown .....	.196	.205	.219	16	.492	26	.065	82	52	77	54	26	40
Hillsborough .....	.208	.206	.206	15	.500	17	.032	77	51	68	47	21	11
Oberlin .....	.203	.244	.239	15	.460	18	.082	81	66	82	63	33	45
MICHIGAN—													
Brooklyn .....	.162	.197	.184	15	.491	25	.036	81	70	82	55	26	53
St. James .....	.136	.185	.141	15	.375	17	b. 000	98	94	93	70	00	00
INDIANA—													
New Harmony .....	.227	.250	.246	15	.573	20	.023	76	55	76	30	1	32
ILLINOIS—													
Ottawa .....	.160	.306	.211	15	.586	18	.074	91	84	88	80	63	70
Upper Alton (c) .....	.261	.401	.297	15	.799	10	.155	88	82	88	76	58	66
MISSOURI—													
St. Louis .....	.207	.204	.204	7	.480	18	.060	72	52	61	43	15	29
IOWA—													
Dubuque .....	.157	.167	.181	2	.352	17	.039	75	50	70	45	21	37
Muscatine (d) .....	.135	.209	.153	22	.348	26	.017	70	76	76	18	44	42

a Observations omitted from the 1st to the 8th and from the 18th to the 31st.

b Same amount on the 19th and 26th.

c Incomplete.

d For the last eleven days of the month only.

## No. 29.—PSYCHROMETER, APRIL, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
NOVA SCOTIA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches</i>						
Halifax ( <i>a</i> )								86	74	76	-----	-----	-----
CANADA EAST—													
St. Martin's	.158	.244	.168	20	.420	2	<i>b</i> .079	85	78	84	61	47	64
St. Martin's ( <i>c</i> )	.141	.268	.196	21	.421	2	.080	84	81	85	64	57	68
NEW HAMPSHIRE—													
Hanover	.142	.170	.158	30	.415	11	<i>d</i> .000	74	56	68	00	9	39
VERMONT—													
Burlington	.140	.170	.159	26	.348	24	.025	67	54	63	34	21	9
MASSACHUSETTS—													
Amherst	.213	.222	.208	27	.551	14	.070	81	59	78	46	19	37
Nantucket	.209	.197	.213	29	.403	5	.000	69	60	82	00	20	56
New Bedford	.220	.246	.226	27	.456	3	.108	82	69	88	55	40	46
Newburyport	.169	.185	.185	30	.365	3	<i>e</i> .000	72	59	73	00	00	00
North Attleboro'	.204	.192	.192	27	.513	3	<i>f</i> .000	77	51	76	00	00	00
Princeton	.174	.197	.189	27	.480	2	.000	76	64	76	00	00	42
Worcester	.161	.177	.185	26	.519	2	<i>g</i> .000	66	54	72	00	00	36
CONNECTICUT—													
Pomfret	.212	.270	.219	27	.559	14	.093	88	75	86	59	38	66
NEW YORK—													
Leroy ( <i>h</i> )	.211	.250	-----	26	.503	2	.105	77	72	-----	27	38	-----
Madrid	.160	.166	.181	30	.311	11	<i>i</i> .000	71	53	78	00	00	00
New York city, [D. & D. Inst.]	.227	.252	.221	27	.551	11	.094	79	64	75	30	28	31
Penn Yan	-----	.193	-----	-----	-----	-----	-----	-----	57	-----	-----	25	-----
Troy	.202	.176	.213	26	.525	14	.065	74	51	69	51	19	37
NEW JERSEY—													
Bloomfield ( <i>j</i> )	.200	.279	.215	9	.497	3	.088	76	60	80	59	45	61
PENNSYLVANIA—													
Lima	.253	.256	.255	27	.527	2	.026	78	58	83	12	21	50
Norristown	.240	.318	.259	28	.633	3	.116	76	63	74	38	28	26
Philadelphia	.254	.276	.273	27	.539	2	.089	78	56	72	44	31	35
Youngsville	.193	.231	.196	25	.442	16	.059	86	65	77	49	22	27
Warrior's Mark	.188	.218	.203	25	.462	1	<i>k</i> .000	69	49	66	00	00	00
MARYLAND—													
Frederick	.244	.259	.279	27	.560	12	.088	78	60	74	56	26	35
DISTRICT OF COLUMBIA—													
Washington	.308	.344	.310	26	.631	1	.139	83	58	77	50	38	56
VIRGINIA—													
Alexandria	.264	.277	.285	27	.562	2	.000	76	61	73	00	23	00
NORTH CAROLINA—													
Thornbury	.325	.291	.299	26	.576	2	.080	79	46	71	30	11	42
SOUTH CAROLINA—													
Camden	.367	.398	.373	8	.981	19	.129	82	52	74	56	20	40
St. John's	.361	.357	.338	-----	-----	-----	-----	79	45	74	50	18	45
GEORGIA—													
Culloden	.407	.372	.357	27	.612	3	<i>l</i> .059	76	51	64	59	15	31
Savannah	.417	.416	.419	26	.723	8	.115	79	48	72	55	26	42
Sparta	.381	.431	.392	23	.721	2	.049	79	54	74	70	34	20
FLORIDA—													
Jacksonville	.511	.603	.527	27	.846	3	.225	85	72	86	53	45	65
MISSISSIPPI—													
Jackson	.377	.521	.423	26	.963	1	.136	86	68	84	57	35	56
LOUISIANA—													
New Orleans	.444	.481	.483	13	.791	1	.146	81	65	80	48	32	36
TEXAS—													
Austin	.426	.357	.453	13	<i>m</i> .658	2	.097	74	58	77	46	13	25
New Weid	.464	.613	.504	24	.983	17	.163	74	58	77	48	23	26

*a* Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

*b* Same amount on the 14th.

*c* See note for this place in table 26.

*d* Same amount on the 24th.

*e* Same amount on the 4th, 12th, 16th, and 19th.

*f* Same amount on the 4th, 11th, 14th, and 16th.

*g* Same amount on the 3d, 5th, 11th, 15th, and 23th.

*h* Incomplete.

*i* Same amount on the 13th, 14th, 16th, and 17th.

*j* Observations omitted after the 15th.

*k* Same amount on the 2d, 3d, 11th, and 28th.

*l* Same amount on the 4th.

*m* Same amount on the 23d and 25th.



No. 29.—PSYCHROMETER, APRIL, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>TENNESSEE—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
Glenwood .....	.304	.291	.301	22	.541	1	.061	73	43	59	51	19	21
Knoxville .....	.297	.341	.329	25	.836	3	.103	82	57	74	63	31	50
<b>KENTUCKY—</b>													
Springdale .....	.267	.347	.337	23	.744	2	.096	84	56	73	41	34	45
<b>OHIO—</b>													
Germantown .....	.274	.275	.276	22	.537	2	.099	82	55	77	57	31	48
Hillsborough .....	.253	.279	.253	26	.510	2	.106	74	59	70	46	34	41
Oberlin .....	.282	.317	.276	21	.588	28	.131	93	76	87	75	46	64
<b>INDIANA—</b>													
New Harmony .....	.311	.311	.335	23	.892	1	<i>a</i> .097	79	49	75	53	22	45
<b>ILLINOIS—</b>													
Ottawa .....	.305	.528	.323	24	1.074	29	.118	89	81	92	48	65	61
Upper Alton .....	.389	.505	.417	22	.839	10	.149	87	74	81	69	40	53
<b>MISSOURI—</b>													
St Louis .....	.297	.305	.298	23	.650	2	.083	70	49	65	44	28	42
<b>IOWA—</b>													
Dubuque .....	.228	.235	.241	21	.527	15	.036	64	41	58	44	9	39
Muscatine .....	.232	.295	.270	8	.574	15	.000	77	45	72	00	19	32
<b>MINNESOTA—</b>													
St. Anthony's Falls .....	.253	.323	.266	24	.623	2	.063	90	62	84	67	38	62

*a* Same amount on the 2d.

## No. 30.—PSYCHROMETER, MAY, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 a. m.	7 a. m.	2 p. m.	9 p. m.
NOVA SCOTIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Halifax ( <i>a</i> )								93	71	87			
CANADA EAST—													
St. Martin's	.292	.380	.314	17	.643	6	.111	70	56	73	36	33	51
St. Martin's ( <i>b</i> )	.315	.417	.344	16	.660	6	.110	77	64	77	49	45	60
NEW HAMPSHIRE—													
Hanover	.304	.307	.293	19	.621	14	.000	82	48	66	44	19	00
VERMONT—													
Burlington	.315	.371	.311	21	.641	6	.082	67	53	65	46	26	43
MASSACHUSETTS—													
Amherst	.380	.419	.380	18	.623	6	.087	86	60	77	47	38	36
Nantucket	.345	.291	.334	18	.567	16	.116	79	54	82	55	17	36
New Bedford	.376	.457	.381	15	.691	6	.152	86	73	92	60	48	69
Newburyport	.310	.333	.312	19	.540	11	.077	69	51	67	26	14	23
North Attleboro'	.368	.394	.363	18	.604	7	.091	78	57	82	43	25	39
Princeton	.324	.342	.341	18	.565	6	.062	78	57	74	44	30	40
Worcester	.317	.347	.352	18	.664	6	.052	66	54	71	33	25	29
CONNECTICUT—													
Pomfret	.382	.457	.410	20	.680	6	.118	88	74	91	52	48	59
NEW YORK—													
Beaver Brook	.401	.560	.437	28	.819	7	.168	94	80	85	85	51	61
Madrid ( <i>e</i> )	.269	.277	.305	14	.561	6	.106	61	51	51	46	29	42
New York city, [D. & D. Inst.]	.363	.393	.366	15	.626	6	.077	71	62	73	36	24	32
Penn Yan		.323							47			30	
Troy	.345	.324	.359	18	.592	6	.059	69	45	63	39	23	33
NEW JERSEY—													
Bloomfield	.365	.428	.393	15	.694	6	.085	80	59	80	39	25	37
PENNSYLVANIA—													
Lima	.412	.436	.422	15	.722	6	.087	81	60	79	40	20	29
Norristown	.391	.478	.420	15	.800	6	.071	79	60	79	40	15	33
Philadelphia	.414	.446	.439	14	.772	7	.077	75	55	71	31	25	38
Sugar Grove	.300	.288	.268	25	.551	6	.006	69	46	64	39	2	36
Warrior's Mark	.309	.328	.333	29	.709	11	.052	74	44	70	21	12	23
MARYLAND—													
Frederick	.390	.399	.446	25	.688	7	.079	68	46	86	28	21	25
DISTRICT OF COLUMBIA—													
Washington	.448	.509	.487	10	.884	7	.112	80	57	78	34	26	24
VIRGINIA—													
Alexandria	.441	.431	.446	17	.725	7	.091	74	51	70	31	23	28
NORTH CAROLINA—													
Thornbury	.516	.450	.491	17	.667	7	.124	82	46	77	54	18	47
SOUTH CAROLINA—													
Aiken	.572	.574	.616	27	.775	5	.242	81	58	75	45	29	46
Camden	.545	.525	.559	17	.788	1	.195	79	53	75	42	24	44
St. John's	.534	.568	.591					88	59	85	76	27	66
GEORGIA—													
Culloden	.550	.558	.571	26	.895	4	.183	78	57	70	48	34	28
Savannah	.640	.624	.642	15	.821	1	.232	85	59	82	57	32	50
Sparta ( <i>f</i> )	.530	.650	.605	30	1.138	1	.182	85	52	75	61	31	32
FLORIDA—													
Jacksonville	.757	.843	.738	17	1.176	1	.316	87	76	90	49	62	77
MISSISSIPPI—													
Jackson	.582	.764	.642					90	80	95	54	34	69
LOUISIANA—													
New Orleans	.676	.680	.704	30	.895	3	.323	93	63	87	78	34	45
TEXAS—													
Austin	.579	.514	.616	25	.812	1	.262	85	50	86	62	22	54
New Wied	.621	.814	.651	31	1.201	5	.217	81	71	83	46	31	33

*a* Observations at 6 a. m., 3 p. m., and 9 p. m., and humidity computed from Glaisher's tables.

*b* See note for this place in table 26.

*c* Same amount on the 16th.

*d* Same amount on the 7th.

*e* Observations omitted after the 16th.

*f* Imperfect.



No. 30.—PSYCHROMETER, MAY, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>TENNESSEE—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Glenwood .....	.457	.492	.501	26	.787	1	.225	85	60	78	49	30	29
Knoxville .....	.441	.540	.494	23	.726	1	.162	84	63	79	50	28	35
<b>KENTUCKY—</b>													
Springdale .....	.389	.520	.503	29	.884	19	.191	90	62	82	51	38	49
<b>OHIO—</b>													
Germantown .....	.375	.385	.389	25	.727	7	.174	81	52	80	53	25	47
Hillsborough .....	.380	.408	.366	14	.720	5	.110	76	58	71	48	13	33
Oberlin .....	.386	.427	.367	14	.705	6	.175	84	66	76	67	49	56
<b>MICHIGAN—</b>													
St. James .....	.341	.429	.309	24	.826	8	.138	94	96	97	45	73	39
<b>INDIANA—</b>													
New Harmony .....	.457	.549	.496	24	.944	1	.196	80	58	74	37	28	48
La Fayette .....		.347							41			13.5	
<b>ILLINOIS—</b>													
Ottawa .....	.459	.631	.455	25	1.111	2	.222	89	79	93	72	66	70
Upper Alton .....	.477	.742	.514	30	1.065	2	.218	89	88	85	73	61	67
<b>MISSOURI—</b>													
St. Louis .....	.411	.438	.457	30	.756	10	.130	72	46	70	45	21	43
<b>IOWA—</b>													
Dubuque .....	.300	.299	.330	27	.619	5	.087	61	41	64	32	14	28
Muscatine .....	.338	.459	.377	28	.873	3	.129	82	59	79	52	18	39
<b>MINNESOTA—</b>													
St. Anthony's Falls .....	.315	.432	.330	28	1.038	29	.021	82	63	80	3	23	33

## No. 31.—PSYCHROMETER, JUNE, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
NOVA SCOTIA—													
Halifax (a) .....								87	71	84			
CANADA EAST—													
St. Martin's .....	.397	.554	.449	27	.986	1	.163	80	66	83	49	34	49
St. Martin's (b) .....	.430	.564	.451	27	.910	1	.180	83	70	83	57	43	58
NEW HAMPSHIRE—													
Hanover .....	.387	.434	.428	28	.678	14	.094	86	52	81	19	20	56
VERMONT—													
Burlington .....	.424	.464	.438	28	.827	1	.191	75	55	78	51	27	62
Fairfax (c) .....	.482	.564	.528	28	.812	26	.275	80	73	87	65	55	81
MASSACHUSETTS—													
Amherst .....	.523	.547	.498	6	.752	2	.283	92	64	83	75	37	52
Nantucket .....	.438	.438	.449	19	.594	4	.116	77	62	82	62	17	40
New Bedford .....	.517	.624	.517	19	.913	1	.291	80	77	94	79	57	81
Newburyport .....	.413	.426	.431	15	.621	17	.176	73	55	74	40	20	49
North Attleboro' .....	.474	.480	.483	28	.701	1	.178	78	57	87	49	22	68
Princeton .....	.398	.433	.444	28	.752	1	.218	75	60	81	43	29	44
Worcester .....	.395	.461	.433	28	.679	2	.160	67	59	73	37	30	49
CONNECTICUT—													
Pomfret .....	.506	.468	.507	19	.708	1	.203	89	73	87	70	47	42
NEW YORK—													
Beaver Brook .....	.495	.743	.371	20	.976	1	.310	91	78	85	88	61	77
Buffalo, [Allen] .....		.576		27	.718	1	.356		77			49	
Buffalo, [Hunt] .....	.560	.571	.602	27	.772	17	.330	77	74	74	53	39	62
Leroy, (f) .....	.470	.553		27	.935	1	.245	76	62		56	34	
Madrid .....	.411	.449	.433	28	.838	1	.219	75	60	82	45	23	42
New York city, [D. & D. Inst.] .....	.479	.521	.504	28	.783	2	.239	69	58	76	47	29	54
Penn. Yan. ....		.448							49			28	
Troy .....	.456	.456	.484	28	.742	1	.156	75	47	66	51	20	44
NEW JERSEY—													
Bloomfield .....	.514	.637	.529	28	.921	1	.294	86	67	86	68	47	28
PENNSYLVANIA—													
Lima .....	.539	.597	.569	27	.884	1	.256	85	50	87	59	43	72
Norristown .....	.544	.663	.571	21	.962	1	.287	85	66	83	55	38	59
Philadelphia .....	.544	.584	.577	28	.992	1	.261	78	59	74	57	33	56
Warrior's Mark .....	.474	.535	.496	19	.808	1	.246	85	59	83	55	33	20
MARYLAND—													
Frederick .....	.532	.541	.559	19	.758	1	.253	70	49	80	56	33	56
DISTRICT OF COLUMBIA—													
Washington .....	.610	.649	.634	30	.925	1	.330	77	60	80	33	43	59
VIRGINIA—													
Alexandria .....	.408	.578	.561	24	.910	1	.272	80	54	73	43	39	51
NORTH CAROLINA—													
Thornbury .....	.575	.512	.608	30	.866	28	.000	78	45	82	49	26	60
SOUTH CAROLINA—													
Aiken .....	.684	.652	.703	30	.935	2	.336	82	58	72	59	55	42
Camden .....	.645	.621	.677	28	1.313	2	.276	81	53	76	64	28	48
St. John's .....	.666	.727	.738					90	69	91	68	45	70
GEORGIA—													
Culloden .....	.665	.661	.702	30	.996	2	.303	77	61	77	49	31	45
Savannah .....	.740	.754	.774	26	.971	2	.383	83	63	84	60	37	71
Sparta (g) .....	.610	.635	.706	22	.860	2	.336	89	52	79	65	31	56
FLORIDA—													
Jacksonville .....	.862	.954	.850	26	1.138	2	.523	88	79	90	72	58	56
ALABAMA—													
Tuscaloosa .....	.704	.703	.789	26	.980	2	.382	85	59	81	65	44	64
MISSISSIPPI—													
Lake Washington .....	.737	.605	.876	24	.946	8	.397	82	62	81	69	33	71
LOUISIANA—													
New Orleans (f) .....	.789	.747	.818	30	.972	3	.549	92	65	87	79	44	69

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table No. 26.

c For the last six days of the month only.

d Same amount on the 19th.

e Same amount on the 28th.

f Incomplete.

g No observations after the 23d.



No. 31.—PSYCHROMETER, JUNE, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
TEXAS—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Austin .....	.649	.580	.664	13	<i>a.</i> 785	7	.416	76	50	75	64	31	42
New Wied .....	.820	.975	.835	17	1.296	4	.639	83	67	88	69	37	73
TENNESSEE—													
Glenwood .....	.627	.649	.678	30	.932	8	.315	91	64	86	74	49	74
Knoxville .....	.584	.621	.653	29	.850	2	.314	88	64	84	73	41	66
KENTUCKY—													
Springdale .....	.528	.703	.679	21	1.151	10	.311	97	68	85	86	50	56
OHIO—													
Germantown .....	.575	.587	.578	29	1.039	1	.233	56	57	87	74	32	71
Hillsborough .....	.564	.581	.571	29	.979	1	.290	89	66	86	69	40	63
Oberlin .....	.560	.613	.544	21	.868	1	.270	85	65	82	71	47	72
INDIANA—													
La Fayette .....	.554	.524	.577	28	.906	2	.306	79	49	81	42	31	59
New Harmony .....	.626	.706	.672	25	.987	8	.316	80	60	85	60	44	58
ILLINOIS—													
Ottawa .....	.682	.883	.673	29	1.304	7	.285	92	86	97	79	77	87
Upper Alton .....	.652	.875	.682	27	1.188	2	.308	87	87	82	71	70	00
MISSOURI—													
St. Louis .....	.600	.629	.655	30	.971	8	.283	75	54	74	61	37	63
IOWA—													
Dubuque .....	.513	.558	.535	27	1.137	8	.222	76	56	75	63	29	51
Muscatine .....	.509	.657	.584	30	.958	1	.256	87	60	85	61	41	64
MINNESOTA—													
St. Anthony's Falls .....	.549	.653	.549	27	1.108	6	.222	94	65	93	70	50	67
CALIFORNIA—													
Sacramento, [Hatch] (b) .....	.537												

*a* Same amount on the 26th.*b* Observations taken at noon.

## No. 32.—PSYCHROMETER, JULY, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches	Inches		Inches		Inches						
NOVA SCOTIA—													
Halifax (a) .....								95	68	85			
CANADA EAST—													
St. Martin's .....	.559	.723	.605	24	1.133	12	.310	75	56	77	62	36	54
St. Martin's (b) .....	.555	.663	.614	4	.986	13	.393	77	57	80	69	40	56
NEW HAMPSHIRE—													
Hanover .....	.517	.563	.534	25	.832	9	.232	91	52	80	73	29	36
VERMONT—													
Burlington .....	.579	.600	.585	21	1.056	27	.342	74	48	72	58	35	59
MASSACHUSETTS—													
Amherst .....	.631	.664	.644	22	.964	18	.341	88	63	80	54	31	39
Nantucket .....	.581	.569	.565	26	.813	1	.411	78	62	82	55	35	62
New Bedford .....	.671	.796	.670	4	.997	1	.431	92	81	94	77	62	66
Newburyport .....	.536	.547	.528	26	.803	1	.195	78	52	71	53	32	55
North Attleboro' (c) .....	.550	.529	.552	4	.805	2	.371	73	50	79	49	32	53
Princeton .....	.548	.605	.548	26	.792	27	.282	78	65	75	48	35	37
Worcester .....	.522	.539	.522	4	.982	1	.279	68	55	64	47	30	43
CONNECTICUT—													
Pomfret .....	.631	.745	.631	21	1.033	14	.433	88	75	90	67	56	66
NEW YORK—													
Buffalo, [Hunt] .....	.669	.711	.726					74	70	71	59	59	59
Leroy (d) .....	.590	.636	.572	8	.908	10	.398	75	53	75	62	38	56
Madrid .....	.523	.551	.540	8	.832	26	.000	63	49	72	00	33	41
New York city, [D & D. Inst.] .....	.610	.635	.636	26	.886	13	.341	71	58	72	47	39	39
Penn Yan .....		.526							46			26	
Spencertown .....	.587	.730	.584	4	1.355	10	.209	79	62	74	61	27	44
Troy .....	.573	.524	.572	4	1.032	10	.260	72	41	57	50	23	49
NEW JERSEY—													
Bloomfield .....	.646	.690	.680	20	1.026	19	.409	82	59	87	50	40	52
PENNSYLVANIA—													
Lima .....	.677	.699	.685	23	.984	13	.338	82	63	88	55	38	80
Norristown .....	.668	.768	.719	22	.992	13	.376	83	66	84	48	33	68
Philadelphia .....	.676	.710	.740	26	.983	13	.393	76	57	74	36	40	59
Warrior's Mark .....	.594	.621	.607	22	.896	13	.272	84	53	84	61	29	45
MARYLAND—													
Fred-rick .....	.665	.624	.695	8	.877	4	.000	72	46	75	46	00	52
DISTRICT OF COLUMBIA—													
Washington .....	.744	.761	.794	25	.983	18	.489	84	56	81	64	32	62
VIRGINIA—													
Alexandria .....	.759	.817	.845	30	1.646	13	.352	79	63	84	23	33	63
NORTH CAROLINA—													
Thornbury (e) .....	.715	.678	.713	8	.916	18	.459	83	56	80	68	28	50
SOUTH CAROLINA—													
Aiken .....	.784	.781	.820	9	.956	13	.531	82	60	76	67	43	57
Camden .....	.770	.818	.811	31	1.017	13	.559	77	62	79	56	43	59
St. John's .....	.766	.840	.847					91	71	91	70	53	79
GEORGIA—													
Savannah .....	.819	.808	.838	1	.986	13	.563	83	58	81	66	26	70
FLORIDA—													
Jacksonville .....	.921	.935	.903	1	1.255	12	.666	85	72	86	69	49	68
ALABAMA—													
Tuscaloosa .....	.801	.773	.835	6	.987	13	.575	85	58	82	73	59	47
MISSISSIPPI—													
Lake Washington (d) .....	.703	.778	.830	9	.962	12	.524	82	58	81	36	43	65
LOUISIANA—													
New Orleans .....	.850	.836	.883	5	.996	10	f. 647	97	71	89	84	48	79
TEXAS—													
Austin .....	.678	.592	.702	25	.816	12	.416	75	45	75	56	31	65
New Wied .....	.888	.937	.830	8	1.345	12	.524	84	59	87	71	30	66

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table No. 26.

c No observations after the 15th.

d Incomplete.

e Observations omitted after the 25th.

f Same amount on the 15th.



No. 32.—PSYCHROMETER, JULY, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
TENNESSEE—													
Glenwood .....	.762	.747	.796	16	.994	11	.465	85	58	84	70	41	75
Knoxville .....	.681	.666	.730	5	.903	12	.390	87	61	80	63	27	59
KENTUCKY—													
Springdale .....	.604	.794	.812	31	1.243	27	.396	95	55	79	81	25	51
OHIO—													
Gallipolis .....	.681	.715	.738	23	.963	13	.443	76	57	67	65	40	52
Germantown .....	.659	.642	.666	7	1.001	10	.357	81	49	84	73	32	70
Hillsborough .....	.624	.637	.619	11	.963	14	.384	83	51	73	66	29	50
Oberlin .....	.660	.759	.683	7	1.087	12	.410	88	60	84	66	45	67
Zanesville .....	.739	.812	.835	8	1.427	28	.515	95	57	88	80	34	65
MICHIGAN—													
St. James .....	.605	.759	.573	17	1.188	25	.278	88	91	92	49	79	29
INDIANA—													
New Harmony .....	.730	.784	.790	8	1.198	11	.200	72	45	72	29	25	57
ILLINOIS—													
Manchester .....	.744	.807	.800	28	1.201	11	.315	78	56	76	43	26	62
Ottawa .....	.830	1.103	.831	30	1.445 <sup>a</sup>	12	.505	89	83	95	79	66	84
Upper Alton .....	.795	1.036	.826	29	1.521	26	.483	87	74	84	74	43	65
MISSOURI—													
St. Louis .....	.712	.683	.747	1	.969 <sup>b</sup>	26	.380	73	45	68	55	26	48
IOWA—													
Dubuque .....	.620	.677	.673	30	1.101	27	.397	76	57	77	61	36	61
Muscatine .....	.642	.854	.734	18	1.671	10	.335	87	64	86	58	38	67
MINNESOTA—													
St. Anthony's Falls .....	.674	.854	.701	1	1.135	11	.361	96	77	96	87	61	82
CALIFORNIA—													
Sacramento, [Hatch] (c) .....		.507											
Sacramento, [Logan] (d) .....													
CENTRAL AMERICA—													
Truxillo, Honduras (e) .....	.838	.836		5	.923	1	.733	75	76		64	56	
SOUTH AMERICA—													
Assumption, Paraguay .....	.613	.730	.659	11	1.023 <sup>f</sup>	19	.386	99	98	100	95	84	95

<sup>a</sup> Same amount on the 31st.  
<sup>b</sup> Same amount on the 8th.  
<sup>c</sup> Observations taken at noon.

<sup>d</sup> Mean force of vapor for the month, .548; computed approximately from the mean dew point.  
<sup>e</sup> Incomplete.  
<sup>f</sup> Same amount on the 12th.

## No. 33.—PSYCHROMETER, AUGUST, 1854.

NAME OF STATION.	FORCE OF VAPOR.						RELATIVE HUMIDITY.						
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
NOVA SCOTIA— Halifax (a).....								95	81	80			
CANADA EAST— St. Martin's..... St. Martin's (b).....	.419 .444	.501 .531	.455 .474	10 30	.879 .854	21 16	.250 .326	73 77	54 57	77 80	53 59	30 35	54 64
NEW HAMPSHIRE— Hanover.....	.402	.425	.403	24	.739	14	.123	84	46	67	51	14	30
VERMONT— Burlington.....	.413	.403	.417	1	.751	2	.190	66	40	51	38	18	29
MASSACHUSETTS— Amherst..... Nantucket..... New Bedford..... Newburyport..... Princeton..... Worcester.....	.491 .542 .579 .424 .434 .409	.494 .496 .717 .405 .424 .430	.491 .534 .599 .434 .419 .419	2 2 22 2 2 15	.841 .789 1.031 .706 .732 .929	25 23 30 25 30 16	.245 .290 .427 .187 .244 c. 229	87 79 93 75 77 66	52 60 81 47 49 47	75 82 94 70 51 62	60 57 77 39 51 40	21 41 64 16 27 24	43 49 81 38 44 34
CONNECTICUT— Pomfret.....	.522	.616	.536	13	.904	28	.362	88	75	91	71	43	61
NEW YORK— New York city, [D. & D. Inst.] Penn Yan..... Spencertown..... Troy.....	.503 ..... .487 .441	.503 ..... .647 .431	.553 ..... .401 .460	2 ..... 16 1	.828 ..... .863 .801	7 ..... 11 18	.257 ..... .009 .235	64 ..... 68 69	43 ..... 61 40	70 ..... 61 57	43 ..... 48 53	30 ..... 37 22	43 ..... 90 40
NEW JERSEY— Bloomfield.....	.536	.602	.566	1	.915	14	.331	81	54	80	53	33	44
PENNSYLVANIA— Lima..... Norristown..... Philadelphia.....	.569 .556 .592	.626 .693 .638	.598 .615 .685	1 1 1	.955 1.070 1.024	8 29 8	.340 .367 .338	83 84 77	63 67 58	86 81 75	52 56 58	42 46 40	57 64 60
MARYLAND— Frederick.....	.546	.541	.597	1	.872	8	.268	71	44	70	52	29	40
SOUTH CAROLINA— Aiken..... Camden..... St. John's.....	.743 .749 .759	.716 .744 .842	.776 .789 .829	3 2 .....	.970 1.010 .....	30 30 .....	.545 .502 .....	81 86 91	57 59 71	73 87 87	59 68 82	41 40 54	61 63 78
GEORGIA— Savannah.....	.827	.836	.840	1	1.052	30	.587	85	61	82	76	39	63
FLORIDA— Jacksonville.....	.905	.903	.891	28	1.033	14	.516	85	70	88	75	38	72
ALABAMA— Tuscaloosa.....	.755	.687	.770	15	.861	6	.322	79	46	75	52	20	48
MISSISSIPPI— Lake Washington (d).....	.800	.809	.844	21	1.052	23	.655	82	58	83	56	44	68
LOUISIANA— New Orleans.....	.863	.822	.901	2	1.283	23	.564	94	67	86	86	42	59
TEXAS— Austin..... New Wied.....	.729 .843	.614 .951	.753 .823	6 21	.856 1.044	2 29	e. 515 .691	79 79	44 53	74 82	62 67	31 41	62 70
TENNESSEE— Glenwood..... Knoxville.....	.700 .700	.645 .689	.786 .719	19 3	1.070 .897	5 7	.348 .524	82 91	49 62	73 83	59 81	26 45	56 55
KENTUCKY— Springdale.....	.579	.777	.750	23	1.345	9	.309	89	56	69	61	31	29
OHIO— Gallipolis..... Germanstown..... Hillsborough (d)..... Oberlin..... Zanesville.....	.641 .597 .610 .603 .641	.673 .562 .595 .660 .740	.711 .609 .565 .599 .801	28 13 26 1 13	.950 .865 1.132 .935 1.101	5 8 17 7 8	.326 .226 .236 .348 c. 374	74 85 82 85 96	57 44 50 59 52	71 80 72 83 91	22 62 56 72 79	38 26 23 39 35	56 61 55 74 70

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table No. 25.

c Same amount on the 18th.

d Incomplete.

e Same amount on the 12th and 20th.



No. 33.—PSYCHROMETER, AUGUST, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
INDIANA—													
New Harmony.....	.707	.743	.762	11	1.115	6	.377	79	52	82	47	31	56
ILLINOIS—													
Manchester.....	.681	.782	.760	27	1.201	9	.433	82	60	79	69	40	60
Ottawa.....	.699	1.129	.768	28	1.569	7	.423	94	89	97	85	75	88
Upper Alton.....	.704	1.027	.755	30	1.418	18	.315	86	75	82	73	31	48
MISSOURI—													
St. Louis.....	.635	.603	.678	27	.900	18	.329	70	41	65	50	23	49
IOWA—													
Dubuque.....	.544	.576	.631	28	.901	7	.331	77	50	77	63	34	64
Muscataine.....	.570	.771	.647	28	1.187	8	.311	89	60	84	75	44	59
MINNESOTA—													
St. Anthony's Falls.....	.579	.738	.586	21	1.015	6	.321	96	72	95	81	57	80
CALIFORNIA—													
Sacramento, [Hatch] (a).....		.460											
Sacramento, [Logan] (b).....													
CENTRAL AMERICA—													
Truxillo, Honduras.....	.844	.868		18	.963	4	.731	79	78		65	67	
SOUTH AMERICA—													
Assumption, Paraguay.....	.596	.751	.683	21	1.165	26	c .388	100	99	99	95	89	88

a Observations taken at noon.

b Mean force of vapor for the month, .364; computed approximately from the mean dew point.

c Same amount on the 28th.

## No. 34.—PSYCHROMETER, SEPTEMBER, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
NOVA SCOTIA—													
Halifax (a) .....								93	80	84			
CANADA EAST—													
St. Martin's .....	.336	.465	.371	5	.922	21	.143	86	67	78	64	36	46
St. Martin's (b) .....	.351	.477	.376	5	.854	30	.161	88	67	81	67	49	59
NEW HAMPSHIRE—													
Hanover .....	.346	.405	.379	5	.817	29	.126	97	60	83	58	30	56
VERMONT—													
Burlington .....	.368	.418	.383	5	.744	20	.151	78	58	71	54	36	52
MASSACHUSETTS—													
Amherst .....	.432	.496	.456	6	1.122	30	.185	96	64	89	68	40	57
Nantucket .....	.448	.415	.423	9	.732	30	.106	79	62	79	49	22	41
New Bedford .....	.501	.585	.484	9	.945	30	.195	94	83	93	82	55	72
Newburyport .....	.368	.408	.390	6	.788	29	.130	78	54	72	36	34	38
North Attleboro' .....	.444	.430	.431	5	.884	30	.127	85	58	87	56	29	42
Princeton .....	.393	.428	.378	6	.796	21	.118	85	62	78	53	18	49
Williamstown .....	.388	.449	.422	6	.798	20	.157	84	67	85	47	28	59
Worcester .....	.389	.431	.371	28	.836	30	.109	74	60	70	46	25	32
CONNECTICUT—													
Pomfret .....	.456	.540	.446	6	.969	30	.177	92	81	92	66	61	59
NEW YORK—													
Madrid .....	.379	.393	.391	6	.706	30	.181	80	57	85	65	39	32
New York city, [D. & D. Inst.]	.460	.478	.470	6	.835	30	.149	74	59	71	47	30	48
Penn Yan. ....		.457							47			20	
NEW JERSEY —													
Bloomfield .....	.480	.566	.500	6	.929	21	.164	87	61	82	59	38	30
PENNSYLVANIA—													
Byberry (c) .....	.354	.445	.401	26	.704	30	.204	81	58	76	55	46	51
Lima .....	.489	.513	.517	6	.885	21	.179	85	62	83	54	35	50
Norristown .....	.509	.620	.528	6	1.108	30	.215	86	67	79	63	52	43
Philadelphia .....	.535	.578	.582	6	.992	21	.216	82	61	78	62	45	48
Pittsburg .....	.505	.668	.527	8	1.255	30	.196	80	63	68	60	31	50
MARYLAND—													
Frederick .....	.544	.584	.572	8	1.142	30	.182	87	58	77	50	29	49
SOUTH CAROLINA—													
Aiken .....	.679	.702	.695	10	1.024	23	.343	84	65	78	69	38	53
Camden .....	.715	.716	.742	10	1.030	30	.363	91	64	89	71	42	55
St. John's .....	.695	.813	.770	25		21		89	79	88	74	62	81
GEORGIA—													
Savannah .....	.778	.776	.774	10	.990	23	.439	89	66	83	75	49	68
FLORIDA—													
Jacksonville .....	.894	.920	.881	10	1.124	24	.668	89	77	91	83	59	83
ALABAMA—													
Tuscaloosa .....	.702	.677	.724	12	.910	7	.000	81	60	79	57	26	49
TEXAS—													
Austin .....	.680	.640	.708	8	.839	21	.333	83	54	81	50	29	56
New Wied .....	.774	.862	.790	1	1.193	21	.416	82	64	82	56	36	52
TENNESSEE—													
Glenwood .....	.593	.574	.622	25	.769	21	.308	84	49	73	67	28	49
Knoxville .....	.524	.514	.508	12	.823	21	.206	86	57	42	65	39	37
KENTUCKY—													
Springdale .....	.548	.864	.745	5	1.300d	22	.261	93	67	78	65	36	49
OHIO—													
Gallipolis .....	.624	.786	.741	5	1.105	22	.285	82	68	77	64	53	67
Germantown .....	.532	.446	.540	14	.821	22	.207	88	51	80	72	31	60
Hillsborough .....	.540	.545	.548	7	.870	22	.239	88	53	78	66	30	52
Oberlin .....	.538	.582	.533	1	.843	21	.275	90	61	85	66	34	43
Zanesville .....	.556	.679	.660	4	1.245	5	.000	94	58	84	79	00	51
MICHIGAN—													
St. James .....	.497	.576	.406	4	1.215	13	.061	93	87	85	13	42	34

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table No. 26.

c Incomplete.

d Same amount on the 6th, 8th, and 9th.



No. 34.—PSYCHROMETER, SEPTEMBER, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
INDIANA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
New Harmony.....	.629	.666	.685	1	.984	21	.302	91	56	84	82	34	67
ILLINOIS—													
Ottawa.....	.583	.910	.647	1	1.556	16	.323	99	87	97	94	73	89
Upper Alton.....	.624	.863	.662	11	1.241	21	.308	90	79	87	78	61	55
MISSOURI—													
St. Louis.....	.548	.559	.577	8	.760	19	.257	73	46	70	52	28	43
IOWA—													
Dubuque.....	.466	.466	.528	2	.892	19	.162	82	50	77	62	27	58
Muscatine.....	.489	.777	.570	1	1.286	26	.044	92	72	85	81	54	05
MINNESOTA—													
St. Anthony's Falls.....	.413	.608	.447	1	1.176	15	1.212	95	76	92	85	37	58
CALIFORNIA—													
Sacramento, [Hatch] (b).....		.493											
Sacramento, [Logan] (c).....													
CENTRAL AMERICA—													
Truxillo, Honduras (d).....	.845	.891		8	.969	27	e. 787	78	76		68	44	

a Same amount on the 20th.

b Observations taken at noon.

c Mean force of vapor for the month, .338; computed approximately from the mean dew point.

d Observations omitted from the 17th to the 23d.

e Same amount on the 27th.

## No. 35.—PSYCHROMETER, OCTOBER, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
NOVA SCOTIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Halifax (a) .....								93	75	82	-----	-----	-----
CANADA EAST—													
St. Martin's .....	.233	.339	.289	31	.622	25	.026	86	71	84	02	40	62
St. Martin's (b) .....	.260	.368	.304	31	.626	18	.166	91	75	86	71	50	72
NEW HAMPSHIRE—													
Hanover .....	.236	.304	.292	30	.609	19	.013	89	65	85	07	34	58
VERMONT—													
Burlington .....	.248	.300	.288	12	.577	21	.099	75	58	77	52	29	57
MASSACHUSETTS—													
Amherst .....	.285	.357	.351	31	.643	16	.166	94	68	91	53	43	70
Nantucket .....	.343	.344	.373	13	.596	16	.167	78	67	85	42	37	55
New Bedford .....	.348	.448	.396	9	.668	10	.113	90	83	95	29	65	82
Newburyport .....	.280	.316	.317	31	.592	5	.163	80	62	78	47	33	57
North Attleboro' .....	.304	.325	.334	29	.700	21	.000	87	55	88	56	00	64
Princeton .....	.280	.304	.304	30	.574	5	c. 130	83	65	81	53	29	49
Williamstown .....	.264	.331	.316	12	.586	10	.000	89	66	91	70	16	72
Worcester .....	.259	.322	.295	31	.630	22	.095	75	59	77	39	41	46
CONNECTICUT—													
Pomfret .....	.311	.399	.352	29	.639	20	.148	94	76	92	75	54	79
NEW YORK—													
Madrid(d) .....	.257	.321	.304	12	.508	■	.154	76	72	86	55	38	71
New York city, [D. & D. Inst.] .....	.289	.333	.353	29	.365	19	.132	75	59	74	55	29	56
Penn Yan .....		.346							62			33	-----
Spencertown .....	.244	.361	.291	■	.664	21	.042	73	68	74	29	44	26
NEW JERSEY—													
Bloomfield .....	.343	.416	.373	12	.716	15	.121	89	66	87	58	39	41
PENNSYLVANIA—													
Byberry .....	.322	.405	.355	29	.726	20	.136	84	64	79	63	39	54
Lima .....	.308	.333	.342	29	.722	19	.082	89	51	84	57	21	42
Norristown .....	.322	.431	.358	3	.706	19	.082	88	67	83	31	26	57
Philadelphia .....	.359	.389	.397	3	.695	19	.143	80	60	76	61	40	51
Pittsburg .....	.309	.361	.352	12	.671	21	.000	79	61	75	00	10	39
MARYLAND—													
Frederick .....	.331	.338	.351	3	.714	31	.097	90	53	78	73	13	63
DISTRICT OF COLUMBIA—													
Washington .....	.368	.368	.405	14	.688	24	.110	90	51	80	66	16	55
VIRGINIA—													
Alexandria .....	.346	.402	.387	3	.773	15	.163	85	61	81	48	33	50
SOUTH CAROLINA—													
Aiken .....	.397	.421	.417	30	.717	20	.173	78	53	66	43	29	44
Camden .....	.393	.420	.434	2	e. 732	19	.163	85	51	84	51	26	57
St. John's .....	.411	.514	.467					80	68	84	67	51	71
GEORGIA—													
Augusta (f) .....	.413	.536	.544	30	.785	23	.335	97	88	91	88	51	73
Savannah .....	.473	.465	.516	9	.780	20	.208	83	50	77	62	28	52
FLORIDA—													
Jacksonville .....	.597	.689	.632	14	.891	21	.376	88	73	87	73	56	71
Warrington .....	.671	.801						99	88		75	68	-----
ALABAMA—													
Tuscaloosa .....	.444	.482	.492	3	.797	18	.205	85	57	87	61	31	78
LOUISIANA—													
New Orleans (g) .....	.499	.489	.514	15	.785	18	h. 309	80	58	70	61	41	47
TEXAS—													
Austin .....	.520	.553	.566	13	.800	29	.282	88	53	80	63	33	57
New Wied .....	.583	.759	.627	14	.976	29	.283	83	66	85	47	47	66
TENNESSEE—													
Glenwood .....	.391	.429	.430	13	.744	19	.210	89	59	86	67	36	43
Knoxville .....	.357	.387	.399	13	.692	18	.165	89	58	86	70	30	44

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table No. 26.

c Same amount on the 23d.

d Observations omitted after the 16th.

e Same amount on the 30th.

f For the last nine days only.

g Incomplete.

h Same amount on the 19th.



## No. 35.—PSYCHROMETER, OCTOBER, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
KENTUCKY—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Springdale .....	.355	.416	.424	13	.731	15	.062	92	60	73	64	14	38
OHIO—													
Gallipolis .....	.407	.503	.460	12	.827	19	.186	89	74	86	41	46	53
Germantown .....	.314	.361	.360	12	.678	19	.145	93	57	87	83	32	65
Hillsborough .....	.371	.381	.377	12	.708	19	.136	94	62	85	71	33	47
Oberlin .....	.362	.425	.357	12	.745	19	.160	95	70	87	68	44	62
Zanesville .....	.348	.471	.410	12	.744	15	.144	94	73	90	63	40	65
MICHIGAN—													
St. James .....	.330	.407	.327	27	.658	17	.103	89	90	90	74	79	47
INDIANA—													
New Harmony .....	.390	.486	.430	11	.912	19	.207	90	67	80	71	45	53
ILLINOIS—													
Manchester .....	.367	.467	.413	1	.778	19	.199	87	68	85	65	39	60
Ottawa .....	.355	.568	.408	1	.884	15	<i>a</i> .167	99	84	95	93	69	71
MISSOURI—													
St. Louis .....	.366	.390	.397	12	.766	17	.189	87	58	76	66	29	44
IOWA—													
Dubuque .....	.329	.345	.339	1	.636	16	.105	70	55	74	53	28	39
Muscatine .....	.343	.447	.352	1	.745	17	.111	88	66	84	64	42	42
CALIFORNIA—													
Sacramento, [Hatch] ( <i>b</i> ) .....		.568											
Sacramento, [Logan] ( <i>c</i> ) .....													
CENTRAL AMERICA—													
Truxillo, Honduras .....	.825	.873		10	.950	1	.773	83	83		75	71	

*a* Same amount on the 17th.  
*b* Observations taken at noon.

*c* Mean force of vapor for the month, .304; computed approximately from the mean dew point.

## No. 36.—PSYCHROMETER, NOVEMBER, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
NOVA SCOTIA—													
Halifax (a).....								93	80	86			
CANADA EAST—													
St. Martin's.....	.170	.187	.153	13	.356	27	.059	93	85	87	69	47	35
St. Martin's (b).....	.183	.206	.173	13	.349	4	c.074	90	84	87	80	50	64
NEW HAMPSHIRE—													
Hanover.....	.171	.184	.163	13	.570	4	d.000	83	70	79	00	43	00
VERMONT—													
Burlington.....	.167	.175	.157	11	.442	5	.048	74	61	69	49	35	44
MASSACHUSETTS—													
Amherst.....	.224	.212	.231	11	.624	5	.063	95	73	91	73	30	48
Nantucket.....	.252	.259	.254	13	.518	5	.077	76	67	75	43	37	38
New Bedford.....	.267	.277	.253	1	.645	5	.090	93	77	89	84	52	70
Newburyport.....	.208	.209	.212	13	.594	5	.039	77	60	71	48	31	28
North Attleboro'.....	.222	.218	.226	13	.591	5	.047	86	59	81	71	17	48
Princeton.....	.197	.209	.197	13	.538	8	.032	87	74	81	55	36	20
Williamstown.....	.203	.201	.195	13	.504	5	.034	90	75	83	20	20	39
Worcester.....	.204	.213	.200	13	.604	6	.000	82	67	77	31	00	14
CONNECTICUT—													
Pomfret.....	.226	.247	.242	13	.596	11	.071	91	78	90	69	50	58
NEW YORK—													
New York city, [D. & D. Inst.].....	.215	.227	.218	11	.516	5	.064	74	63	71	44	37	42
Penn Yan.....		.165							60			37	
Spencertown (e).....	.236	.218	.202	13	.576	19	.079	90	76	88	62	28	63
Thornbury.....	.229	.217	.231	12	.659	28	.000	82	41	72	55	22	00
NEW JERSEY—													
Bloomfield (e).....	.214	.238	.210	11	.566	10	f.000	79	62	75	50	50	00
PENNSYLVANIA—													
Byberry.....	.213	.236	.219	13	.596	5	.088	82	62	76	62	44	51
Lima.....	.205	.222	.202	13	.572	30	.094	83	56	76	53	35	54
Norristown.....	.220	.232	.217	11	g.570	4	.089	80	65	77	54	45	46
Philadelphia.....	.236	.233	.244	11	.583	5	.105	80	60	76	61	36	60
MARYLAND—													
Frederick.....	.196	.209	.210	12	.474	20	.049	80	57	75	59	20	54
DISTRICT OF COLUMBIA—													
Washington.....	.219	.233	.226	11	.569	5	.078	81	57	70	49	33	44
VIRGINIA—													
Alexandria.....	.226	.241	.222	12	.487	6	.061	87	60	74	61	35	28
SOUTH CAROLINA—													
Aiken.....	.242	.257	.262	12	.604	18	.087	77	47	66	53	21	36
All Saints.....	.287	.345	.330	11	.731	10	.117	81	58	82	63	38	45
Camden.....	.213	.268	.267	12	.604	28	.113	85	48	80	53	23	51
St. John's.....	.276	.315	.297					82	53	79	65	28	43
GEORGIA—													
Augusta.....	.248	.296	.312	11	.549	28	.087	74	54	74	45	25	32
Savannah.....	.294	.314	.324	12	.649	19	.102	76	48	69	50	31	37
FLORIDA—													
Jacksonville.....	.372	.509	.436	11	.829	21	.079	86	72	87	34	59	68
ALABAMA—													
Tuscaloosa.....	.258	.285	.292	23	.610	18	.098	84	50	78	41	25	38
LOUISIANA—													
New Orleans (h).....	.351	.329	.344	22	.658	28	.131	85	56	73	61	28	42
TEXAS—													
Austin.....	.329	.361	.389	17	.604	25	.071	90	51	90	48	10	60
New Wied.....	.362	.453	.378	2	.785	26	.068	83	52	73	51	13	68
TENNESSEE—													
Glenwood.....	.211	.198	.216	23	.521	19	.086	82	46	72	58	22	31
Knoxville.....	.213	.226	.215	11	.509	13	.062	84	54	72	50	28	36
KENTUCKY—													
Springdale.....	.189	.220	.225	23	.478	9	.099	87	67	78	19	33	16

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table No. 26.

c Same amount on the 5th.

d Same amount on the 28th.

e Incomplete.

f Same amount on the 14th.

g Same amount on the 13th.

h Observations omitted for the first seven days.



No. 36.—PSYCHROMETER, NOVEMBER, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
OHIO—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Gallipolis.....	.214	.250	.220	12	<i>a.</i> .518	19	.084	83	67	83	67	33	61
Germantown.....	.160	.174	.173	10	.370	14	<i>b.</i> .103	84	62	81	57	28	59
Hillsborough.....	.195	.213	.202	23	.437	13	.111	92	73	86	50	34	45
Oberlin ( <i>c</i> ).....	.226	.267	.240	24	.449	21	.135	93	76	85	74	56	60
Zanesville.....	.190	.239	.213	12	.502	28	.111	86	74	84	55	49	58
INDIANA—													
Madison.....	.197	.215	.205	23	.493	19	.097	81	65	74	60	34	43
New Harmony.....	.203	.216	.213	23	.444	5	.070	89	66	81	52	19	44
ILLINOIS—													
Manchester ( <i>d</i> ).....	.169	.235	.191	22	.370	12	.059	86	65	80	49	28	31
Ottawa.....	.194	.296	.200	2	<i>a.</i> .483	27	.082	93	85	95	88	54	74
Upper Alton.....	.184	.305	.226	9	.529	5	.035	84	78	78	61	47	56
MISSOURI—													
St. Louis.....	.170	.180	.175	2	.462	19	.077	75	50	63	47	21	34
IOWA—													
Dubuque.....	.135	.147	.154	9	.282	11	.056	71	66	66	41	22	40
Muscataine.....	.131	.179	.157	6	.518	16	<i>e.</i> .000	72	59	69	00	00	00
MINNESOTA—													
St. Anthony's Falls.....	.145	.236	.160	1	.658	11	.063	88	75	89	72	56	78
CALIFORNIA—													
Sacramento, [Hatch] ( <i>f</i> ).....		.568											
Sacramento, [Logan] ( <i>g</i> ).....													
CENTRAL AMERICA—													
Truxillo, Honduras ( <i>h</i> ).....	.726	.783		12	.936	28	.668	80	80		77	74	

*a* Same amount on the 23d.*b* Same amount on the 19th.*c* Incomplete.*d* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*e* Same amount on the 28th.*f* Observations taken at noon.*g* Mean force of vapor for the month, .275; computed approximately from the mean dew point.*h* See note in table of thermometer for this month.

## No. 37.—PSYCHROMETER, DECEMBER, 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
NOVA SCOTIA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Halifax (a) .....								86	86	84			
CANADA EAST—													
St. Martin's .....	.081	.102	.085	27	.226	23	.002	89	84	91	19	27	82
St. Martin's (b) .....	.088	.120	.092	26	.263	23	.000	84	85	89	06	30	73
NEW HAMPSHIRE—													
Hanover .....	.090	.111	.097	26	.214	20	.015	93	83	90	64	56	59
VERMONT—													
Burlington .....	.069	.085	.077	29	.183	8	c. 000	57	58	64	00	06	00
MASSACHUSETTS—													
Amherst .....	.110	.136	.115	27	.228	22	.019	93	87	92	36	67	68
Nantucket .....	.164	.156	.159	15	.323	31	.000	79	65	76	53	34	00
New Bedford .....	.136	.176	.148	14	.304	20	.050	95	85	89	85	68	79
Newburyport (d) .....	.102	.131	.096	15	.243	20	.005	60	60	63	11	11	24
North Attleboro' .....	.116	.133	.128	10	.299	20	.023	85	68	81	46	28	46
Princeton .....	.102	.105	.095	24	e. 181	20	.002	91	85	82	51	50	06
Westfield .....	.094	.128	.101	16	.261	23	.009	77	75	78	42	35	61
Williamstown (f) .....	.104	.121	.118	26	.221	20	.018	93	89	97	57	59	76
Worcester .....	.079	.110	.085	27	.279	g. 000		53	66	51	00	23	00
CONNECTICUT—													
Pomfret .....	.116	.146	.121	15	.275	2	.000	95	89	90	78	74	00
NEW YORK—													
New York city, [D. & D. Inst.] .....	.118	.147	.126	27	.252	19	.028	76	79	76	34	50	46
Penn Yan .....		.118							65			11	
NEW JERSEY—													
Bloomfield .....	.113	.135	.127	25	.273	4	.044	79	64	76	62	28	56
PENNSYLVANIA—													
Lima .....	.124	.127	.155	27	.292	13	.050	86	67	81	66	44	46
Norristown .....	.114	.110	.113	27	.267	19	.024	74	55	69	34	12	23
Philadelphia .....	.132	.152	.144	27	.298	22	.029	81	71	80	53	50	51
MARYLAND—													
Frederick .....	.135	.148	.146	25	.301	9	.045	81	68	79	45	20	53
DISTRICT OF COLUMBIA—													
Washington .....	.129	.146	.136	27	.348	h. 024		73	60	58	55	14	25
VIRGINIA—													
Alexandria .....	.133	.173	.154	27	.304	29	.000	81	76	81	00	41	66
NORTH CAROLINA—													
Thornbury .....	.156	.165	.156	26	.489	5	k. 000	81	45	66	31	00	18
SOUTH CAROLINA—													
Aiken .....	.180	.228	.203	26	.596	5	i. 051	83	53	70	52	14	27
All Saints .....	.224	.264	.241	26	.529	8	.066	86	62	81	57	23	45
Camden .....	.164	.203	.187	26	.505	6	.061	88	47	75	54	19	42
St. John's .....	.168	.243	.220	25				80	53	78	36	28	29
GEORGIA—													
Savannah .....	.217	.246	.250	26	.534	5	.069	74	49	69	39	25	31
FLORIDA—													
Jacksonville .....	.331	.450	.321	3	j. 720	28	.064	92	86	86	63	48	18
Warrington .....	.459	.505		3	k. 639	4	.269	100	89		100	60	
ALABAMA—													
Tuscaloosa .....	.222	.245	.233	25	.598	8	.079	74	53	74	47	20	29
LOUISIANA—													
New Orleans .....	.302	.304	.311	25	.772	29	.104	85	58	78	30	28	42
TEXAS—													
Austin .....	.223	.234	.275	2	.658	19	.071	91	49	87	48	16	27
New Wied .....	.214	.294	.233	1	.576	19	.064	76	57	68	18	07	43
TENNESSEE—													
Glenwood .....	.175	.174	.180	25	.477	5	.069	82	54	72	39	23	38
Knoxville .....	.162	.163	.175	26	.410	5	.045	85	53	81	47	00	55

a Observations taken at 6 a. m., 3 p. m., and 8 p. m., and humidity calculated from Glaisher's tables.

b See note for this place in table No. 26.

c Same amount on the 19th.

d Observations taken at 8 a. m., 2 p. m., and 9 p. m.

e Same amount on the 27th and 28th.

f See notes in tables of thermometer for this month.

g Same amount on the 19th, 20th, 21st, and 22d.

h Same amount on the 6th.

i Same amount on the 29th.

j Same amount on the 1st.

k Same amount on the 25th.



No. 37.—PSYCHROMETER, DECEMBER, 1854—Continued.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
KENTUCKY—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Springdale .....	.174	.209	.203	26	.469	20	.078	90	80	89	65	47	56
OHIO—													
Gallipolis .....	.154	.205	.166	26	.452	8	.045	85	77	83	60	23	53
Germantown .....	.143	.156	.156	26	.420	8	.061	87	69	90	50	34	68
Hillsborough .....	.164	.185	.173	26	.449	8	.068	92	81	90	08	32	53
Zanesville .....	.146	.164	.127	26	.403	■	.051	89	72	86	60	37	54
MICHIGAN—													
Ann Arbor, [Winchell] (a) ..	.115	.138	.122	24	.227	19	.028	89	79	85	62	58	52
INDIANA—													
Madison .....	.179	.206	.198	26	.427	20	.085	88	79	88	59	48	71
New Harmony .....	.176	.205	.187	26	.499	19	.066	93	77	88	61	45	62
ILLINOIS—													
Manchester (b) .....	.143	.194	.178	26	.418	10	.021	93	75	88	68	43	08
Ottawa .....	.129	.204	.157	26	.361	5	.060	100	92	97	100	38	78
Upper Alton (d) .....	.339	.298	.223	26	.476	7	.094	91	85	80	73	41	43
MISSOURI—													
St. Louis .....	.152	.163	.165	26	.423	5	.062	79	56	70	50	25	38
IOWA—													
Dubuque .....	.100	.131	.116	26	.215	29	.039	80	68	78	53	31	49
Muscatine .....	.094	.170	.119	15	.335	30	.000	81	81	82	27	00	41
CALIFORNIA—													
Sacramento, [Logan] (f) ..	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CENTRAL AMERICA—													
Truxillo, Honduras (g) .....	.695	.696	-----	16	.839	30	.503	84	84	-----	66	66	-----

a Observations omitted for the first five days.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Same amount on the 12th and 18th.

d Very imperfect.

e Same amount on the 7th.

f Mean force of vapor for the month, .238; computed approximately from the mean dew point.

g Observations taken at 9 a. m. and 3 p. m.

No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Cal'm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Albion Mines .....	7	8	4	7	18	23	7	27	0	101	3	8	0	3	8	32	28	25	107	
Halifax .....	6	3	0	1	2	3	0	3	0	18	—	—	—	—	—	—	—	—	—	
CANADA EAST—																				
St. Martin's .....	1	29	0	3	1	22	9	28	0	93	—	—	—	—	—	—	—	—	—	
MAINE —																				
Biddeford .....	3	9	1	0	11	11	21	30	0	75	—	—	—	—	—	—	—	—	—	
Carmel .....	2	5	5	4	2	4	18	29	13	82	1	4	4	4	1	4	7	14	39	
Fryeburg .....	3	13	9	4	2	22	9	29	0	91	0	0	0	0	0	12	16	15	43	
Oldtown .....	15	9	4	0	2	17	16	23	5	91	4	1	0	0	0	9	17	11	42	
South Thomaston .....	13	30	1	10	4	9	9	16	0	92	10	28	3	10	4	10	11	17	93	
Windham .....	2	14	1	1	2	12	2	19	11	64	0	0	0	0	0	2	0	1	3	
NEW HAMPSHIRE—																				
Concord .....	7	23	0	3	0	17	2	42	0	94	—	—	—	—	—	—	—	—	—	
Exeter .....	11	2	0	3	1	12	21	26	0	70	6	1	0	3	1	12	15	14	53	
Hanover .....	16	3	2	15	6	17	2	32	0	93	0	0	0	0	0	3	9	12	24	
Londonderry .....	3	11	1	2	2	5	8	35	26	91	3	0	0	0	0	3	17	10	33	
Manchester .....	18	3	0	3	6	11	19	34	1	93	8	2	0	2	2	4	54	5	77	
Salmon Falls .....	8	10	2	1	3	11	9	31	18	93	1	0	0	0	0	5	11	11	28	
VERMONT—																				
Brandon .....	15	0	0	1	44	0	2	22	0	93	0	0	0	0	0	3	20	14	46	
Burlington .....	30	5	1	4	35	2	11	5	0	93	0	0	0	0	1	3	4	3	11	
Castleton .....	13	0	2	4	6	25	5	8	30	93	4	0	0	0	0	1	0	0	5	
Craitsbury .....	2	5	1	4	15	9	17	15	0	68	2	4	1	2	7	5	31	11	63	
St. Johnsbury .....	4	0	0	6	0	14	10	58	0	92	—	—	—	—	—	—	—	—	—	
MASSACHUSETTS—																				
Amherst .....	4	3	2	21	5	11	5	39	1	86	1	0	0	0	0	5	6	13	25	
Mendon .....	5	11	0	1	2	28	5	41	0	93	4	0	0	1	3	27	4	35	83	
Nantucket .....	5	4	2	8	7	22	2	30	0	80	0	0	0	0	0	6	5	2	13	
New Bedford .....	9	10	2	3	3	27	9	27	0	90	1	1	1	1	2	12	11	7	36	
Newburyport .....	12	5	1	0	10	17	27	17	0	89	0	0	0	1	0	6	0	0	7	
North Attleboro' .....	12	3	3	3	14	20	21	17	0	93	7	2	0	2	7	25	23	7	33	
Princeton .....	1	10	1	2	1	26	27	0	78	1	6	1	1	0	5	18	8	4	40	
Richmond .....	1	16	1	16	2	24	0	33	0	93	4	8	0	12	7	17	0	24	72	
Southwick .....	4	12	1	4	10	12	1	19	13	76	0	0	0	0	0	16	2	7	25	
Wood's Hole .....	6	4	2	3	12	20	21	23	2	93	—	—	—	—	—	—	—	—	—	
Worcester .....	0	5	0	3	0	20	1	64	0	93	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
North Scituate .....	1	13	1	5	1	30	6	35	0	92	0	0	0	0	0	1	0	1	5	
Providence .....	6	11	0	0	4	24	4	41	1	91	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
New London .....	5	5	2	3	3	30	7	38	0	93	—	—	—	—	—	—	—	—	—	
Pomfret .....	1	18	1	3	10	25	5	30	0	93	2	7	1	1	6	30	3	13	63	
Saybrook .....	11	10	3	4	1	11	19	24	1	84	1	1	2	2	1	7	22	19	55	
West Cornwall .....	3	1	1	12	4	24	18	17	0	81	—	—	—	—	—	—	—	—	—	
NEW YORK—																				
Baldwinsville .....	0	4	9	8	2	21	8	39	0	91	0	0	0	0	0	5	34	38	77	
Beaver Brook .....	0	1	1	25	0	24	4	38	0	93	0	0	0	2	0	26	10	32	70	
Beverly .....	1	8	0	14	11	39	1	15	3	92	0	4	0	10	10	28	15	5	72	
Buffalo, [Salisbury] .....	3	0	3	1	3	28	11	10	0	68	0	0	0	1	0	16	7	1	25	
Canton .....	6	24	0	1	0	45	6	13	0	95	2	20	0	1	0	40	5	13	81	
Chatham .....	0	1	1	25	0	23	3	40	0	93	0	0	0	2	0	26	10	32	70	
Falconer .....	13	0	0	0	2	8	0	10	0	33	3	0	0	0	8	16	20	19	66	
Fishkill .....	12	12	0	0	3	39	3	9	15	93	—	—	—	—	—	—	—	—	—	
Gouverneur .....	1	41	0	0	1	43	4	3	0	93	0	37	0	0	2	36	10	2	87	
Houseville .....	3	1	0	1	41	16	13	4	2	81	0	0	0	0	2	15	17	1	35	
Lodi .....	2	0	2	22	12	21	14	18	2	93	0	0	0	0	5	31	5	47	47	
Madrid .....	0	30	1	0	1	19	23	4	12	90	0	2	0	0	0	16	33	0	51	
New York city .....	3	36	0	17	20	27	23	57	3	186	—	—	—	—	—	—	—	—	—	
New York city, [Deaf and Dumb Inst.] .....	3	19	1	6	4	17	10	33	0	93	2	10	0	3	4	18	16	12	65	
Oswego .....	3	2	0	0	42	6	13	26	0	92	—	—	—	—	—	—	—	—	—	
Penn Yan .....	2	3	0	5	40	7	32	4	0	93	—	—	—	—	—	—	—	—	—	



No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Sag Harbor.....	6	9	3	10	5	31	10	18	1	93	0	1	2	1	2	50	16	8	80	
Troy.....	11	5	2	2	29	12	4	20	1	86	0	0	0	0	1	1	1	3	6	
Wampsville.....	2	1	10	5	19	8	45	3	0	93	1	3	10	3	20	11	41	2	91	
NEW JERSEY—																				
Bloomfield.....	0	4	0	0	1	15	7	11	0	38	—	—	—	—	—	—	—	—	—	
Burlington.....	9	13	0	0	6	26	26	5	0	85	5	5	0	0	4	17	5	1	37	
Lambertville.....	3	12	0	4	5	15	1	30	0	70	—	—	—	—	—	—	—	—	—	
PENNSYLVANIA—																				
Bedford.....	0	0	0	9	1	35	7	26	0	78	0	0	0	9	0	29	6	21	65	
Bustleton.....	2	1	7	7	7	3	18	6	0	51	5	0	9	1	6	3	11	1	36	
Byberry.....	5	5	8	0	7	21	30	10	7	93	1	3	2	0	4	14	60	2	86	
Ceres.....	0	0	2	19	11	19	28	1	0	80	0	0	0	8	25	16	25	1	75	
Gettysburg.....	2	10	1	0	3	39	17	15	6	93	0	0	0	0	2	21	28	7	58	
Harrisburg.....	1	1	7	24	1	6	8	35	0	83	0	0	1	8	0	3	4	15	26	
Lima.....	8	12	3	8	4	10	1	26	21	93	1	0	1	2	1	14	22	18	59	
Morrisville.....	6	14	6	3	2	22	7	29	4	93	6	2	0	1	1	23	21	15	69	
Moss Grove.....	0	0	6	5	14	13	20	2	2	62	0	0	0	0	4	13	51	0	68	
Norristown.....	0	7	17	6	1	7	32	8	0	78	0	1	8	3	2	12	35	5	66	
Philadelphia.....	2	17	0	2	1	35	16	20	0	93	0	0	0	2	0	6	9	3	20	
Pittsburg.....	3	0	2	10	3	19	30	18	39	124	—	—	—	—	—	—	—	—	—	
Pocopson.....	6	3	6	3	0	27	30	18	0	93	—	—	—	—	—	—	—	—	—	
Sugar Grove.....	0	1	1	3	12	36	21	3	11	88	0	1	2	2	6	39	23	2	75	
Youngsville.....	2	1	12	1	0	7	64	2	0	89	1	1	7	1	0	7	49	2	68	
West Haverford.....	0	5	0	1	3	13	3	19	16	60	3	1	0	0	1	8	4	16	33	
MARYLAND—																				
Frederick.....	4	11	2	3	7	25	15	9	7	83	1	0	1	2	3	17	22	3	49	
Schellman Hall.....	1	3	0	1	8	5	58	17	0	93	2	1	0	1	7	8	57	3	79	
DISTRICT OF COLUMBIA—																				
Washington.....	0	1	0	2	2	2	8	6	6	27	1	1	1	0	1	3	14	2	23	
VIRGINIA—																				
Alexandria.....	9	9	4	4	32	8	8	19	0	93	—	—	—	—	—	—	—	—	—	
Ashland.....	0	8	1	1	2	52	19	10	0	93	0	0	0	0	0	1	10	0	11	
Crichton's Store.....	17	3	0	4	15	44	9	0	2	94	6	0	0	3	3	31	19	1	63	
Huntersville.....	11	6	2	6	33	37	21	7	0	123	1	0	8	19	17	37	24	12	118	
Lewisburg.....	0	0	0	0	0	6	2	0	0	8	0	0	0	0	2	9	9	2	22	
Portsmouth.....	15	6	3	12	16	7	8	11	0	78	—	—	—	—	—	—	—	—	—	
Winchester.....	0	0	0	0	0	10	11	7	55	93	0	0	0	1	0	0	7	1	9	
NORTH CAROLINA—																				
Chapel Hill.....	12	9	3	1	16	21	19	12	0	93	2	3	0	0	18	18	7	0	48	
Thornbury.....	8	10	11	2	6	22	13	6	10	88	3	6	0	2	0	19	17	0	47	
SOUTH CAROLINA—																				
Camden.....	5	16	2	3	4	18	5	10	0	63	2	0	0	0	0	27	8	8	45	
St. John's.....	0	26	0	6	1	17	0	10	0	60	—	—	—	—	—	—	—	—	—	
GEORGIA—																				
Culloden.....	9	17	7	9	13	17	5	14	0	91	2	4	3	2	2	17	0	5	35	
Savannah.....	5	14	8	10	10	21	1	22	0	92	0	2	0	2	5	6	7	3	25	
Sparta.....	0	24	0	3	1	25	2	33	0	88	0	2	0	0	1	18	1	11	33	
The Rock.....	1	3	1	0	1	4	0	18	0	28	—	—	—	—	—	—	—	—	—	
Whitemarsh Island.....	4	20	0	3	13	14	2	14	23	93	2	2	1	2	4	13	4	2	30	
FLORIDA—																				
Cedar Keys.....	8	33	5	5	18	5	9	4	5	93	4	20	4	4	13	6	8	5	62	
Jacksonville.....	14	24	0	14	12	14	0	16	0	94	2	7	0	3	4	31	7	2	56	
Key West.....	21	13	6	15	4	2	0	1	0	62	—	—	—	—	—	—	—	—	—	
Knox Hill.....	16	22	11	7	14	10	4	8	0	92	3	2	0	2	10	26	12	2	57	
Warrington.....	15	19	3	14	5	9	2	17	9	93	1	2	0	3	4	28	20	25	83	
ALABAMA—																				
Greene Springs.....	13	3	11	2	10	2	2	12	0	55	3	0	0	0	2	7	0	0	12	
Tuscaloosa.....	8	3	1	0	9	9	4	15	43	92	—	—	—	—	—	—	—	—	—	
Weewokaville.....	10	4	6	4	5	11	14	12	23	89	4	2	0	4	8	27	7	10	60	
MISSISSIPPI—																				
Garlandville.....	0	9	3	2	9	32	0	22	10	93	1	9	0	3	10	40	5	19	87	
Jackson.....	22	2	0	12	26	9	1	7	14	93	5	0	0	1	16	14	0	2	38	
LOUISIANA—																				
New Orleans.....	22	11	20	5	10	0	12	11	2	93	2	0	1	1	0	8	8	2	22	

No. 33.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TEXAS—																				
Austin .....	35	2	0	0	29	7	0	0	11	93	23	0	0	1	21	8	3	10	66	
New Wied .....	45	4	2	3	14	7	1	4	12	92	2	1	0	1	1	0	0	7	12	
TENNESSEE—																				
Glenwood .....	11	12	1	9	23	11	1	14	11	93	6	2	1	1	5	17	15	6	53	
Lebanon .....	8	3	3	6	39	11	2	19	2	93	5	1	2	1	9	32	20	13	83	
Memphis .....	1	12	0	20	■	28	6	19	1	93	1	■	0	13	2	22	11	12	67	
KENTUCKY—																				
Ballardsville .....	5	4	0	0	3	23	14	44	0	93	0	0	0	1	0	10	2	3	16	
Danville .....	1	2	1	7	17	32	12	21	0	93	0	2	0	0	5	24	14	17	62	
Millersburg .....	5	0	2	6	3	25	28	12	8	89										
Springdale .....	7	1	2	5	6	31	4	13	24	93										
OHIO—																				
College Hill .....	3	■	3	9	3	9	19	22	20	88	4	1	0	1	1	2	11	7	27	
Germantown .....	■	6	2	13	■	48	4	11	0	92	0	5	1	2	4	49	3	9	73	
Granville .....	0	12	2	4	1	32	16	7	7	81	0	0	0	0	0	16	10	2	28	
Hillsborough .....	0	5	3	8	13	27	7	16	0	79	0	1	0	0	1	17	6	8	33	
Jackson .....	3	6	14	1	9	17	33	0	6	89	0	0	2	0	0	4	48	1	55	
Keene .....	4	1	5	7	12	24	18	6	0	77	2	0	0	1	4	11	28	5	51	
Marietta .....	2	0	0	0	13	8	9	8	53	93	0	1	0	0	3	8	16	6	34	
Mount Vernon .....	1	0	0	1	■	25	32	3	22	90	0	0	0	0	1	14	38	1	54	
Oberlin .....	1	1	5	12	10	31	14	12	0	86	7	1	11	■	5	3	14	1	42	
Zanesville .....	3	4	0	8	7	22	27	5	■	85										
MICHIGAN—																				
Ann Arbor, [Woodruff] ..	1	2	10	12	9	27	19	5	7	92	0	0	3	2	2	5	45	0	63	
Battle Creek .....	1	4	11	9	10	32	17	7	2	93	0	5	3	0	1	35	39	5	88	
Brooklyn .....	1	1	3	6	3	28	17	5	6	70	0	1	2	5	3	11	15	5	42	
Detroit .....	1	7	9	4	7	39	11	9	0	87										
Flint .....	3	3	3	12	18	21	24	4	0	88										
Monroe, [Whelpley] .....	0	14	3	8	■	17	5	43	0	93	0	12	3	2	7	17	7	38	86	
St. James .....	3	16	5	5	4	27	13	20	0	93	0	1	2	1	1	18	14	14	51	
INDIANA—																				
Greencastle .....	1	1	1	2	8	9	13	3	3	41	0	1	1	0	0	3	7	0	18	
Milton .....	3	9	2	8	4	34	6	■	18	92	0	0	0	0	0	10	5	5	20	
New Harmony .....	12	5	0	4	22	13	1	■	0	66	0	0	0	0	0	0	1	0	1	
Richmond .....	3	1	3	10	20	21	22	5	5	90	0	0	1	0	3	14	21	8	47	
ILLINOIS—																				
Athens .....	0	10	1	23	0	26	2	25	0	87	1	■	0	0	0	10	8	27	48	
Augusta .....	3	12	4	15	11	8	13	20	7	93	3	0	0	2	0	1	17	7	30	
Batavia .....	14	3	4	2	11	14	35	10	0	93										
Ottawa .....	10	14	1	5	10	23	18	12	0	93	2	1	0	1	3	15	15	11	48	
Upper Alton .....	12	11	0	5	14	12	15	9	0	78	1	3	0	0	0	3	1	3	11	
MISSOURI—																				
Hannibal .....	19	2	11	4	24	7	13	9	4	93	13	0	2	0	2	5	25	8	55	
Jefferson Barracks .....	4	0	0	4	4	5	1	8	0	32										
St. Louis .....	1	4	3	26	11	15	19	14	0	93										
WISCONSIN—																				
Bellefontaine .....	9	8	1	10	1	31	15	16	1	92	2	1	3	5	0	7	15	■	39	
Beloit .....	18	8	0	5	27	18	2	15	0	93	1	0	0	0	1	4	0	1	7	
Janesville .....	10	6	4	7	5	24	21	7	9	93	0	0	0	0	1	3	3	■	7	
Madison .....	16	2	0	12	9	21	14	19	0	93										
Platteville .....	6	8	7	8	5	12	23	24	0	93	5	4	5	3	3	7	29	14	70	
IOWA—																				
Dubuque .....	14	12	0	3	10	8	6	20	16	89	0	0	0	0	1	2	8	16	27	
Fort Madison .....	1	7	1	10	9	26	2	37	0	93	4	0	4	0	1	9	31	13	62	
Keokuk .....	26	2	17	0	2	11	16	2	15	91	4	0	7	0	0	0	7	0	18	
Muscataine .....	3	10	2	6	6	22	2	42	0	93	0	0	0	0	1	14	7	1	23	
Poultney .....	8	5	8	6	2	12	24	12	9	86	1	1	1	1	0	5	20	2	31	
Quasqueton .....	■	■	8	15	5	18	6	29	0	93	1	0	0	0	1	4	6	9	21	
St. Mary's .....	16	0	8	9	2	5	0	3	24	67										
MINNESOTA—																				
St. Joseph's .....	32	2	6	2	15	0	15	■	■	80										
Lac qui Parle .....	0	2	1	14	13	9	11	43	0	93	2	1	4	4	3	1	12	2	29	
Red Lake .....	9	1	4	8	25	12	8	14	0	81										



No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1854—Continued.

[illegible]

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
		Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calin or varia- ble.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Albion Mines .....	8	14	4	12	13	15	2	29	0	97	8	7	1	8	3	18	8	26	79	
Halifax .....	28	6	3	5	6	11	4	21	1	85										
CANADA EAST—																				
St. Martin's .....	0	32	1	5	0	13		27	0	84										
MAINE—																				
Biddeford .....	5	21	1	0	0	12	12	16	0	67										
Carmel .....	4	7	1	1	0	3	6	36	13	71	4	6	0	0	0	1	3	14	28	
Fryeburg .....	7	14	7	1	1	20	16	14	0	80	0	0	0	0	0	3	22	4	29	
Oldtown .....	20	2	9	1	5	12	11	15	0	84	8	0	1	1	0	3	15	10	38	
Perry .....	14	7	4	4	1	8	3	6	1	48	5	7	3	4	1	6	5	2	33	
Steuben .....	7	27	0	2	1	17	4	24	2	84	1	1	2	0	0	10	13	4	31	
Windham .....	9	12	2	2	1	3	8	22	20	79	0	0	0	1	0	0	2	1	4	
NEW HAMPSHIRE—																				
Concord .....	3	17	0	7	0	18	0	39	0	84										
Exeter .....	3	9	7	2	0	11	28	24	0	84	2	10	7	2	0	10	15	7	53	
Hanover .....	11	0	2	13	5	7	6	31	0	84	0	0	0	0	0	4	9	8	21	
Londonderry .....	3	9	2	0	3	6	5	35	15	84	1	2	0	1	0	2	4	12	22	
Manchester .....	13	5	6	3	8	4	14	31	0	84	5	4	6	2	1	5	25	11	59	
Salmon Falls .....	10	11	0	4	0	7	8	33	11	84	1	3	0	0	0	2	3	17	26	
VERMONT—																				
Brandon .....	33	0	0	3	28	2	0	7	5	84	1	0	0	1	2	4	8	10	26	
Burlington .....	30	5	2	7	19	0	12	0	0	84	0	0	0	0	0	1	0	0	1	
Castleton .....	10	0	0	3	12	4	4	18	30	81	1	1	0	0	7	2	0	5	16	
Craftsbury .....	8	6	0	9	19	8	12	17	0	79	3	2	0	5	9	3	28	10	60	
St. Johnsbury .....	2	0	0	0	0	22	1	59	0	84										
MASSACHUSETTS—																				
Amherst .....	6	1	1	12	2	3	3	46	0	74	0	0	0	0	0	0	1	11	12	
Mendon .....	4	10	0	0	3	25	2	31	0	84	1	12	1	0	2	24	3	32	84	
Nantucket .....	6	13	1	10	3	19	1	27	4	84	0	0	0	0	0	1	0	0	1	
New Bedford .....	4	14	1	8	1	21	4	26	0	79	0	1	3	2	0	2	2	3	13	
Newburyport .....	0	13	4	0	11	9	21	17	0	81										
North Attleboro' .....	0	5	8	3	6	12	12	29	0	84	3	11	7	2	2	11	16	8	60	
Princeton .....	6	17	5	2	2	4	16	24	0	76	0	1	2	0	0	1	13	10	27	
Richmond .....	0	20	0	16	0	11	0	37	0	84	2	11	0	13	3	12	2	20	63	
Southwick .....	3	20	1	2	2	9	1	14	3	55	0	1	0	0	3	5	7	7	23	
Springfield .....	15	9	0	0	0	11	4	28	17	84	2	3	0	0	0	4	4	24	37	
Wood's Hole .....	14	10	0	8	3	18	5	26	0	84										
Worcester .....	1	11	3	3	0	12	4	50	0	84										
RHODE ISLAND—																				
North Scituate .....	6	22	2	3	0	17	3	31	0	84	0	0	0	1	0	2	4	4	11	
CONNECTICUT—																				
New London .....	14	6	4	10	1	12	11	26	0	84										
Pomfret .....	6	13	3	4	4	17	2	35	0	84	2	9	2	4	3	14	5	16	55	
Saybrook .....	13	11	6	10	2	8	11	21	1	83	1	2	2	1	3	1	13	13	36	
West Cornwall .....	2	2	8	13	4	16	4	35	0	84										
NEW YORK—																				
Baldwinsville .....	5	5	18	7	0	6	8	26	0	76	1	0	0	2	0	4	16	33	56	
Beverly .....	1	13	0	6	4	25	2	28	4	83	0	6	0	9	4	21	15	8	63	
Buffalo, [Salisbury] .....	10	20	2	1	2	25	8	0	4	78	0	2	0	1	0	16	0	2	30	
Canton .....	3	20	1	1	1	36	5	16	3	86	2	12	1	1	1	32	2	5	56	
Chatham .....	0	4	0	29	2	10	1	38	0	84	1	0	0	9	0	9	10	40	69	
Falconer .....	8	0	0	0	0	1	2	0	0	11	13	1	0	2	14	3	19	13	65	
Fishkill .....	3	27	3	0	0	24	3	3	21	84										
Gouverneur .....	2	28	0	0	3	19	15	17	0	84	2	28	0	0	3	18	21	8	80	
Lodi .....	5	2	4	15	0	11	11	26	4	84	3	0	0	1	0	3	14	10	31	
Madrid .....	3	26	2	1	0	22	12	2	14	82	3	0	0	0	0	17	13	3	36	
New York city .....	4	38	0	8	5	13	35	59	0	168										
New York city, [Deaf and Dumb Institution] .....	4	23	1	2	0	12	14	28	0	84	2	6	1	5	1	4	18	13	50	
Oswego .....	4	8	13	2	34	0	12	3	0	76										
Penn Yan .....	4	7	3	6	24	12	22	0	0	84										
Sag Harbor .....	3	12	3	6	0	20	7	26	1	84	1	3	1	1	6	22	15	15	64	
Troy .....	27	8	0	3	16	4	3	17	5	83										
Wampsville .....	0	1	17	6	2	8	38	12	0	84	0	1	15	7	2	7	33	12	77	



No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY—																				
Bloomfield.....	3	27	0	1	0	28	2	23	0	84										
Burlington.....	30	5	2	7	19	0	12	9	0	84	1	7	1	0	4	8	2	0	23	
Lambertville.....	1	17	0	7	1	13	2	30	0	71										
PENNSYLVANIA—																				
Bedford.....	0	0	1	11	5	15	3	37	0	72	0	0	0	10	2	10	3	22	47	
Bustleton.....	8	12	1	0	4	17	22	15	2	81	1	7	1	0	4	8	2	0	23	
Byberry.....	6	12	4	0	2	4	9	7	6	50	4	1	2	0	2	3	23	4	39	
Ceres.....	0	3	8	17	2	3	24	7	20	84	0	3	0	8	10	7	21	5	54	
Gettysburg.....	10	11	1	1	5	23	13	14	6	84	0	0	0	0	0	10	26	12	48	
Harrisburg.....	1	5	5	17	0	2	19	33	0	82	1	0	0	3	0	0	9	9	22	
Lima.....	15	20	6	5	6	10	10	15	13	100	2	0	0	2	2	3	23	21	53	
Morrisville.....	8	17	5	3	3	12	8	24	4	84	3	9	2	1	0	10	14	18	57	
Moss Grove.....	2	2	2	3	8	15	16	6	9	63	1	1	2	2	7	8	40	4	65	
Norristown.....	0	16	8	5	0	7	15	30	0	81	0	4	2	7	0	3	35	3	54	
Philadelphia.....	4	14	4	3	1	27	5	26	0	84	2	0	0	0	0	4	4	5	15	
Pittsburg.....	1	0	2	0	14	21	27	41	112											
Pocopson.....	1	5	0	1	0	3	5	9	0	24	1	5	0	1	0	3	5	9	24	
Sugar Grove.....	2	2	1	2	0	31	14	6	10	68	2	4	1	2	0	31	13	6	59	
Youngsville.....	13	1	14	1	5	10	19	2	0	65	6	0	7	0	4	3	7	1	28	
West Haverford.....	3	4	1	5	1	8	7	14	10	53	3	0	0	0	0	0	4	13	20	
MARYLAND—																				
Frederick.....	10	8	3	4	9	11	13	23	3	84	2	0	1	0	1	4	26	5	39	
Schellman Hall.....	0	6	1	4	2	9	47	15	0	84	3	0	5	1	1	1	48	0	59	
DISTRICT OF COLUMBIA—																				
Washington.....	3	3	3	1	2	10	8	15	0	45	4	2	1	0	0	3	15	0	31	
VIRGINIA—																				
Alexandria.....	13	7	2	7	26	9	4	16	0	84										
Ashland.....	11	3	1	3	8	36	16	6	0	84	0	0	0	0	0	1	10	0	11	
Crichton's Store.....	13	10	0	2	15	33	3	8	0	84	4	3	0	0	0	21	15	4	53	
Huntersville.....	4	11	4	32	24	23	13	0	0	111	0	4	0	23	29	31	12	4	103	
Lewisburg.....	0	0	0	0	0	4	0	0	0	4	2	0	0	0	0	3	4	0	9	
New Creek Depot.....	1	3	1	3	0	5	30	9	0	52	0	0	0	0	1	7	17	3	28	
Portsmouth.....	16	5	2	8	17	14	6	16	0	84										
Winchester.....	0	1	3	1	5	2	16	9	47	84										
NORTH CAROLINA—																				
Chapel Hill.....	9	10	2	1	17	15	19	11	0	84	1	0	0	2	8	21	9	4	45	
Thornbury.....	10	7	5	6	10	19	6	18	3	84	1	2	0	3	2	10	21	4	43	
SOUTH CAROLINA—																				
Camden.....	6	6	1	4	5	12	0	7	0	41	4	3	0	1	1	16	4	5	34	
St. John's.....	0	16	2	4	4	12	4	6	0	48										
GEORGIA—																				
Augusta.....											3	5	0	1	1	2	13	2	27	
Culloden.....	11	11	8	2	11	19	4	12	0	78	0	5	3	0	2	17	1	9	37	
Savannah.....	7	7	5	13	9	20	7	16	0	84	0	0	0	1	2	1	9	2	15	
Sparta.....	0	13	4	7	1	16	6	36	0	83	1	0	0	2	0	10	5	12	30	
The Rock.....	1	2	0	2	0	7	0	14	0	26										
Whitemarsh Island.....	8	7	2	9	12	19	6	6	15	84	3	2	0	5	2	15	5	2	34	
FLORIDA—																				
Cedar Keys.....	8	23	9	6	15	4	12	5	2	84	3	10	4	3	15	7	5	1	48	
Jacksonville.....	7	20	2	9	10	20	2	14	0	84	2	3	0	8	1	26	2	7	49	
Key West.....	18	7	12	9	3	1	3	2	1	56										
Knox Hill.....	10	16	14	6	5	13	7	9	0	80	2	2	3	3	5	17	17	3	52	
Warrington.....	20	22	10	8	7	9	2	8	1	87	7	2	10	4	14	3	15	6	61	
ALABAMA—																				
Wewokaville.....	1	2	1	1	2	4	16	8	49	84	6	2	1	3	3	10	26	9	60	
MISSISSIPPI—																				
Garlandville.....	3	3	10	6	8	21	17	18	0	84	3	4	8	6	6	14	12	9	62	
Jackson.....	20	3	2	2	30	3	3	3	18	84	6	0	0	0	11	6	4	1	28	
Lake Washington.....	2	2	1	1	0	9	1	2	0	18	1	2	2	2	0	21	16	3	47	
LOUISIANA—																				
New Orleans.....	14	14	19	6	10	2	7	4	7	83	0	0	0	0	6	9	15	0	30	
TEXAS—																				
Austin.....	25	5	0	20	16	5	0	8	5	84	1	3	1	17	5	16	3	13	59	
Huntsville.....	11	1	1	0	25	1	2	2	6	49	3	1	1	0	11	2	1	2	21	
New Wied.....	27	5	3	4	15	3	5	12	10	84	1	0	1	1	1	3	0	2	9	

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
TENNESSEE—																			
Glenwood.....	8	4	4	11	23	7	5	15	7	84	4	0	1	1	0	15	17	10	48
Knoxville.....	15	7	4	1	16	14	15	12	0	84	4	0	0	4	5	24	23	13	73
Lebanon.....	10	0	6	17	25	9	3	13	1	84	4	0	0	4	5	24	23	13	73
Memphis.....	1	8	6	19	3	19	5	13	10	84	1	3	3	6	1	18	10	10	52
KENTUCKY—																			
Ballardsville.....	6	1	0	5	2	27	8	35	0	84	0	1	0	1	0	5	4	2	13
Danville.....	9	5	1	6	15	25	11	12	0	84	0	0	0	1	2	13	28	9	53
Millersburg.....	4	1	5	7	4	18	22	6	14	81	4	1	5	7	4	18	22	6	81
Springdale.....	4	4	9	1	4	35	7	6	14	84	4	4	9	1	4	35	7	6	84
OHIO—																			
College Hill.....	8	3	3	4	1	20	6	13	18	76	2	0	0	1	3	9	7	3	25
Geneva Hall.....	4	1	1	10	0	13	9	8	6	57	4	4	1	7	1	9	14	3	43
Germantown.....	4	1	1	12	10	33	1	15	0	84	3	3	0	5	3	26	3	10	53
Granville.....	2	12	2	3	3	30	8	0	14	74	0	2	0	0	1	15	4	0	22
Hillsborough.....	3	5	2	10	4	28	2	11	0	65	0	1	0	0	1	15	2	8	27
Jackson.....	10	5	17	3	3	9	22	6	6	81	1	2	1	0	5	5	25	4	43
Marietta.....	2	0	3	2	8	6	8	12	42	83	1	1	1	2	4	16	5	7	37
Mount Vernon.....	0	7	1	2	1	13	23	4	23	82	1	0	3	0	3	10	23	1	41
Oberlin.....	5	0	6	7	8	18	17	9	0	79	2	0	9	2	3	7	13	0	36
MICHIGAN—																			
Ann Arbor, [Woodruff] ..	4	10	16	7	4	22	10	6	5	84	3	3	5	0	1	6	34	12	64
Battle Creek.....	6	4	17	8	3	15	24	3	4	84	2	4	3	1	0	14	42	5	71
Brooklyn.....	1	4	1	13	10	11	14	9	10	73	0	3	1	7	2	18	10	8	49
Detroit.....	5	20	10	3	1	28	8	10	0	85	5	20	10	3	1	28	8	10	85
Flint.....	17	4	2	13	11	0	16	4	0	76	17	4	2	13	11	0	16	4	76
Monroe, [Whelpley].....	1	25	1	6	3	7	2	38	0	83	1	23	0	7	3	7	2	37	80
St. James.....	2	12	5	9	2	30	2	19	3	84	0	0	5	0	1	17	3	19	45
INDIANA—																			
Greencastle.....	6	2	4	7	9	8	6	7	2	51	2	0	1	1	1	6	11	5	27
Kendallville.....	2	6	12	8	5	10	20	17	3	83	3	3	7	0	2	5	22	8	50
Milton.....	4	10	1	11	1	14	3	10	30	84	1	1	0	1	1	7	3	0	14
New Harmony.....	12	2	0	5	10	13	4	13	0	59	12	2	0	5	10	13	4	13	59
Richmond.....	3	10	4	22	6	13	10	8	4	80	2	3	2	1	4	8	13	5	38
ILLINOIS—																			
Athens.....	5	8	2	18	1	19	1	21	0	75	3	2	1	4	0	1	5	28	44
Augusta.....	10	20	5	8	10	4	8	14	5	84	3	5	0	1	1	2	13	2	27
Batavia.....	3	2	0	3	14	19	20	17	6	84	3	2	0	0	0	0	0	0	84
Ottawa.....	5	14	8	8	9	16	8	14	3	85	3	2	1	1	1	5	9	11	33
Upper Alton.....	13	3	3	6	15	7	14	10	0	71	4	0	0	0	0	0	3	2	9
MISSOURI—																			
Hannibal.....	17	8	4	5	29	3	4	6	7	83	9	2	5	1	7	3	17	7	51
St. Louis.....	2	6	8	16	12	7	14	19	0	84	2	6	8	16	12	7	14	19	84
WISCONSIN—																			
Bellefontaine.....	10	5	10	12	5	15	15	12	0	84	1	0	0	2	0	5	25	2	36
Beloit.....	12	14	0	17	16	9	8	0	0	84	5	0	0	0	1	0	2	1	9
Janesville.....	1	14	6	7	3	14	18	12	9	84	0	1	0	0	0	0	0	4	5
Madison.....	16	5	2	17	3	17	5	19	0	84	16	5	2	17	3	17	5	19	84
Milwaukee.....	1	18	0	15	4	11	8	25	2	84	0	1	0	1	0	0	2	1	5
Platteville.....	8	6	18	14	4	4	14	16	0	84	7	2	4	3	0	4	28	7	55
IOWA—																			
Dubuque.....	21	10	2	7	3	12	4	16	8	83	2	1	0	0	0	3	7	15	28
Fort Madison.....	4	7	0	13	12	16	2	30	0	84	5	5	0	0	2	7	14	10	43
Keokuk.....	22	3	13	1	2	6	9	7	19	82	7	0	3	0	2	0	13	1	26
Muscatine.....	5	20	0	4	5	14	5	31	0	84	0	1	0	2	0	14	1	7	25
Poultney.....	15	2	13	2	6	8	16	5	12	79	3	0	1	1	0	7	18	3	33
Quasqueton.....	4	12	3	20	3	10	12	19	0	83	0	1	0	0	0	3	9	2	15
St. Mary's.....	18	0	0	11	3	2	1	4	17	65	4	0	3	6	1	1	1	3	19
MINNESOTA—																			
St. Joseph's.....	19	4	5	1	27	2	10	7	9	84	19	4	5	1	27	2	10	7	84
Lac qui Parle.....	2	2	9	14	10	2	5	40	0	84	0	0	10	1	0	0	16	4	31
Red Lake.....	2	5	5	2	30	3	18	8	0	73	2	5	5	2	30	3	18	8	73
NEBRASKA—																			
Fort Pierre.....	1	0	3	1	1	1	4	5	12	28	0	0	0	1	1	1	2	0	5
Fort Union.....	1	0	3	1	1	1	4	5	12	28	0	0	0	1	1	1	2	0	5



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1854—Continued.

[illegible]

## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Albion Mines .....	15	17	2	8	12	25	4	13	0	96	9	7	1	5	5	29	17	18	91	
Halifax .....	34	3	2	13	10	5	10	16	0	93										
CANADA EAST—																				
St. Martin's .....	0	20	0	7	4	18	9	28	7	93										
MAINE—																				
Carmel .....	0	5	1	5	0	3	5	31	12	68	0	6	0	8	0	3	5	16	38	
Fryeburg .....	13	8	3	3	1	10	2	31	12	83	0	0	0	0	0	10	22	34		
Oldtown .....	3	4	5	0	2	11	18	31	6	92	2	2	3	5	1	10	15	25	66	
Perry .....	18	10	4	12	2	16	12	13	5	93	11	10	4	5	2	11	7	5	55	
Steuben .....	1	20	1	7	0	19	4	34	7	93	2	4	0	1	0	7	11	17	42	
Windham .....	2	14	1	6	5	2	5	33	14	86	0	0	0	0	0	0	4	0	4	
NEW HAMPSHIRE—																				
Concord .....	1	19	3	10	0	20	0	40	0	93										
Exeter .....	0	6	5	7	0	8	14	28	0	68	0	5	5	7	0	8	8	16	49	
Hanover .....	16	0	3	21	5	5	3	35	0	93	1	0	0	3	1	0	4	20	29	
Londonderry .....	2	7	5	7	0	6	5	44	16	93	1	1	3	0	0	0	3	8	16	
Manchester .....	1	4	14	3	9	10	15	37	0	93	1	4	15	0	5	3	27	14	69	
Salmon Falls .....	1	11	2	7	0	14	8	42	8	93	3	0	0	2	0	2	3	24	34	
VERMONT—																				
Brandon .....	22	0	1	5	31	3	4	22	2	93	4	0	0	0	2	2	19	13	40	
Burlington .....	21	1	4	7	33	2	14	11	0	93	0	0	0	0	0	0	2	2	4	
Castleton .....	20	1	1	2	24	4	5	10	22	93	0	0	0	1	1	0	4	3	9	
Craftsbury .....	5	1	0	7	32	6	11	28	0	90	2	1	0	5	10	7	16	23	64	
St. Johnsbury .....	0	0	0	0	0	27	15	51	0	93										
MASSACHUSETTS—																				
Amherst .....	7	4	1	22	2	1	2	49	0	88	0	2	0	0	0	5	2	22	31	
Mendon .....	2	14	5	3	0	37	6	26	0	93	2	15	4	3	2	28	4	13	71	
Nantucket .....	5	6	1	11	9	15	11	33	2	93										
New Bedford .....	7	8	1	10	5	17	3	40	2	93	2	2	2	1	1	2	8	17	35	
Newburyport .....	3	12	5	4	10	7	21	27	0	89										
North Attleboro' .....	8	9	3	1	16	6	25	25	0	93	4	6	5	3	6	9	21	12	67	
Princeton .....	1	10	3	6	1	4	3	35	0	63	0	1	1	1	0	0	0	24	27	
Richmond .....	1	11	0	15	1	25	0	40	0	93	0	13	0	10	3	22	0	34	82	
Southwick .....	5	15	0	1	5	12	1	28	10	72	0	1	0	0	0	11	5	16	34	
Springfield .....	7	12	0	0	1	12	2	40	19	93	6	4	0	0	0	5	3	37	55	
Worcester .....	1	17	0	6	0	10	4	55	0	93										
RHODE ISLAND—																				
North Scituate .....	4	13	3	0	1	18	5	43	0	93	1	0	1	0	0	7	5	5	19	
CONNECTICUT—																				
New London .....	19	11	0	3	6	17	1	36	0	93										
Pomfret .....	4	14	4	4	2	16	5	44	0	93	4	11	2	4	1	16	6	21	65	
Saybrook .....	11	5	12	5	4	10	14	28	1	93	4	0	4	1	2	3	11	21	46	
West Cornwall .....	1	1	5	20	3	12	11	37	0	93										
NEW YORK—																				
Angelica .....																				
Baldwinsville .....	0	1	13	10	0	6	18	37	0	85	0	0	0	2	0	0	33	32	67	
Beaver Brook .....	2	1	4	6	0	2	1	29	0	45	0	0	5	1	1	4	3	23	37	
Beverly .....	2	7	0	15	4	22	5	31	4	90	0	3	3	14	4	15	16	15	70	
Buffalo, [Salisbury] .....	1	7	1	2	1	27	2	21	5	67	0	0	0	1	1	8	6	4	20	
Canton .....	0	14	1	2	1	47	8	8	5	86	0	12	1	2	1	40	6	7	69	
Chatham .....	0	1	0	39	0	5	1	47	0	93	0	0	0	10	1	10	5	46	72	
Falconer .....	4	0	0	0	0	0	1	1	0	6	0	0	0	0	8	3	4	9	24	
Fishkill .....	6	12	0	0	0	39	3	0	24	93										
Gouverneur .....	6	20	0	0	0	28	10	29	0	93	2	18	0	0	0	27	12	24	83	
Leroy .....	3	2	0	3	1	0	0	1	0	10										
Lodi .....	1	1	0	20	6	8	9	42	0	93	0	0	0	1	2	7	12	19	41	
Madrid .....	0	14	0	0	0	32	15	13	14	88	0	5	0	0	1	30	14	10	60	
New York city .....	6	42	6	3	0	18	18	84	0	186										
New York city, [Deaf and Dumb Institution] .....	2	26	3	6	2	5	13	36	0	93	0	4	2	4	2	12	26	13	63	
Oswego .....	7	4	0	1	46	0	12	23	0	93										
Penn Yan .....	2	2	2	2	13	24	35	13	0	93										
Sag Harbor .....	4	5	0	5	0	13	14	34	0	93	1	1	4	2	2	28	13	22	73	



No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Troy.....	4	2	1	0	19	8	20	21	18	93	0	0	12	12	3	9	48	1	85	
Wampsville.....	0	0	13	13	3	10	52	1	0	93	0	0	12	12	3	9	48	1	85	
NEW JERSEY—																				
Bloomfield.....	0	10	0	0	0	13	10	5	0	38	0	0	0	0	0	1	0	0	1	
Burlington.....	13	11	3	0	3	12	34	14	4	94	0	3	3	0	0	4	12	0	22	
Lambertville.....	2	12	2	5	1	23	0	39	0	84	0	0	0	0	0	0	0	0	0	
PENNSYLVANIA—																				
Bedford.....	0	0	4	1	2	20	18	36	0	81	0	0	3	1	2	18	16	21	61	
Byberry.....	3	5	0	0	0	4	15	12	3	51	0	2	2	0	0	3	27	5	39	
Ceres.....	9	0	11	6	1	5	37	6	15	90	0	0	6	1	11	15	31	7	71	
Gettysburg.....	3	12	0	3	5	24	13	28	5	93	0	1	0	1	1	7	19	15	44	
Harrisburg.....	0	0	12	11	5	5	15	45	0	93	0	0	0	0	1	1	10	18	30	
Lima.....	4	6	6	5	4	10	8	35	20	92	0	0	0	3	2	5	11	26	47	
Morrisville.....	9	12	4	5	1	14	9	27	12	93	2	5	1	2	1	4	26	21	62	
Moss Grove.....	3	2	0	6	4	8	13	13	5	54	4	0	0	4	4	11	35	9	67	
Norristown.....	0	0	18	5	1	7	40	10	0	81	0	0	14	1	0	0	36	0	60	
Philadelphia.....	4	17	5	0	2	20	12	31	0	91	0	0	0	0	0	4	17	7	28	
Pittsburg.....	1	0	7	4	6	5	38	19	44	124	0	0	0	0	0	0	0	0	0	
Pocopson.....	2	3	1	3	1	9	15	25	0	59	1	0	0	4	3	27	10	18	63	
Sugar Grove.....	1	0	0	4	4	30	6	18	16	79	9	0	8	0	3	2	35	1	58	
Youngsville.....	8	0	5	1	11	2	50	2	0	79	9	0	8	0	3	2	35	1	58	
Warrior's Mark.....	2	3	5	3	5	7	18	21	6	70	0	0	0	0	0	1	0	1	2	
West Haverford.....	0	0	0	3	2	9	10	21	17	62	1	0	0	0	1	3	3	26	34	
MARYLAND—																				
Frederick.....	3	8	5	1	7	23	15	23	8	93	2	0	0	0	0	6	37	3	48	
Schellman Hall.....	2	1	0	0	10	16	48	16	0	93	1	1	1	0	0	7	59	2	71	
DISTRICT OF COLUMBIA—																				
Washington.....	0	5	3	3	6	6	5	21	8	57	2	1	0	4	0	1	21	8	37	
VIRGINIA—																				
Alexandria.....	10	9	5	2	18	9	7	32	0	92	2	0	0	0	3	0	8	0	13	
Ashland.....	11	1	3	2	15	30	15	16	0	93	2	0	0	0	3	0	8	0	13	
Crichton's Store.....	7	2	6	2	17	38	17	3	2	94	1	1	4	0	3	34	26	2	71	
Huntersville.....	1	0	0	11	11	29	13	28	0	93	1	0	0	14	11	29	7	17	79	
Lewisburg.....	0	1	0	0	0	6	22	2	0	31	0	0	0	0	0	8	9	3	20	
New Creek Depot.....	0	10	9	4	2	2	42	8	1	78	0	3	0	0	0	4	27	4	38	
Portsmouth.....	9	14	7	5	22	12	10	14	0	93	0	0	0	0	0	4	27	4	38	
Winchester.....	0	0	1	0	2	11	18	13	48	93	0	0	0	0	1	5	6	4	16	
NORTH CAROLINA—																				
Chapel Hill.....	7	7	3	3	11	24	27	11	0	93	4	0	0	0	6	26	16	6	58	
Thornbury.....	9	5	1	1	16	25	17	11	8	93	0	0	0	2	2	10	34	2	50	
SOUTH CAROLINA—																				
Camden.....	5	6	13	5	4	11	10	8	0	62	1	0	0	0	0	11	15	0	27	
St. John's.....	3	7	0	6	2	34	2	8	0	62	0	0	0	0	0	0	0	0	0	
GEORGIA—																				
Culloden.....	12	11	5	8	9	33	3	8	0	89	10	16	2	4	3	4	4	5	48	
Savannah.....	2	7	7	20	13	13	10	13	0	85	1	0	2	2	4	3	8	5	25	
Sparta.....	0	24	0	6	0	22	5	32	0	89	0	1	0	2	1	23	5	12	44	
The Rock.....	2	1	0	2	2	0	1	8	0	25	0	0	0	0	0	0	0	0	0	
Whitemarsh Island.....	4	11	2	7	13	18	7	10	13	85	0	6	0	2	2	9	6	23	48	
FLORIDA—																				
Cedar Keys.....	3	20	8	8	11	20	9	14	0	93	1	10	5	3	7	20	7	13	66	
Jacksonville.....	4	23	1	7	4	42	6	6	0	93	1	8	0	2	2	22	16	3	54	
Key West.....	6	14	15	16	2	0	3	4	2	62	0	0	0	0	0	0	0	0	0	
Knox Hill.....	8	16	10	9	14	17	8	5	0	87	3	3	1	11	10	14	11	2	55	
Warrington.....	8	9	4	23	5	18	8	15	2	92	0	1	0	8	7	22	10	33	61	
ALABAMA—																				
Greene Springs.....	14	8	8	1	17	10	6	5	1	70	0	0	0	0	12	19	8	5	44	
MISSISSIPPI—																				
Garlandville.....	0	14	0	9	2	42	7	19	0	93	0	14	0	8	2	40	2	4	70	
Jackson.....	9	3	2	1	29	7	7	5	29	92	1	0	2	0	3	9	6	3	24	
Lake Washington.....	3	1	5	2	3	8	4	3	0	29	2	1	0	0	4	16	15	3	41	
LOUISIANA—																				
New Orleans.....	12	12	29	4	10	1	15	7	3	93	3	0	2	0	8	9	12	0	34	

No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TEXAS—																				
Austin .....	18	3	1	17	37	4	0	5	8	93	0	2	1	13	38	14	3	8	87	
Huntsville .....	12	0	6	1	46	0	3	0	0	68	29	0	4	0	15	0	2	0	50	
New Wied .....	17	3	7	21	16	0	4	5	11	93	0	0	0	0	3	3	2	2	10	
TENNESSEE—																				
Glenwood .....	7	17	2	5	19	12	6	13	12	93	0	1	0	0	1	22	34	0	67	
Knoxville .....	21	4	7	0	20	14	12	10	0	88	0	0	0	0	11	26	38	19	94	
Lebanon .....	13	10	8	6	26	11	0	8	0	88	0	0	0	0	11	26	38	19	94	
Memphis .....	3	16	5	19	1	23	7	15	4	93	2	12	1	12	2	26	6	5	66	
KENTUCKY—																				
Ballardsville .....	3	8	0	2	4	25	7	44	0	93	0	0	0	2	0	0	33	32	67	
Danville .....	6	5	2	5	13	22	19	21	0	93	2	0	0	1	1	27	19	10	60	
Springdale .....	6	3	4	1	11	24	0	13	25	0	0	0	0	0	0	0	0	0	0	
OHIO—																				
College Hill .....	7	1	0	7	7	14	24	9	24	93	2	0	0	1	2	10	9	5	29	
Geneva Hall .....	0	1	0	11	0	22	25	29	5	93	0	1	0	7	0	17	20	22	67	
Germantown .....	2	4	1	15	5	36	0	22	0	85	0	1	0	3	4	35	0	10	53	
Granville .....	2	6	1	3	3	28	20	6	17	86	1	1	0	0	2	17	9	5	35	
Hillsborough .....	2	6	2	10	4	19	6	22	0	71	0	0	0	1	1	8	5	10	25	
Huron .....	1	8	0	1	0	15	0	17	0	42	2	5	0	1	0	11	0	13	32	
Jackson .....	6	6	11	0	7	12	29	5	5	81	5	0	0	0	4	7	30	5	51	
Marietta .....	0	0	0	2	6	2	13	14	55	92	1	0	0	0	6	11	16	7	41	
Mount Vernon .....	0	0	5	3	11	17	36	7	11	90	0	0	2	1	4	17	24	3	51	
Oberlin .....	8	2	6	7	24	8	14	22	2	93	0	0	0	1	4	0	28	6	45	
Perrysburg .....	3	0	0	4	0	5	24	11	0	56	0	0	0	0	0	0	0	0	0	
Savannah .....	2	0	0	5	0	21	39	25	0	92	2	0	0	4	0	21	34	23	84	
MICHIGAN—																				
Ann Arbor, [Woodruff] ..	5	2	4	18	5	13	18	18	10	93	2	0	3	4	2	0	29	12	58	
Battle Creek .....	3	1	14	7	8	22	17	18	3	93	0	0	1	3	3	25	18	15	65	
Brooklyn .....	1	1	4	9	6	17	28	9	11	86	0	0	2	7	4	13	14	10	50	
Detroit .....	5	17	8	7	5	31	8	12	0	93	0	0	0	0	0	0	0	0	0	
Flint .....	7	4	0	15	17	8	18	21	0	90	0	0	0	0	0	0	0	0	0	
Monroe, [Whelpley] .....	2	15	7	7	0	23	4	35	0	93	2	12	5	6	0	20	4	32	81	
St. James .....	3	8	7	5	6	27	7	22	7	92	1	4	2	0	4	20	3	19	53	
INDIANA—																				
Kendallville .....	11	1	3	5	20	9	1	15	0	65	1	1	1	1	3	6	20	8	41	
Milton .....	4	2	0	14	0	16	14	14	29	93	0	1	0	1	0	8	3	7	20	
New Harmony .....	11	1	3	5	20	9	1	15	0	65	0	0	0	0	0	4	0	1	5	
Richmond .....	6	4	2	12	0	14	13	7	4	68	0	0	0	1	0	7	17	8	33	
ILLINOIS—																				
Athens .....	0	8	1	25	1	14	1	34	0	84	0	0	0	8	3	7	17	28	63	
Augusta .....	10	11	7	19	7	9	4	20	6	93	0	1	0	2	1	4	10	2	20	
Batavia .....	3	8	1	2	20	13	34	5	7	93	0	0	0	0	0	0	0	0	0	
Ottawa .....	6	4	8	7	11	19	14	23	1	93	0	0	0	3	3	14	9	14	43	
Upper Alton .....	8	11	1	11	8	5	18	18	0	80	0	1	0	1	2	3	7	1	15	
MISSOURI—																				
Hannibal .....	26	3	0	25	27	7	8	5	3	93	0	1	6	2	15	3	14	8	58	
St. Louis .....	6	7	9	28	2	11	12	18	0	93	0	0	0	0	0	0	0	0	0	
WISCONSIN—																				
Bellefontaine .....	6	5	9	16	4	19	27	7	0	93	1	0	1	1	1	11	32	7	54	
Beloit .....	3	4	3	11	9	28	2	30	0	90	3	0	0	2	5	6	2	4	22	
Ceresco .....	3	7	4	16	6	14	10	26	7	93	0	3	6	2	0	0	2	0	13	
Janesville .....	4	9	2	3	6	19	31	8	11	93	0	2	0	0	0	0	0	0	2	
Madison .....	3	4	0	18	12	20	9	27	0	93	0	0	0	0	0	0	0	0	0	
Milwaukee .....	2	15	0	16	5	17	4	31	3	93	0	0	0	0	0	0	1	1	2	
Platteville .....	0	5	5	20	6	9	22	26	0	93	0	3	1	2	0	15	31	14	66	
IOWA—																				
Dubuque .....	20	7	0	4	11	15	9	23	4	93	1	2	0	0	1	7	5	13	30	
Fort Madison .....	3	6	0	23	7	21	3	30	0	93	3	3	1	2	2	12	25	6	54	
Keokuk .....	11	12	0	4	0	3	16	4	28	93	10	1	0	0	5	1	30	1	54	
Muscatine .....	7	5	0	13	11	3	20	36	0	93	0	0	0	1	0	16	3	7	27	
Poultney .....	6	4	6	14	8	9	18	19	4	88	1	0	1	2	3	0	23	9	45	
Quasqueton .....	1	3	5	24	9	3	12	34	0	91	3	0	0	1	0	6	8	4	24	



No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1854—Continued.

[illegible]

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Halifax .....	29	5	0	4	14	22	5	10	0	89	—	—	—	—	—	—	—	—	—	
CANADA EAST—																				
St. Martin's .....	1	46	1	5	0	29	1	7	0	90	—	—	—	—	—	—	—	—	—	
MAINE—																				
Carmel .....	0	11	0	15	4	12	10	17	3	72	0	10	0	12	3	8	5	7	45	
Fryeburg .....	13	19	2	5	4	21	4	10	0	78	1	0	0	0	0	0	1	27	29	
Oldtown .....	8	15	1	6	6	18	13	15	8	90	4	10	2	5	6	13	9	8	57	
Perry .....	7	19	0	6	7	16	9	23	3	90	3	14	1	0	4	16	3	11	52	
Steuben .....	0	37	3	2	0	23	1	15	■	87	0	5	0	0	0	11	18	15	49	
Windham .....	1	27	0	5	5	0	2	17	19	76	—	—	—	—	—	—	—	—	—	
NEW HAMPSHIRE—																				
Concord .....	11	40	3	3	0	14	0	19	0	90	—	—	—	—	—	—	—	—	—	
Exeter .....	7	20	13	8	0	15	14	12	0	89	5	18	12	8	1	14	9	8	75	
Hanover .....	19	8	1	7	16	6	2	31	0	90	7	2	0	3	1	2	8	8	31	
Londonderry .....	9	15	■	■	3	5	5	26	12	90	2	11	3	1	0	0	14	8	39	
Manchester .....	13	12	11	5	3	12	11	23	0	90	4	9	12	3	0	2	27	14	71	
Salmon Falls .....	3	24	12	8	4	13	4	8	12	88	4	9	1	1	0	2	1	23	41	
VERMONT—																				
Brandon .....	33	0	2	1	27	2	2	13	8	88	10	0	0	0	8	8	9	10	45	
Burlington .....	44	4	1	2	24	5	1	9	■	90	1	0	0	0	0	0	1	1	3	
Castleton .....	42	4	1	2	15	3	1	5	16	89	■	0	0	0	3	3	1	4	13	
Craftsbury .....	11	19	3	3	25	2	5	12	0	80	8	13	1	2	2	0	14	14	61	
St. Johnsbury .....	4	1	2	2	0	22	24	35	0	90	—	—	—	—	—	—	—	—	—	
MASSACHUSETTS—																				
Amherst .....	4	11	3	19	■	5	6	34	1	89	1	5	1	1	0	0	8	14	30	
Mendon .....	2	33	5	5	■	38	3	4	0	90	3	29	6	4	0	38	■	7	90	
Nantucket .....	3	27	■	5	3	26	4	12	3	89	—	—	—	—	—	—	—	—	—	
New Bedford .....	8	23	1	8	4	27	3	13	1	88	1	1	0	0	0	3	3	3	11	
Newburyport .....	3	27	10	6	10	6	16	7	0	85	1	0	0	0	0	1	2	0	4	
North Attleboro' .....	14	20	3	4	17	11	7	14	0	90	5	19	4	3	7	6	12	15	71	
Princeton .....	1	34	0	2	0	4	11	18	6	76	0	4	0	0	0	1	12	10	27	
Richmond .....	2	26	0	10	2	19	■	27	2	90	■	22	0	9	4	18	2	15	70	
Southwick .....	3	31	2	6	5	5	3	8	5	68	0	12	0	3	0	4	9	6	34	
Springfield .....	12	16	2	3	1	15	1	10	30	90	■	7	0	2	0	4	1	17	37	
Worcester .....	0	24	0	4	■	21	1	40	0	90	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
North Scituate .....	6	30	1	1	5	24	5	16	1	89	0	4	0	0	0	0	2	9	15	
Providence .....	2	28	1	5	11	18	3	21	0	89	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
New London .....	2	17	0	■	7	18	2	15	0	69	—	—	—	—	—	—	—	—	—	
Pomfret .....	■	24	4	7	9	17	2	21	0	90	5	19	0	6	0	18	6	9	63	
Saybrook .....	12	16	6	10	12	9	6	10	8	89	8	10	1	3	0	9	10	■	47	
West Cornwall .....	7	10	5	17	1	18	8	23	1	90	—	—	—	—	—	—	—	—	—	
NEW YORK—																				
Baldwinsville .....	10	■	12	0	0	6	20	28	0	84	5	4	0	0	1	0	28	29	67	
Beaver Brook .....	9	15	10	12	5	15	10	28	0	104	—	—	—	—	—	—	—	—	—	
Beverly .....	4	20	0	5	2	33	0	22	4	90	4	13	0	6	4	17	14	16	74	
Buffalo, [Salisbury] .....	5	31	1	2	1	13	2	2	5	62	4	10	1	0	1	5	6	2	29	
Canton .....	2	46	0	3	3	26	0	9	1	90	1	38	0	3	3	24	0	8	77	
Chatham .....	0	11	1	28	1	14	0	35	1	91	0	4	0	7	0	7	7	47	72	
Fishkill .....	0	15	0	0	3	36	0	3	33	90	—	—	—	—	—	—	—	—	—	
Gouverneur .....	7	29	1	4	1	35	4	9	0	90	■	25	0	0	0	28	3	6	68	
Leroy .....	4	12	3	2	4	0	0	3	0	28	—	—	—	—	—	—	—	—	—	
Lodi .....	11	9	4	6	■	17	■	22	9	90	2	0	0	0	0	6	12	9	29	
Madrid .....	1	36	0	0	1	21	2	11	13	85	0	4	0	0	0	27	5	8	44	
New York city .....	12	40	5	20	17	43	6	37	0	180	—	—	—	—	—	—	—	—	—	
New York city, [Deaf and Dumb Institution] .....	4	24	0	14	0	23	9	16	0	90	1	13	1	7	1	16	24	7	70	
Penn Yan .....	10	26	1	0	21	16	9	7	0	90	—	—	—	—	—	—	—	—	—	
Sag Harbor .....	5	21	3	11	14	20	8	8	0	90	4	15	1	3	2	17	24	11	77	
Troy .....	28	5	0	9	12	4	6	8	16	88	—	—	—	—	—	—	—	—	—	
Wampsville .....	1	3	13	7	6	11	37	11	1	90	2	3	13	6	6	13	31	10	84	



## NO. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW JERSEY—																			
Bloomfield .....	1	27	1	7	2	29	2	21	0	90	7	19	0	0	2	15	6	3	52
Burlington .....	6	24	2	1	5	20	16	12	4	90	7	19	0	0	2	15	6	3	52
Lambertville .....	3	20	1	1	4	33	1	15	0	78	7	19	0	0	2	15	6	3	52
PENNSYLVANIA—																			
Bedford .....	0	0	1	10	3	24	4	33	0	75	0	0	0	7	1	21	5	23	57
Byberry .....	17	19	1	0	4	21	12	8	8	90	4	19	0	0	3	6	37	25	94
Gettysburg .....	11	14	0	1	7	27	7	17	5	89	2	5	1	1	1	12	15	24	61
Harrisburg .....	9	7	4	13	15	4	15	21	0	88	1	0	1	1	6	2	17	10	38
Lima .....	8	23	3	13	8	9	10	12	3	89	3	9	1	1	1	8	24	23	70
Morrisville .....	6	26	0	6	4	26	4	13	5	90	7	18	1	1	0	10	22	12	71
Moss Grove .....	6	5	2	3	3	8	12	8	4	51	5	1	6	4	2	0	41	11	70
Norristown .....	3	9	12	9	6	1	33	17	0	90	1	5	10	0	2	2	32	13	65
Philadelphia .....	9	19	1	3	1	39	3	15	0	90	1	1	0	0	0	10	12	6	30
Pittsburg .....	2	1	18	3	6	37	11	36	120										
Pocopson .....	6	13	4	1	3	12	11	13	3	66	0	0	0	0	0	0	1	0	1
Sugar Grove .....	5	17	4	0	2	19	15	9	15	86	4	17	0	0	0	11	23	13	68
Warrior's Mark .....	3	21	15	1	3	1	18	16	11	89	0	0	0	0	0	0	1	1	2
West Haverford .....	2	12	1	1	4	17	2	10	11	60	1	5	1	0	0	1	6	21	35
Youngsville .....	7	4	7	1	33	6	20	5	0	83	7	4	7	1	22	7	12	6	66
MARYLAND—																			
Frederick .....	11	11	0	1	17	13	14	20	3	90	9	4	0	1	2	5	38	10	69
Schellman Hall .....	4	9	2	3	6	13	31	19	0	87	2	2	4	1	0	8	51	3	71
DISTRICT OF COLUMBIA—																			
Washington .....	3	5	0	3	10	8	6	11	5	51	5	2	2	1	1	4	18	8	41
VIRGINIA—																			
Alexandria .....	12	13	5	7	22	11	4	15	0	89	1	0	0	0	0	1	13	0	15
Ashland .....	20	8	5	0	19	21	9	8	0	90	1	0	0	0	0	1	13	0	15
Crichton's Store .....	22	2	1	5	13	20	1	3	1	68	10	0	0	0	2	16	18	2	48
Lewisburg .....	1	0	0	0	0	4	6	0	0	11	4	0	0	0	1	16	16	5	42
Winchester .....	0	5	4	0	3	5	22	1	46	86	0	0	0	0	2	0	13	0	15
NORTH CAROLINA—																			
Chapel Hill .....	9	11	0	3	14	22	15	16	0	90	4	2	1	1	14	17	9	6	54
Thornbury .....	9	8	7	1	14	15	17	3	9	83	3	5	1	0	6	7	19	6	47
SOUTH CAROLINA—																			
Camden .....	21	6	12	5	11	3	2	0	0	60	2	2	0	1	4	3	4	0	16
St. John's .....	2	10	1	2	10	24	0	11	0	60	2	2	0	1	4	3	4	0	16
GEORGIA—																			
Culloden .....	4	6	6	14	8	26	9	14	0	87	0	8	2	5	1	2	3	4	25
Savannah .....	11	4	7	13	19	9	12	14	0	89	0	0	0	0	1	4	8	0	13
Sparta .....	0	21	0	5	0	18	0	45	0	89	1	2	1	2	1	9	6	13	35
The Rock .....	0	0	3	6	1	7	3	8	0	28									
Whitemarsh Island .....	8	8	1	8	24	8	10	7	16	90	4	2	0	2	7	10	9	4	38
FLORIDA—																			
Cedar Keys .....	9	14	10	5	4	7	26	10	5	90	3	9	7	5	6	8	21	6	65
Jacksonville .....	6	19	2	16	3	21	6	14	3	90	1	7	2	3	2	25	8	3	51
Key West .....	14	13	8	6	5	2	4	7	1	60									
Knox Hill .....	7	7	2	2	6	15	3	7	0	49	3	0	0	2	0	15	5	0	25
Warrington .....	12	8	1	19	10	14	3	18	5	90	2	0	1	7	5	8	1	29	53
ALABAMA—																			
Greene Springs .....	11	7	5	2	2	2	9	6	27	71	2	0	0	1	5	3	6	4	21
MISSISSIPPI—																			
Garlandville .....	3	3	0	19	0	41	3	21	0	90	2	0	0	10	0	30	1	9	52
Jackson .....	5	0	1	5	38	2	11	13	15	90	1	0	0	0	4	2	8	2	17
Lake Washington .....	0	1	0	1	0	5	1	6	0	14	1	0	0	0	1	5	6	4	17
LOUISIANA—																			
New Orleans .....	13	12	28	9	13	0	4	10	1	90	1	1	0	1	6	4	7	2	22
TEXAS—																			
Austin .....	14	4	0	20	31	3	1	13	4	90	6	2	1	16	20	17	3	12	77
New Wied .....	28	3	1	32	10	7	0	2	7	90	3	0	2	0	5	2	0	8	20
TENNESSEE—																			
Glenwood .....	5	12	0	6	19	14	3	10	21	90	2	5	0	0	1	25	21	8	62
Knoxville .....	14	0	1	10	7	17	15	15	0	79									
Memphis .....	0	11	1	15	4	33	1	19	6	90	0	5	2	6	2	26	3	17	61
KENTUCKY—																			
Ballardsville .....	13	2	3	5	1	27	12	27	0	90	0	0	0	0	0	5	0	1	6





## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Halifax .....	0	4	1	20	23	22	3	10	1	93	—	—	—	—	—	—	—	—	—	
CANADA EAST—																				
St. Martin's .....	6	14	5	13	6	22	12	13	2	93	—	—	—	—	—	—	—	—	—	
MAINE—																				
Carmel .....	0	3	1	24	7	7	4	19	11	76	0	3	0	18	2	7	3	12	45	
Fryeburg .....	9	5	6	7	5	32	5	10	0	79	0	1	2	2	4	5	8	27	49	
Perry .....	6	2	4	26	20	19	3	13	0	93	2	1	3	7	5	10	7	9	44	
Steuben .....	1	18	1	7	10	35	3	15	3	93	1	11	0	1	0	13	9	13	48	
Windham .....	0	9	16	12	6	2	5	11	5	66	0	0	0	0	0	0	1	1	2	
NEW HAMPSHIRE—																				
Concord .....	3	19	0	34	0	22	1	14	0	93	—	—	—	—	—	—	—	—	—	
Exeter .....	5	11	3	15	5	29	8	17	0	93	0	4	0	1	2	15	1	11	34	
Hanover .....	12	4	1	13	15	19	4	21	4	93	1	1	5	2	6	9	6	7	37	
Londonderry .....	1	2	3	23	13	5	11	20	15	93	0	4	0	2	8	3	21	10	48	
Manchester .....	12	3	10	6	19	27	5	11	0	93	2	6	2	1	12	1	44	6	74	
Salmon Falls .....	1	4	6	11	16	22	0	13	11	93	5	8	1	4	1	9	13	16	57	
VERMONT—																				
Brandon .....	19	0	2	6	37	8	2	13	6	93	4	0	0	4	6	14	17	6	51	
Burlington .....	30	3	1	1	39	2	5	12	0	93	0	0	0	0	3	2	2	4	11	
Castleton .....	16	1	1	10	19	10	8	5	23	93	2	0	0	1	0	7	2	0	12	
Craftsbury .....	5	5	1	1	24	11	13	11	0	71	2	4	1	1	12	9	16	7	52	
St. Johnsbury .....	1	0	0	5	8	17	10	52	0	93	—	—	—	—	—	—	—	—	—	
MASSACHUSETTS—																				
Amherst .....	7	4	2	24	11	11	5	25	0	89	0	3	0	9	2	6	5	19	44	
Mendon .....	1	11	1	3	7	48	5	17	0	93	1	11	1	2	7	50	6	15	93	
Nantucket .....	0	15	0	14	17	20	12	9	6	93	—	—	—	—	—	—	—	—	—	
New Bedford .....	4	11	1	15	10	38	2	11	1	93	5	2	1	1	1	6	4	10	30	
Newburyport .....	2	7	5	8	25	18	10	13	0	88	—	—	—	—	—	—	—	—	—	
North Attleboro' .....	7	9	0	5	46	10	4	12	0	93	4	5	0	6	26	12	16	10	79	
Princeton .....	4	16	0	5	9	18	11	18	0	81	1	6	0	2	5	10	21	6	51	
Richmond .....	0	6	0	15	2	36	1	33	0	93	0	5	1	13	3	31	2	17	72	
Southwick .....	2	12	1	9	18	12	1	10	12	77	0	5	0	2	6	12	6	6	37	
Springfield .....	4	9	0	4	20	14	2	13	27	93	1	8	1	2	7	9	5	17	50	
Taunton .....	8	11	0	12	6	24	4	18	9	92	5	12	0	12	4	21	6	21	81	
Worcester .....	0	9	0	12	0	42	1	29	0	93	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
North Scituate .....	1	17	0	11	7	37	2	12	2	89	1	3	0	1	0	9	4	4	22	
Providence .....	4	11	0	14	13	28	2	15	0	93	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
New London .....	2	8	1	10	16	39	0	17	0	93	—	—	—	—	—	—	—	—	—	
Pomfret .....	6	10	2	9	23	19	2	22	0	93	3	5	0	7	15	19	3	15	67	
West Cornwall .....	4	7	0	14	8	26	8	26	0	93	—	—	—	—	—	—	—	—	—	
NEW YORK—																				
Angelica .....	11	4	0	8	0	20	16	25	0	93	1	0	1	0	5	25	23	7	62	
Baldwinsville .....	10	3	3	3	5	16	13	30	0	83	2	0	0	1	2	8	24	25	62	
Beaver Brook .....	11	2	8	16	11	7	6	30	2	93	3	2	0	4	9	17	13	11	59	
Beverly .....	5	8	0	15	16	23	4	15	7	93	1	4	0	18	3	24	11	4	65	
Buffalo, [Salisbury] .....	3	15	0	6	22	1	2	2	51	0	0	0	0	1	5	5	2	13	13	
Canton .....	3	18	0	3	4	49	3	6	7	93	2	16	0	3	3	40	2	5	71	
Chatham .....	0	10	1	39	1	13	1	23	5	93	0	3	0	11	0	16	3	39	72	
Fishkill .....	0	15	0	0	15	27	9	12	15	93	—	—	—	—	—	—	—	—	—	
Gouverneur .....	5	11	1	0	4	34	34	4	0	93	1	3	2	0	1	17	39	2	65	
Lodi .....	10	1	1	12	11	15	10	24	9	93	2	0	0	0	7	12	12	11	44	
Madrid .....	6	15	0	3	4	34	8	4	16	90	2	2	0	0	2	35	10	4	55	
New York city, .....	10	8	12	36	38	21	20	35	0	180	—	—	—	—	—	—	—	—	—	
New York city, [Deaf and Dumb Institution] .....	2	12	9	22	2	14	15	17	0	93	1	4	7	4	2	11	26	7	62	
Penn Yan .....	3	19	0	0	29	17	16	9	0	93	—	—	—	—	—	—	—	—	—	
Sag Harbor .....	5	9	3	12	25	20	2	16	1	93	0	5	0	7	3	33	6	9	63	
Troy .....	11	3	3	10	23	4	12	12	15	93	—	—	—	—	—	—	—	—	—	
Wampsville .....	0	2	4	7	14	12	39	15	0	93	0	2	1	7	13	13	35	11	82	

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
<b>NEW JERSEY—</b>																				
Bloomfield.....	5	23	0	8	9	33	0	20	0	93	5	5	0	2	6	6	2	32		
Burlington.....	14	6	0	4	5	12	17	4	31	93	5	5	0	2	6	6	2	32		
Lambertville.....	1	13	2	16	7	17	2	24	0	82	5	5	0	2	6	6	2	32		
<b>PENNSYLVANIA—</b>																				
Bedford.....	1	1	2	11	1	22	5	31	0	74	1	1	2	7	0	19	5	12	47	
Gettysburg.....	8	7	1	5	22	23	5	18	4	93	2	0	0	2	5	32	16	16	73	
Harrisburg.....	2	1	0	22	4	7	18	23	0	77	2	0	0	9	4	3	13	6	37	
Lima.....	4	11	0	12	10	3	5	20	19	93	2	4	1	2	2	20	17	17	65	
Morrisville.....	8	9	10	10	10	13	8	15	10	93	8	2	2	3	7	13	13	7	55	
Moss Grove.....	4	1	2	3	4	16	37	2	14	83	0	0	0	0	1	8	41	2	52	
Norristown.....	0	3	2	17	5	3	42	0	0	82	2	1	4	5	5	9	39	2	67	
Philadelphia.....	5	19	5	9	4	28	7	16	0	93	1	2	0	4	2	19	10	3	41	
Pittsburg.....	0	1	14	13	11	10	25	6	44	124	0	0	0	1	0	7	4	3	15	
Pocopson.....	5	4	1	0	5	29	17	20	0	82	0	0	0	1	0	7	4	3	15	
Sugar Grove.....	0	7	2	1	8	22	23	18	10	91	0	1	0	1	2	30	12	10	56	
Warrior's Mark.....	4	6	0	10	8	5	15	22	8	88	3	4	0	0	0	10	11	11	39	
West Haverford.....	3	8	0	4	4	23	5	8	5	60	3	4	0	0	0	10	11	11	39	
<b>MARYLAND—</b>																				
Frederick.....	5	10	2	9	23	14	9	13	8	93	3	1	3	3	13	14	28	0	74	
Schellman Hall.....	4	2	0	2	11	25	48	1	0	93	1	9	0	6	2	16	51	0	76	
<b>DISTRICT OF COLUMBIA—</b>																				
Washington.....	1	4	1	3	14	6	5	12	5	51	0	2	0	2	2	9	20	3	38	
<b>VIRGINIA—</b>																				
Alexandria.....	4	9	5	14	25	9	5	18	0	90	1	0	0	0	1	1	8	3	14	
Ashland.....	17	6	3	3	30	14	11	0	0	93	1	0	0	0	1	1	8	3	14	
Crichton's Store.....	13	4	0	3	21	32	10	6	4	93	7	2	0	2	6	39	25	2	83	
Lewisburg.....	0	1	0	0	1	9	0	0	0	11	2	1	0	2	3	17	12	0	37	
Winchester.....	0	0	0	8	2	2	31	0	50	93	0	0	2	3	2	2	13	0	22	



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
<b>OHIO—</b>																				
College Hill.....	0	6	10	2	3	10	21	0	33	85	0	0	0	0	3	11	13	2	29	
Geneva Hall.....	1	0	2	6	1	24	11	0	12	65	1	0	0	2	0	25	12	0	46	
Germantown.....	2	11	2	16	5	43	2	0	0	87	0	2	0	10	4	37	3	3	59	
Granville.....	1	8	2	3	7	21	4	4	33	83	0	2	0	1	1	20	5	4	33	
Hillsborough.....	1	18	2	11	4	25	3	4	0	68	0	3	0	1	0	21	3	4	32	
Huron.....	3	23	1	5	14	28	9	3	4	90	2	9	1	1	11	23	18	3	68	
Jackson.....	4	11	27	4	3	20	0	0	13	90	0	0	1	0	6	22	22	1	52	
Marietta.....	5	0	0	3	5	10	8	5	55	91	1	0	0	1	1	19	5	5	30	
Mount Vernon.....	6	0	0	1	14	9	19	0	32	81	0	0	0	0	12	11	18	0	41	
Oberlin.....	9	18	4	3	10	25	7	8	7	91	2	1	1	1	1	11	42	2	61	
Perrysburg.....	11	18	6	17	9	17	6	7	2	93	—	—	—	—	—	—	—	—	—	
Savannah.....	2	0	0	2	0	25	41	12	2	84	1	0	0	2	1	25	31	8	68	
Zanesville.....	3	4	1	8	5	10	10	8	37	86	0	0	0	4	11	23	11	7	56	
<b>MICHIGAN—</b>																				
Ann Arbor, [Woodruff] ..	5	8	0	23	5	23	8	6	5	90	2	0	0	1	9	21	28	12	73	
Battle Creek.....	1	4	12	21	7	30	12	4	2	93	1	0	2	1	10	33	19	9	75	
Detroit.....	3	19	21	6	8	29	4	3	0	93	—	—	—	—	—	—	—	—	—	
Flint.....	13	4	2	5	18	18	23	5	0	88	—	—	—	—	—	—	—	—	—	
Grand Rapids.....	0	12	8	12	2	35	6	2	16	93	0	0	0	0	1	9	12	2	24	
Monroe, [Whelpley].....	0	14	5	7	1	14	2	48	0	91	0	16	8	3	0	18	1	43	89	
St. James.....	4	8	21	8	1	37	0	10	4	93	1	1	0	3	1	39	2	9	56	
<b>INDIANA—</b>																				
Kendallville.....	0	1	9	23	7	20	24	7	0	91	0	0	1	4	5	10	18	1	39	
La Fayette.....	4	5	2	19	5	25	13	9	11	93	0	0	0	5	8	23	36	3	75	
Milton.....	0	18	2	4	0	27	3	1	38	93	0	2	0	1	0	17	5	0	25	
New Harmony.....	5	1	4	13	20	12	3	5	1	64	0	0								

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Halifax.....	14	3	1	15	17	25	4	7	3	89										
CANADA EAST—																				
St. Martin's.....	2	28	2	9	0	22	5	20	2	90										
MAINE—																				
Carmel.....	0	5	2	10	1	7	11	14	0	50	0	5	1	9	0	7	9	11	42	
Fryeburg.....	19	10	5	9	2	19	13	4	0	81	1	4	3	2	0	5	19	16	50	
Perry.....	2	9	3	30	10	29	3	4	0	90	0	6	1	5	6	15	7	1	41	
Steuben.....	2	12	0	15	2	37	0	9	4	90	6	5	0	4	0	14	10	11	50	
Windham.....	3	18	0	8	0	5	1	10	4	49	0	0	0	0	0	1	0	0	1	
NEW HAMPSHIRE—																				
Concord.....	3	18	2	29	1	25	0	12	0	90										
Hanover.....	23	5	2	19	4	7	3	24	0	87	5	0	0	2	4	1	1	3	16	
Exeter.....	1	19	9	10	3	25	10	13	0	90	1	15	7	10	1	16	9	11	70	
Great Falls.....	3	15	1	5	0	12	3	0	0	47	0	1	0	0	0	2	2	0	5	
Londonderry.....	0	9	6	8	0	6	14	22	0	71	0	2	5	2	2	2	2	10	37	
Manchester.....	13	5	18	6	7	19	11	11	0	90	3	2	9	2	4	0	35	4	59	
Salmon Falls.....	1	6	19	7	8	13	14	5	0	73	0	2	2	0	0	4	2	14	30	
VERMONT—																				
Brandon.....	19	1	1	9	21	3	0	9	9	72	8	1	0	1	2	8	5	10	35	
Burlington.....	44	1	1	3	37	3	1	1	0	90	0	0	0	0	0	2	0	1	3	
Castleton.....	37	0	1	4	26	2	0	0	20	90	0	0	0	0	1	0	0	0	1	
Craftsbury.....	7	9	1	2	22	1	24	11	6	83	8	11	0	0	13	3	12	2	49	
St. Johnsbury.....	1	2	0	0	2	19	0	56	0	80	0	8	0	0	2	16	1	12	34	
MASSACHUSETTS—																				
Amherst.....	4	2	5	27	3	8	3	26	0	78	1	1	0	3	3	4	1	17	30	
Mendon.....	0	12	0	3	0	57	3	15	0	90	0	15	0	3	0	57	4	11	90	
Nantucket.....	3	18	1	5	7	42	3	5	6	90										
New Bedford.....	4	12	3	7	3	45	4	11	1	90	10	0	0	1	0	6	4	9	30	
Newburyport.....	6	12	9	9	18	0	17	4	0	84										
North Attleboro'.....	13	12	3	0	29	12	6	15	0	90	0	9	0	0	15	7	17	9	63	
Princeton.....	2	26	2	3	0	7	25	16	0	81	3	9	0	1	0	5	12	6	36	
Richmond.....	1	1	0	8	3	46	0	27	2	88	1	0	0	7	6	29	2	23	68	
Southwick.....	1	10	2	8	12	4	1	6	7	51	0	3	0	2	4	9	3	10	31	
Springfield.....	5	11	0	2	0	15	5	11	32	90	1	7	0	2	4	4	5	10	33	
Taunton.....	2	9	0	4	3	24	27	18	3	90	1	9	0	4	0	25	21	18	78	
Worcester.....	1	10	1	11	0	24	2	41	0	90										
RHODE ISLAND—																				
North Scituate.....	2	15	7	2	3	38	3	17	0	87	1	0	0	0	0	3	1	6	11	
CONNECTICUT—																				
New London.....	1	6	0	11	10	48	1	13	0	90										
Pomfret.....	3	16	2	0	4	28	11	26	0	90	0	11	1	0	5	14	8	17	56	
Saybrook.....	11	4	7	9	11	22	15	5	2	86	3	3	3	3	4	8	12	1	37	
West Cornwall.....	4	3	0	14	3	20	16	30	0	90										
NEW YORK—																				
Angelica.....	4	8	1	5	1	13	26	32	0	90	0	27	33	3	0	1	0	1	65	
Baldwinsville.....	3	1	6	1	1	7	19	38	0	76	1	0	0	0	1	1	35	12	50	
Beaver Brook.....	8	0	4	16	10	11	18	24	5	96	2	0	1	3	7	0	5	11	35	
Beverly.....	7	9	0	16	8	30	1	11	5	87	1	4	2	11	6	18	17	8	67	
Buffalo, [Salisbury].....	0	4	0	0	0	21	1	0	4	30	1	0	0	0	0	0	0	0	7	
Canton.....	6	23	1	2	3	40	0	8	5	88	1	17	1	1	3	25	0	4	52	
Fishkill.....	9	3	3	0	24	30	9	3	9	90										
Gouverneur.....	3	27	0	1	1	33	13	12	0	90	3	10	0	1	1	5	30	10	60	
Le Roy.....	1	0	1	0	4	0	2	9	0	17										
Lodi.....	7	5	1	9	8	5	20	23	12	90	1	0	0	1	6	6	16	14	44	
Madrid.....	4	30	0	0	0	27	1	2	25	89	3	15	0	0	0	27	3	0	48	
New York city.....	4	0	13	32	51	27	27	9	0	80										
New York city, [Deaf and Dumb Institution].....	3	13	8	19	1	13	23	10	0	90	2	3	12	5	1	10	31	7	71	
Penn Yan.....	1	27	0	0	20	14	25	3	0	90										
Sag Harbor.....	2	9	7	12	14	22	12	12	0	90	6	5	0	1	2	22	12	10	58	
Troy.....	24	1	7	11	16	4	9	0	9	90										
Wampsville.....	1	0	5	14	13	4	41	12	0	90	1	0	3	11	10	5	29	13	72	



No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY—																				
Bloomfield.....	0	14	0	7	4	53	2	10	0	90	—	—	—	—	—	—	—	—	—	
Burlington.....	12	5	0	2	4	19	14	7	27	90	1	5	0	2	2	8	8	2	28	
Lambertville.....	1	7	1	16	6	25	1	23	0	80	—	—	—	—	—	—	—	—	—	
PENNSYLVANIA—																				
Bedford.....	0	0	0	13	0	19	8	38	0	78	1	0	0	0	0	17	9	30	57	
Gettysburg.....	6	9	3	1	13	21	15	15	6	89	1	1	0	1	6	12	7	24	52	
Harrisburg.....	0	0	3	8	8	5	41	17	0	82	0	0	0	3	3	2	24	12	44	
Lima.....	5	18	3	11	9	9	5	17	13	90	6	8	0	3	1	8	18	22	66	
Morrisville.....	9	10	4	6	6	25	9	10	11	90	6	4	0	0	3	10	19	7	49	
Moss Grove.....	4	2	0	1	4	22	3	32	70	0	0	1	0	0	8	43	1	53		
Norristown.....	1	2	8	6	1	18	35	7	0	78	0	1	7	3	1	12	29	3	56	
Philadelphia.....	5	8	3	6	6	33	8	21	0	90	4	1	0	0	1	12	5	3	27	
Pittsburg.....	0	0	14	2	4	2	58	3	37	120	—	—	—	—	—	—	—	—	—	
Pocopson.....	4	3	2	1	10	23	19	14	0	76	0	1	0	1	2	3	2	3	12	
Randolph.....	2	1	2	12	9	6	10	17	18	77	0	0	1	6	6	11	9	7	40	
Warrior's Mark.....	0	4	15	12	1	1	12	12	22	79	—	—	—	—	—	—	—	—	—	
West Haverford.....	0	4	4	1	3	29	8	9	3	61	2	4	2	1	2	5	3	16	35	
MARYLAND—																				
Frederick.....	2	5	3	8	14	20	20	9	6	88	4	2	0	5	7	12	20	7	57	
Schellman Hall.....	0	1	0	4	4	21	56	4	0	90	0	0	0	3	1	10	60	4	78	
DISTRICT OF COLUMBIA—																				
Washington.....	5	3	0	3	4	12	5	11	3	46	3	0	1	2	3	8	15	7	39	
VIRGINIA—																				
Alexandria.....	11	5	5	13	23	6	4	21	0	89	—	—	—	—	—	—	—	—	—	
Ashland.....	13	3	4	4	34	12	17	3	0	90	0	0	1	0	1	0	12	1	15	
Crichton's Store.....	20	7	2	5	11	30	4	8	3	90	3	6	0	1	2	41	24	9	86	
Lewisburg.....	0	1	0	0	0	1	1	0	0	3	1	0	1	0	0	8	18	0	28	
Montcalm.....	1	0	1	0	0	4	2	0	0	8	1	2	0	0	0	3	4	0	10	
Winchester.....	0	0	1	1	1	0	37	2	48	90	0	0	0	1	1	0	11	3	16	
NORTH CAROLINA—																				
Chapel Hill.....	16	0	3	2	14	15	28	12	0	90	2	1	1	2	7	25	10	5	53	
Thornbury.....	7	7	11	0	11	28	6	0	14	90	1	1	7	1	2	10	21	5	48	
SOUTH CAROLINA—																				
Camden.....	4	12	13	1	17	0	18	7	0	72	0	13	1	0	3	12	4	8	50	
St. John's.....	0	5	1	38	0	9	0	7	0	60	—	—	—	—	—	—	—	—	—	
GEORGIA—																				
Augusta.....	0	0	0	0	0	6	12	0	0	18	—	—	—	—	—	—	—	—	—	
Culloden.....	11	20	3	12	8	16	3	12	0	85	4	6	1	3	4	13	2	2	35	
Savannah.....	15	4	3	18	22	12	12	4	0	90	1	1	0	1	1	1	2	0	7	
Sparta.....	2	23	3	17	1	13	4	25	0	88	1	13	0	4	0	16	1	8	43	
Whitemarsh.....	3	13	1	5	26	9	11	5	17	90	2	12	0	3	3	11	5	16	42	
FLORIDA—																				
Cedar Keys.....	4	3	16	4	2	7	34	14	6	90	5	8	14	4	2	5	27	14	79	
Jacksonville.....	2	25	0	16	3	31	2	4	7	90	2	12	0	4	3	32	5	11	69	
Key West.....	0	5	6	20	9	3	4	9	4	60	—	—	—	—	—	—	—	—	—	
Knox Hill.....	6	11	3	6	5	30	14	7	5	87	3	11	5	4	1	17	17	3	61	
Warrington.....	2	17	2	7	8	29	3	18	4	90	3	15	1	4	2	25	5	30	85	
ALABAMA—																				
Tuscaloosa.....	1	8	1	6	8	1	1	6	30	62	—	—	—	—	—	—	—	—	—	
MISSISSIPPI—																				
Garlandville.....	8	9	7	18	4	11	24	8	1	90	5	8	7	11	2	8	21	8	70	
Lake Washington.....	0	2	1	2	2	1	5	2	0	15	3	1	3	4	3	5	19	7	45	
LOUISIANA—																				
New Orleans.....	6	10	16	5	12	0	5	0	7	61	1	1	1	0	3	4	12	4	26	
TEXAS—																				
Austin.....	5	7	7	16	41	3	0	4	6	89	7	7	6	15	33	15	5	6	94	
New Wied.....	17	10	5	29	10	0	0	1	18	90	3	0	0	7	3	0	0	8	21	
TENNESSEE—																				
Glenwood.....	2	8	2	5	11	10	8	7	37	90	2	9	1	1	3	9	24	13	62	
Knoxville.....	12	12	5	2	7	7	17	13	0	75	—	—	—	—	—	—	—	—	—	
Memphis.....	4	21	5	7	2	21	7	12	11	90	3	14	4	2	1	22	2	7	55	
KENTUCKY—																				
Ballardsville.....	19	3	0	3	5	11	37	12	0	90	2	0	1	3	0	12	7	2	27	
Danville.....	6	14	5	4	4	35	11	0	0	85	0	2	0	0	3	19	22	3	49	

## 123

	SURFACE CURRENT.									MOTION OF CLOUDS.									
NAME OF STATION.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or varia- ble.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
KENTUCKY—Continued.																			
Millersburg .....	2	2	10	4	3	6	30	4	23	84									
Springdale .....	7	7	3	2	3	12	10	7	39	90									
OHIO—																			
College Hill.....	0	6	2	0	0	14	5	0	18	45	0	0	0	1	0	1	0	0	2
Germantown.....	2	10	1	9	2	58	2	3	0	87	1	0	0	7	1	38	4	1	57
Granville.....	1	5	1	0	0	23	10	2	30	72	0	3	1	0	0	10	4	2	20
Hillsborough.....	1	12	0	9	1	26	3	5	0	60	1	0	0	5	1	8	3	18	31
Huron.....	3	13	0	3	12	23	13	6	16	89	2	1	1	1	3	23	15	9	55
Jackson.....	4	4	18	2	7	9	11	3	23	81	3	0	1	0	5	9	21	12	52
Marietta.....	4	0	1	0	4	3	14	1	54	81	3	0	0	0	1	17	8	2	31
Oberlin.....	15	10	2	3	6	19	20	5	■	89	0	0	0	0	0	19	41	7	67
Perrysburg.....	6	15	3	3	11	17	25	0	10	90									
Savannah.....	0	0	0	0	0	20	62	8	■	90	0	0	0	0	0	18	41	7	66
Yankeetown.....	2	16	24	8	0	0	■	3	28	81									
MICHIGAN—																			
Ann Arbor, [Winchell]..	10	2	10	3	8	19	10	■	19	90	10	2	4	0	3	21	14	16	70
Ann Arbor, [Woodruff]..	6	5	4	11	3	13	17	7	14	80	3	4	1	1	3	9	19	20	60
Battle Creek.....	0	3	5	8	9	15	22	6	22	90	1	4	1	0	0	16	26	17	65
Cooper.....	1	1	21	4	2	1	51	6	2	89	0	0	12	0	1	3	41	5	62
Detroit.....	2	14	11	6	6	32	16	3	0	90									
Flint.....	15	0	0	2	23	3	10	10	0	63									
Grand Rapids.....	0	9	3	5	0	22	11	3	37	90	0	3	1	0	0	5	5		22
Monroe, [Whelpley]....	0	8	11	10	0	20	0	38	■	87	0	5	8	5	0	15	0	36	69
INDIANA—																			
Kendallville.....	1	3	7	5	10	13	16	10	0	63	0	1	1	0	2	4	14	6	28
La Fayette.....	2	7	0	10	3	17	29	10	12	90	2	0	0	2	3	22	33	13	75
Milton.....	1	9	0	0	1	16	7	4	52	90	0	0	0	0	0	11	3	5	19
New Harmony.....	5	0	0	7	20	8	4	8	1	53	0	0	0	0	0	1	0	0	1
Richmond.....	4	5	1	16	3	19	■	7	23	84	2	3	0	3	3	8	14	7	40
ILLINOIS																			



NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NOVA SCOTIA—																			
Halifax.....	16	4	0	5	22	25	11	10	1	94	---	---	---	---	---	---	---	---	---
CANADA EAST—																			
St. Martin's.....	1	8	4	6	3	45	8	18	0	93	---	---	---	---	---	---	---	---	---
MAINE—																			
Carmel.....	0	1	0	6	1	23	0	11	23	65	0	0	0	5	0	18	0	9	32
Fryeburg.....	4	5	4	10	8	29	10	7	0	77	1	0	3	2	1	8	22	20	57
Perry.....	10	3	3	16	4	38	6	13	0	93	---	---	---	---	---	---	---	---	---
Steuben.....	7	3	0	3	2	47	2	24	5	93	8	4	0	0	0	21	22	11	66
NEW HAMPSHIRE—																			
Concord.....	6	7	0	29	0	22	0	29	0	93	---	---	---	---	---	---	---	---	---
Exeter.....	2	14	12	13	10	17	12	12	0	92	2	8	8	5	2	10	4	12	51
Hanover.....	11	3	0	9	25	12	4	29	0	93	4	0	0	0	2	5	4	2	17
Londonderry.....	3	7	2	8	3	13	6	20	31	93	0	1	3	2	2	12	6	3	29
Manchester.....	7	3	11	9	21	13	16	13	0	93	0	5	3	3	2	10	39	4	66
Salmon Falls.....	2	4	3	11	10	30	5	10	18	93	15	6	1	4	2	9	9	13	59
VERMONT—																			
Brandon.....	16	0	1	2	40	5	9	11	7	91	3	0	0	0	0	6	19	10	38
Burlington.....	26	0	2	1	47	3	8	6	0	93	0	0	0	0	0	1	3	1	5
Castleton.....	30	0	0	0	34	3	0	2	24	93	3	0	0	0	0	0	0	5	8
Craftsbury.....	7	0	0	5	31	0	20	9	0	72	7	0	2	2	13	0	22	7	53
St. Johnsbury.....	1	1	0	0	0	43	9	39	0	93	0	0	0	0	0	18	4	5	27
MASSACHUSETTS—																			
Amherst.....	4	4	0	25	11	13	6	25	0	88	2	2	1	2	4	12	5	13	41
Mendon.....	0	6	6	5	0	64	2	10	0	93	0	4	6	5	0	65	2	11	93
Nantucket.....	2	20	1	9	4	32	1	6	18	93	---	---	---	---	---	---	---	---	---
New Bedford.....	5	17	3	5	3	40	4	15	0	93	5	3	0	1	1	7	5	18	40
Newburyport.....	8	5	9	11	22	10	12	9	0	86	0	0	0	0	1	2	0	0	3
North Attleboro'.....	9	5	2	1	12	3	7	4	0	43	12	4	0	4	7	0	0	11	38
Princeton.....	4	18	1	3	2	16	18	15	1	78	2	8	1	2	0	12	20	12	57
Richmond.....	0	4	0	4	5	51	0	25	4	93	7	3	1	7	7	28	8	14	75
Southwick.....	4	6																	

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW JERSEY—Continued.																			
Burlington.....	16	13	0	0	0	33	4	3	24	93	6	12	0	0	0	3	0	0	21
Lambertville.....	6	21	1	10	4	21	0	22	0	85									
PENNSYLVANIA—																			
Bedford.....	4	1	12	6	0	18	11	26	0	78	0	0	0	3	0	17	13	22	55
Freeport.....	16	15	9	8	20	6	11	8	0	93									
Gettysburg.....	5	8	0	4	16	22	0	12	20	93	0	8	1	1	8	7	21	24	76
Harrisburg.....	2	1	1	16	14	2	31	20	0	87	2	0	1	7	6	4	13	11	44
Lima.....	12	21	3	12	6	8	2	8	21	93	12	8	3	4	0	12	10	17	72
Morrisville.....	5	17	3	6	4	23	7	5	19	93	7	7	0	0	2	15	14	15	60
Moss Grove.....	2	1	2	0	0	4	23	5	3	40	0	0	0	0	0	0	41	4	45
Norristown.....	0	0	3	9	2	14	39	7	0	80	1	5	6	4	4	6	31	3	60
Philadelphia.....	10	15	11	6	8	23	3	17	0	93	1	3	2	0	0	9	5	5	33
Pittsburg.....	4	1	19	2	1	4	41	8	44	124									
Pocopson.....	8	10	2	3	4	23	13	11	0	74	1	5	0	0	3	4	3	1	17
Randolph.....	1	0	4	10	12	10	5	16	35	93	2	0	0	0	0	0	21	19	48
Warrior's Mark.....	1	12	15	3	3	4	12	1	25	76									
West Haverford.....	7	14	4	1	1	15	4	9	0	55	2	6	3	1	1	7	12	12	44
MARYLAND—																			
Frederick.....	4	20	2	5	12	10	14	8	5	89	5	3	3	0	0	0	30	9	67
Schellman Hall.....	22	2	1	4	2	28	16	18	0	93	5	3	2	2	8	3	47	5	75
DISTRICT OF COLUMBIA—																			
Washington.....	7	12	2	2	9	12	0	0	2	49	4	0	3	5	1	4	11	2	36
VIRGINIA—																			
Alexandria.....	11	25	4	8	21	16	4	4	0	93									
Ashland.....	16	7	1	3	39	15	7	5	0	93	0	0	0	0	0	0	3	2	5
Crichton's Store.....	26	10	2	7	29	16	1	0	2	93	16	12	3	3	13	34	13	4	98
Lewisburg.....											3	0	0	0	2	0	21	0	26
Montcalm.....	5	4	2	1	7	8	9	0	0	36	0	2	0	0	5	7	0	0	23
NORTH CAROLINA—																			
Chapel Hill.....	18	11	9	0	13	18	19	3	0	93	9	13	0	2	6	18	7	4	65
Thornbury.....	3	17	0	2	16	15	0	0	11	70	3	12	3	1	0	10	7	0	45
SOUTH CAROLINA—																			
Camden.....	8	21	5	12	18	17	2	2	8	93	2	20	1	3	2	13	7	4	52
St. John's.....	0	0	3	22	4	4	7	22	0	62									
GEORGIA—																			
Augusta.....	2	12	7	7	9	26	16	2	0	81	1	12	13	19	8	4	1	0	58
Richmond Hill.....	25	7	18	10	15	1	3	9	0	88									
Savannah.....	11	2	7	17	35	0	0	6	0	93	0	1	0	0	3	0	0	1	5
Sparta.....	1	33	1	12	4	21	0	13	0	91	0	13	0	3	2	10	0	4	32
Whitemarsh Island.....	4	5	1	4	28	11	5	7	19	84	3	0	2	4	0	3	5	9	35
FLORIDA—																			
Cedar Keys.....	2	2	28	12	5	11	24	2	7	93	0	14	34	13	4	2	15	1	83
Jacksonville.....	1	14	3	30	2	33	1	7	2	93	1	11	2	16	0	18	2	5	55
Key West.....	4	10	23	24	1	0	0	0	0	62									
Knox Hill.....	2	16	12	20	12	21	9	0	0	92	1	11	14	17	10	14	1	0	68
Warrington.....	5	9	2	20	29	10	2	13	3	93	7	12	1	37	8	7	4	5	81
ALABAMA—																			
Tuscaloosa.....	5	10	2	3	12	1	6	4	47	90									
MISSISSIPPI—																			
Garlandsville.....	4	16	11	34	3	16	4	5	0	93	3	16	8	24	4	11	3	5	74
Lake Washington.....	0	3	0	3	0	0	3	2	0	14	2	2	8	13	9	7	3	0	50
Vicksburg.....	2	1	21	1	46	1	21	0	0	93									
LOUISIANA—																			
New Orleans.....	14	0	0	19	31	2	1	1	12	92	4	6	20	1	4	2	6	0	43
TEXAS—																			
Austin.....	13	12	4	20	20	1	3	4	7	93	12	14	4	26	24	8	0	0	88
New Wied.....	11	6	21	24	3	1	3	3	21	93	4	1	0	4	3	0	9	12	37
TENNESSEE—																			
Glenwood.....	2	8	4	4	13	9	9	4	34	87	1	7	17	2	4	12	16	2	61
Knoxville.....	26	5	8	2	7	4	15	10	0	77									
Memphis.....	3	11	2	18	1	34	3	10	11	93	0	8	1	16	3	23	3	9	63
KENTUCKY—																			
Ballardsville.....	32	1	3	0	6	23	17	10	0	92	0	1	0	0	1	6	0	2	16
Springdale.....	2	11	0	0	7	11	8	2	51	92									



## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—																				
College Hill .....	0	6	6	4	5	6	27	6	15	75	2	3	0	15	2	27	0	9	58	
Germantown .....	5	12	2	17	7	33	0	12	0	88	4	0	0	0	1	15	1	2	23	
Hillsborough .....	0	14	0	4	1	33	1	8	0	61	3	1	0	0	2	0	12	6	24	
Jackson .....	12	2	9	3	3	3	14	11	34	91	0	0	0	0	0	7	3	3	13	
Marietta .....	5	0	0	0	5	1	9	3	48	71	5	0	1	0	0	1	57	3	67	
Oberlin .....	23	3	2	4	13	12	13	2	17	89	0	0	0	0	0	0	0	0	0	
Perrysburg .....	3	6	8	13	19	4	40	0	0	93	0	0	0	0	0	11	40	0	51	
Savannah .....	0	0	0	0	0	12	63	0	10	85	0	0	0	0	0	0	0	0	1	
Zanesville .....	12	11	3	5	8	18	8	9	5	79	0	0	0	1	0	0	0	0	0	
MICHIGAN—																				
Ann Arbor, [Winchell] ..	4	7	7	15	11	21	9	11	8	93	1	0	2	1	1	29	22	10	66	
Ann Arbor, [Woodruff] ..	3	7	8	13	4	23	7	8	19	90	4	2	1	1	1	7	34	13	63	
Battle Creek .....	2	7	4	5	28	16	10	4	17	93	0	2	1	0	0	20	37	7	67	
Cooper .....	1	0	19	2	1	2	42	5	21	93	0	5	36	3	0	0	12	0	56	
Detroit .....	2	10	9	7	28	19	4	0	0	79	0	0	0	0	0	0	0	0	0	
Flint .....	10	5	0	0	28	13	4	1	0	61	0	0	0	0	0	4	7	0	11	
Grand Rapids .....	0	12	6	11	1	28	8	8	19	93	3	9	0	12	0	12	2	57	95	
Monroe, [Whelpley] .....	0	9	0	19	1	13	0	55	0	97	2	1	0	0	0	35	8	7	53	
St. James .....	8	1	4	13	2	44	1	15	4	92	3	0	0	1	3	2	17	5	31	
INDIANA—																				
Kendallville .....	2	4	7	5	0	36	14	16	0	93	0	5	5	1	0	5	37	1	54	
Logansport .....	0	7	3	1	0	7	30	2	37	87	0	1	0	0	0	5	3	1	10	
Milton .....	4	19	0	1	2	11	3	6	47	93	1	1	0	0	1	5	25	9	42	
New Harmony .....	9	1	4	3	11	2	13	3	0	46	0	0	0	0	0	0	0	0	0	
Richmond .....	4	7	7	18	7	13	6	3	13	78	0	0	0	0	0	0	0	0	0	
ILLINOIS—																				
Athens .....	0	13	0	22	4	30	2	9	0	80	1	4	0	0	0	26	22	28	81	
Augusta .....	2	1	11	9	18	13	18	12	9	93	0	0	1	4	6	6	15	2	34	
Batavia .....	1	4	2	1	8	26	19	6	10	77	2	2	1	3	9	12	13	7	49	
Manchester .....	11	14	6	21	18	6	5	11	1	93	2	2	0	2	0	32	10	2	50	
Ottawa .....	3	13	2	12	7	40	2	12	2	93	0	0	0	0	0	0	0	0	0	
Upper Alton .....	6	8	0	12	25	34	11	15	0	111	0	0	0	0	0	0	0	0	0	
MISSOURI—																				
Hannibal .....	12	2	8	3	24	10	6	3	19	87	14	1	0	0	7	13	1	9	45	
St. Louis .....	1	11	3	34	14	12	4	14	0	93	0	0	0	0	0	0	0	0	0	
WISCONSIN—																				
Bellefontaine .....	2	1	2	20	6	37	20	5	0	93	2	0	2	5	1	16	49	7	82	
Beloit .....	7	7	6	2	19	27	18	7	0	93	0	6	0	0	11	10	13	2	42	
Ceresco .....	3	6	3	2	8	23	14	3	9	71	2	3	1	2	2	17	14	8	49	
Janesville .....	2	8	1	10	16	23	6	10	17	93	0	0	0	0	0	0	0	0	0	
Milwaukie .....	0	12	2	13	2	29	14	8	13	93	0	0	0	0	0	0	0	0	0	
Platteville .....	3	2	2	21	14	13	0	8	0	63	0	2	1	5	1	10	13	12	44	
IOWA—																				
Dubuque .....	7	7	3	4	11	22	10	4	21	89	5	4	2	1	1	5	6	23	47	
Fort Madison .....	2	10	2	21	17	25	2	14	0	93	4	1	1	4	4	21	22	7	64	
Muscataine .....	7	5	2	16	15	26	12	10	0	93	0	4	0	3	2	20	14	6	49	
Pella .....	10	1	2	5	60	2	5	8	0	93	1	5	0	3	4	21	25	5	64	
Poultney .....	6	7	2	9	9	22	7	7	18	86	0	4	0	0	1	18	10	5	38	
Quasqueton .....	1	11	2	14	15	23	7	9	1	83	0	0	0	0	0	0	0	0	0	
MINNESOTA—																				
St. Anthony's Falls .....	3	0	0	7	48	9	14	12	0	93	0	0	0	1	5	20	62	5	93	
St. Joseph's .....	4	2	6	1	29	0	18	9	13	82	6	0	2	3	3	7	18	3	42	
Lac qui Parle .....	9	0	3	12	19	5	7	24	2	81	0	0	0	0	0	0	0	0	0	
CALIFORNIA—																				
Sacramento, [Logan] .....	8	1	0	0	15	23	34	12	0	93	0	0	0	0	0	0	0	0	0	
Sacramento, [Hatch] .....	0	0	0	74	26	8	15	1	0	124	0	0	0	0	0	0	0	0	0	
Stockton .....	2	0	0	0	0	18	16	150	0	186	0	0	0	0	0	0	0	0	0	
CENTRAL AMERICA—																				
Truxillo, Honduras .....	0	4	2	4	0	0	0	0	6	16	0	0	0	0	0	0	0	0	0	
SOUTH AMERICA—																				
Assumption, Paraguay .....	7	10	36	16	14	3	5	0	0	91	2	5	12	1	3	2	1	0	26	
EASTERN CONTINENT—																				
Mosul, Mesopotamia .....	1	4	1	1	0	0	2	6	0	15	0	0	0	0	0	0	0	0	0	

No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Halifax	2	0	0	2	5	9	6	4	0	28										
CANADA EAST—																				
St. Martin's	2	22	1	2	2	21	2	35	0	93										
MAINE—																				
Carmel	0	0	0	5	4	17	5	12	15	58	0	0	0	3	3	12	4	7	29	
Fryeburg	2	7	5	6	3	40	17	2	0	89	0	0	0	0	0	10	14	21	45	
Perry	4	2	0	9	3	40	10	25	0	93	2	1	0	0	1	14	16	0	43	
Steuben	5	14	1	5	1	40	11	11	5	93	4	10	0	3	0	25	14	10	66	
NEW HAMPSHIRE—																				
Concord	5	5	5	16	3	40	1	17	0	92										
Exeter	6	8	6	6	3	26	16	8	5	84	2	5	1	6	8	22	9	6	59	
Great Falls	2	13	1	4	1	31	3	20	0	75	0	0	0	1	0	16	1	7	25	
Hanover	15	6	1	14	10	18	13	16	0	93	1	0	0	1	0	5	6	8	21	
Londonderry	1	5	1	7	5	8	11	28	22	93	0	2	0	0	0	0	17	8	27	
Manchester	8	2	11	9	12	22	9	20	0	93	0	1	4	0	2	5	43	4	59	
Salmon Falls	2	8	4	13	9	25	12	17	3	93	3	2	0	4	1	6	13	17	46	
VERMONT—																				
Brandon	16	0	1	2	38	2	8	5	10	86	2	0	0	0	0	0	11	14	27	
Burlington	27	8	1	3	38	0	14	1	1	93	2	1	0	0	1	0	4	0	8	
Castleton	20	0	0	0	28	11	0	4	30	93	3	0	0	0	2	13	0	3	21	
Craftsbury	2	8	2	5	20	16	19	6	0	78	4	1	0	1	6	0	27	5	44	
St. Johnsbury	1	0	0	0	1	27	4	58	0	91	0	0	0	0	0	5	6	5	16	
MASSACHUSETTS—																				
Amherst	5	1	0	30	6	11	4	25	0	82	0	3	1	1	4	6	7	5	27	
Mendon	0	10	10	0	0	53	6	14	0	93	0	11	0	0	0	52	6	15	93	
Nantucket	6	23	0	5	16	24	3	6	10	93										
New Bedford	4	16	3	7	6	38	2	16	1	93	2	1	0	3	2	8	6	14	36	
Newburyport	0	6	8	7	15	17	29	10	0	84	0	0	0	0	0	0	1	0	1	
North Attleboro'	2	4	0	0	2	0	0	2	0	17	0	4	0	0	0	0	4	1	15	
Princeton	2	15	9	4	0	11	27	17	0	85	0	3	3	1	0	4	19	11	41	
Richmond	0	4	0	8	4	36	0	22	0	74	4	3	0	1	4	22	3	11	48	
Southwick	3	2	1	0	8	6	1	7	11	39	0	2	0	0	0	6	4	1	13	
Springfield	7	11	1	1	6	15	1	15	36	93	6	2	1	0	3	6	2	15	35	
Taunton	11	10	0	16	7	16	14	19	0	93	4	9	3	9	4	10	8	12	59	
Worcester	0	5	1	10	0	38	0	40	0	94										
CONNECTICUT—																				
Pomfret	6	15	2	5	12	28	8	17	0	93	0	8	1	5	5	20	5	9	53	
Saybrook	12	6	6	3	12	19	12	4	2	76	3	3	2	0	2	5	9	9	33	
West Cornwall	5	6	6	9	7	17	18	25	0	93										
NEW YORK—																				
Angelica	2	7	5	7	8	15	17	32	0	93	0	1	0	4	0	15	24	12	56	
Baldwinsville	7	0	2	1	0	16	18	37	0	87	0	0	1	0	0	3	17	18	39	
Beaver Brook	10	0	4	8	14	11	9	33	4	93										
Beverly	3	6	0	17	14	31	1	20	1	93	0	1	0	12	5	23	18	5	64	
Buffalo, [Salisbury]	5	17	1	1	2	24	6	12	10	78	0	0	1	0	1	0	16	7	33	
Canton	2	16	0	2	2	45	5	15	3	90	1	0	0	1	0	33	4	7	52	
Fishkill	0	6	0	0	3	36	3	3	39	90										
Gouverneur	19	2	0	0	9	31	7	25	0	93	8	1	0	0	1	1	39	2	52	
Lodi	3	1	0	19	10	4	14	24	12	93	2	0	0	0	1	6	12	24	45	
New York city	6	37	9	20	30	47	15	22	0	186										
New York city, [Deaf and Dumb Institution]	9	22	0	14	3	5	19	15	0	93	1	0	15	3	0	3	29	7	58	
Penn Yan	6	9	2	0	25	12	24	15	0	93										
Sag Harbor	5	19	3	11	11	28	5	11	0	93	2	12	0	2	1	35	9	12	75	
Smithville	2	11	3	0	19	13	36	9	0	93	7	1	0	0	9	6	44	10	77	
Spencertown	18	5	1	9	7	16	12	23	0	91	5	5	0	7	3	12	10	23	65	
Troy	6	4	1	13	22	13	10	13	8	90										
Wampsville	1	1	2	8	22	9	38	12	0	93	1	1	1	8	17	7	35	7	77	
NEW JERSEY—																				
Bloomfield	2	13	3	24	16	15	18	2	0	93										
Burlington	12	17	4	1	2	22	9	6	20	93	1	4	1	0	0	1	0	1	8	
Lambertville	3	12	4	7	4	20	1	23	0	74										



No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
PENNSYLVANIA—																				
Bedford .....	2	0	3	19	1	12	8	35	0	80	0	0	0	12	0	13	12	20	57	
Byberry .....	6	20	2	9	8	7	20	12	5	89	1	13	0	3	3	10	42	20	92	
Freeport .....	15	18	4	2	28	10	6	10	0	93	3	0	0	0	1	2	3	2	11	
Gettysburg .....	12	10	9	0	14	14	9	13	12	93	1	1	2	1	2	6	20	21	54	
Harrisburg .....	2	0	13	19	7	4	13	31	0	89	0	0	3	9	2	0	10	13	37	
Lima .....	3	16	5	6	5	7	5	14	32	93	4	2	8	3	1	4	22	17	61	
Morrisville .....	11	9	3	4	1	24	6	18	17	93	5	1	2	2	0	13	21	11	55	
Moss Grove .....	1	0	4	3	7	6	19	3	15	58	0	0	0	0	0	1	48	4	53	
Norristown .....	0	3	4	19	2	16	32	2	2	80	0	2	8	4	0	8	31	0	53	
Philadelphia .....	8	25	1	5	6	26	15	7	0	93	4	1	0	0	0	6	10	4	25	
Pocopson .....	0	9	1	2	3	12	15	19	0	61	1	0	0	1	0	1	3	5	11	
West Haverford .....	1	4	10	0	2	8	7	20	11	63	3	3	6	0	2	3	0	14	40	
MARYLAND—																				
Frederick .....	5	7	4	10	11	21	10	9	14	91	5	2	1	6	1	4	26	9	54	
Schellman Hall .....	5	2	2	7	2	30	39	6	0	93	2	5	4	5	0	6	48	1	71	
VIRGINIA—																				
Alexandria .....	8	17	0	19	12	10	4	16	0	84	3	0	0	0	3	0	3	0	9	
Ashland .....	18	5	5	4	27	21	7	6	0	93	2	0	0	0	0	2	4	3	11	
Crichton's Store .....	16	19	0	2	13	34	0	7	2	93	6	14	0	4	4	50	3	10	91	
Lewisburg .....	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	1	21	0	26	
New Creek Depot .....	1	2	19	13	1	1	23	11	0	71	0	1	1	2	2	10	18	7	41	
NORTH CAROLINA—																				
Chapel Hill .....	15	16	2	0	10	14	29	7	0	93	1	12	1	0	7	19	12	6	58	
SOUTH CAROLINA—																				
Camden .....	1	17	7	17	11	19	0	2	13	93	1	9	5	6	0	10	1	10	42	
St. John's .....	0	6	2	24	2	3	14	11	0	62										
GEORGIA—																				
Augusta .....	2	5	1	1	0	10	17	1	0	37	0	1	4	12	7	0	0	0	24	
Savannah .....	9	5	5	20	31	13	6	4	0	93	2	2	0	0	0	0	2	1	7	
Sparta .....	5	30	7	8	2	18	6	10	0	86	0	8	0	3	1	9	2	15	38	
The Rock .....	3	8	1	0	0	1	0	14	0	27										
Whitemarsh Island .....	4	10	3	8	20	16	10	2	13	86	2	9	3	5	4	5	3	15	46	
FLORIDA—																				
Cedar Keys .....	4	10	22	9	5	17	10	8	7	92	5	19	21	10	6	7	1	2	71	
Jacksonville .....	0	37	3	7	0	32	2	5	7	93	1	19	10	8	0	18	3	13	72	
Key West .....	3	13	28	16	0	1	0	0	1	62										
Knox Hill .....	2	7	4	5	3	11	3	4	0	39	1	4	4	4	0	6	3	2	24	
Warrington .....	5	6	0	24	12	24	1	18	1	91	5	12	0	19	10	16	2	29	93	
ALABAMA—																				
Tuscaloosa .....	2	6	3	19	7	5	0	2	43	87										
MISSISSIPPI—																				
Garlandville .....	5	30	8	5	0	13	13	19	0	93	3	17	5	5	0	11	10	10	61	
Lake Washington .....	2	2	0	0	1	0	0	4	0	9	1	3	4	6	2	2	0	5	23	
LOUISIANA—																				
New Orleans .....	11	3	10	15	26	5	7	3	13	93	7	5	14	4	2	4	4	1	41	
TEXAS—																				
Austin .....	2	15	6	20	41	3	1	1	4	93	0	11	4	22	13	6	2	2	60	
New Wied .....	5	7	14	28	13	1	2	2	21	93	3	1	8	0	4	3	3	6	28	
TENNESSEE—																				
Glenwood .....	7	12	9	8	10	12	7	4	24	93	8	4	9	2	2	5	21	10	61	
Knoxville .....	23	14	10	0	12	4	18	0	0	90										
Memphis .....	6	11	3	13	0	29	2	11	18	93	1	10	8	5	0	20	3	10	57	
KENTUCKY—																				
Ballardsville .....	2	0	0	0	0	10	17	64	0	93	2	1	0	6	1	0	3	1	8	
Springdale .....	2	11	6	1	4	16	4	2	47	93	3	2	0	0	2	2	1	0	10	
OHIO—																				
College Hill .....	2	1	6	0	3	4	18	1	23	63	2	0	0	0	2	2	3	0	9	
Germantown .....	7	18	0	3	3	29	3	24	0	87	2	11	0	5	0	29	1	23	71	
Hillsborough .....	1	5	0	5	0	12	0	10	0	33	0	1	0	0	0	7	1	5	14	
Jackson .....	16	2	24	2	7	2	9	8	22	90	2	0	1	0	1	1	34	7	46	
Marietta .....	0	0	1	0	3	2	5	4	58	73	0	0	0	0	2	7	12	1	22	
Oberlin .....	16	7	1	3	7	12	11	13	15	85	4	0	0	1	1	1	45	5	57	
Perrysburg .....	6	3	2	16	12	1	45	0	2	87										
Savannah .....	1	0	0	0	0	4	50	17	7	79	0	0	0	0	0	4	33	11	48	

No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Yankeeetown .....	1	4	19	13	5	0	1	1	18	62	5	2	0	0	2	1	1	0	11	
Zanesville .....	11	7	1	4	3	37	4	14	13	94										
MICHIGAN—																				
Ann Arbor, [Winchell]....	3	8	2	4	4	32	10	18	12	93	0	3	0	0	2	5	18	11	39	
Ann Arbor, [Woodruff]..	7	9	7	17	2	14	3	16	17	92	0	2	1	0	0	3	23	30	61	
Battle Creek .....	8	5	0	5	12	17	12	5	9	92	4	1	1	0	1	12	36	11	66	
Cooper .....	0	0	9	0	0	1	54	3	26	93	0	0	6	1	0	2	36	2	47	
Detroit .....	2	12	9	10	11	26	11	7	0	88										
Flint .....	15	4	0	0	14	4	10	10	0	57										
Grand Rapids .....	1	16	7	5	1	19	9	10	25	93	0	0	0	0	0	4	8	6	18	
Monroe, [Whelpley]....	0	6	5	2	0	0	1	79	0	93	1	5	5	1	0	0	3	72	87	
St. James .....	8	3	7	7	1	27	8	27	4	92	0	0	0	0	0	8	12	23	43	
INDIANA—																				
Kendallville .....	2	5	4	5	15	25	28	0	0	93	1	3	1	0	1	2	11	3	22	
Logansport .....	0	5	2	0	0	3	33	0	50	93	0	3	0	0	0	5	55	2	65	
Milton .....	2	21	0	6	0	7	1	7	49	93	0	1	0	0	0	1	5	3	10	
New Harmony .....	4	1	6	2	4	1	13	2	0	33	2	1	0	0	3	0	5	1	12	
Richmond .....	2	10	4	9	2	12	12	0	27	87	0	0	0	0	0	6	21	14	44	
ILLINOIS—																				
Athens .....	4	9	0	17	0	16	0	16	0	62	2	2	0	2	0	12	19	16	53	
Augusta .....	1	8	15	18	8	21	9	3	0	83	1	2	2	1	0	7	15	1	29	
Batavia .....	0	0	0	2	0	0	6	3	6	17	1	0	0	1	1	0	4	6	13	
Manchester .....	7	28	12	18	11	7	4	6	0	93	4	1	0	4	1	12	13	12	49	
Ottawa .....	5	18	2	9	2	30	4	12	11	93	4	0	1	0	0	18	5	13	44	
Upper Alton .....	5	8	0	10	7	30	3	6	0	69										
MISSOURI—																				
Hannibal .....	8	4	16	4	22	11	8	2	16	91	2	5	3	1	10	0	10	5	42	
St. Louis .....	12	11	16	20	7	12	7	0	0	93										
WISCONSIN—																				
Bellefontaine .....	1	7	10	20	7	24	16	0	2	91	0	1	6	0	1	12	43	11	74	
Beloit .....	7	11	9	7	16	19	11	13	0	93	5	0	3	3	3	9	26	5	60	
Cresco .....	1	13	0	6	6	25	14	11	14	90	1	2	1	1	1	13	4	3	26	
Janesville .....	5	9	3	10	10	20	1	8	27	93										
Milwaukee .....	1	18	2	13	3	26	12	9	9	93	0	0	0	0	2	0	0	3	5	
Platteville .....	7	0	11	12	0	28	0	11	0	93	1	0	3	5	7	14	15	12	63	
IOWA—																				
Dubuque .....	12	10	3	4	10	14	11	6	22	92	9	2	0	0	0	9	0	23	49	
Fort Madison .....	16	13	8	28	6	11	0	11	0	93	5	0	0	2	0	0	33	5	50	
Muscatine .....	0	11	0	33	0	34	6	9	0	93	0	2	0	3	1	26	0	8	48	
Pella .....	6	4	2	10	54	4	6	7	0	93										
Poultney .....	4	3	0	10	9	14	7	9	24	89	3	0	0	1	1	5	20	7	37	
Quasqueton .....	1	15	10	8	17	13	8	9	1	82	3	2	0	0	1	0	5	10	29	
MINNESOTA—																				
St. Anthony's Falls .....	4	2	0	4	51	1	15	16	0	93	0	1	1	8	4	9	49	7	79	
St. Joseph's .....	5	0	7	1	33	0	23	4	13	86	4	0	0	1	3	0	3	0	19	
Lac qui Parle .....	5	2	4	32	20	0	2	25	0	00	2	1	1	5	4	3	0	5	27	
CALIFORNIA—																				
Sacramento, [Logan]....	2	0	1	32	24	24	3	7	0	93										
Sacramento, [Hatch] ..	0	0	0	71	36	9	0	2	0	124										
Stockton .....	2	0	0	0	0	27	9	148	0	186										
CENTRAL AMERICA—																				
Truxillo, Honduras .....	0	2	13	4	1	1	4	0	0	25	5	4	0	0	7	0	0	0	16	
SOUTH AMERICA—																				
Assumption, Paraguay ..	9	15	19	21	10	2	7	3	7	93	3	6	3	2	3	1	3	2	23	
EASTERN CONTINENT—																				
Mosul, Mesopotamia .....	6	4	1	1	2	4	2	12	0	32										



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Halifax.....	24	3	0	3	7	19	7	10	0	73	—	—	—	—	—	—	—	—	—	
CANADA EAST—																				
St. Martin's.....	5	26	0	2	1	16	11	29	0	90	—	—	—	—	—	—	—	—	—	
MAINE—																				
Carmel.....	0	6	0	5	3	28	6	26	0	74	0	0	0	3	3	11	3	10	30	
Fryeburg.....	9	11	2	1	2	33	10	19	0	87	1	1	1	0	2	9	14	22	50	
Perry.....	6	1	0	6	11	30	12	24	0	90	1	2	0	2	10	28	6	13	62	
Steuben.....	5	14	1	4	0	39	3	21	2	89	6	0	0	1	0	21	7	11	46	
NEW HAMPSHIRE—																				
Concord.....	5	4	4	17	1	37	1	21	0	90	—	—	—	—	—	—	—	—	—	
Exeter.....	7	8	4	9	4	27	3	27	1	90	5	9	4	5	3	17	2	11	56	
Great Falls.....	7	10	0	8	0	30	4	18	0	77	1	0	0	1	0	15	4	5	26	
Hanover.....	8	7	0	6	8	31	1	29	0	90	2	1	0	0	3	1	3	7	17	
Manchester.....	8	5	8	5	10	19	7	23	0	85	1	3	6	0	0	7	22	8	47	
Salmon Falls.....	5	13	4	6	3	17	7	7	28	90	5	1	0	0	0	2	11	13	32	
VERMONT—																				
Brandon.....	24	0	0	1	42	5	1	7	10	90	5	0	0	0	3	3	4	14	29	
Burlington.....	31	5	0	0	45	0	2	7	0	90	0	0	0	0	0	0	4	3	7	
Castleton.....	24	0	0	1	28	6	1	2	28	90	1	0	0	0	1	0	0	0	2	
Craftsbury.....	7	12	1	8	26	7	11	16	0	88	3	4	0	1	8	4	27	22	69	
St. Johnsbury.....	0	0	0	0	0	32	4	52	0	88	0	0	0	0	0	13	2	6	21	
MASSACHUSETTS—																				
Amherst.....	1	5	0	31	3	15	4	26	2	87	1	0	1	1	2	8	5	11	29	
Mendon.....	0	11	0	0	0	49	4	26	0	90	0	11	0	0	0	48	2	29	90	
Nantucket.....	10	18	1	7	1	41	1	2	9	90	—	—	—	—	—	—	—	—	—	
New Bedford.....	11	12	1	5	1	39	5	13	0	87	2	0	0	1	2	3	2	0	10	
Newburyport.....	2	7	4	7	23	16	9	16	0	84	—	—	—	—	—	—	—	—	—	
North Attleboro'.....	19	12	2	2	26	16	8	5	0	90	7	7	0	2	11	14	1	10	52	
Princeton.....	5	18	0	5	2	13	33	13	0	90	2	5	0	0	1	8	24	4	44	
Richmond.....	0	6	0	6	2	25	0	50	1	90	2	4	0	8	2	18	3			

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calin or varia- ble.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
PENNSYLVANIA—																			
Bedford.....	1	2	0	15	1	19	2	38	0	78	0	0	0	6	2	14	8	18	48
Ryberry.....	8	11	4	6	18	11	9	16	7	90	5	9	4	5	7	12	35	28	105
Freeport.....	24	22	5	6	27	3	1	2	0	90	4	4	1	2	2	7	29	13	62
Gettysburg.....	12	9	1	2	22	21	5	6	11	89	4	4	1	2	2	7	29	13	62
Harrisburg.....	0	1	7	23	17	0	11	22	0	81	0	0	1	6	5	3	11	12	38
Lima.....	2	22	7	6	12	11	0	7	23	90	2	4	3	3	3	15	14	17	61
Morrisville.....	16	11	4	5	4	27	1	2	20	90	3	6	1	4	0	18	9	9	50
Norristown.....	1	0	5	15	6	18	30	4	0	79	0	0	5	3	1	12	31	1	53
Philadelphia.....	13	16	6	6	5	29	4	11	0	90	5	1	0	1	2	11	6	1	27
Pocopson.....	5	4	0	0	0	17	17	13	0	56	3	5	0	1	0	8	26	6	49
Randolph.....	2	2	3	14	6	11	6	12	16	72	1	1	1	2	0	7	11	9	32
West Haverford.....	5	11	2	4	4	23	2	7	2	60	1	1	1	2	0	7	11	9	32
MARYLAND—																			
Frederick.....	13	0	6	7	19	7	11	8	10	90	7	2	2	0	8	6	33	0	61
Schellman Hall.....	1	0	0	5	9	32	27	16	0	90	6	1	5	4	9	11	31	0	75
VIRGINIA—																			
Alexandria.....	8	24	3	10	33	10	0	1	0	89	8	2	0	0	12	4	0	1	27
Ashland.....	13	6	0	1	12	6	2	0	50	90	5	14	5	5	10	28	9	7	83
Crichton's Store.....	13	17	3	5	16	29	1	1	4	89	3	1	0	0	0	0	11	0	15
Lewisburg.....	11	0	0	0	8	8	1	0	0	28	4	0	0	0	4	4	5	0	17
Winchester.....	0	0	8	4	0	0	14	0	55	90	0	0	1	0	0	0	0	0	7
NORTH CAROLINA—																			
Chapel Hill.....	11	21	11	1	13	8	19	5	0	89	5	16	7	2	10	8	9	1	58
SOUTH CAROLINA—																			
Camden.....	1	26	8	16	11	18	1	0	9	90	0	16	1	10	3	12	3	9	54
St. John's.....	0	32	5	3	0	7	12	1	0	60	0	16	1	10	3	12	3	9	54
GEORGIA—																			
Augusta.....	1	11	6	7	3	3	2	3	0	36	1	5	3	14	10	6	1	2	42
Savannah.....	17	12	10	20	18	4	5	4	0	90	0	0	1	1	1	0	3	1	7
Sparta.....	3	34	15	10	2	8	4	9	0	85	2	17	3	9	2	3	3	10	49
The Rock.....	1	6	2	2	0	2	0	3	0	16	2	21	6	10	2	4	2	7	54
Whitemarsh Island.....	7	33	5	9	12	6	1	1	16	90	2	21	6	10	2	4	2	7	54
FLORIDA—																			
Cedar Keys.....	5	17	27	6	2	12	13	5	3	90	3	16	17	6	3	12	7	6	70
Jacksonville.....	3	53	3	6	2	12	1	3	7	90	3	37	8	10	1	11	3	5	78
Key West.....	8	10	22	7	4	1	4	3	1	60	0	16	1	10	3	12	3	9	54
Knox Hill.....	7	26	22	11	1	0	7	4	0	87	4	9	21	11	1	7	4	3	60
Warrington.....	6	15	2	21	8	23	2	12	1	90	4	21	1	19	3	15	0	18	81
ALABAMA—																			
Tuscaloosa.....	1	10	9	15	1	3	2	7	34	82	0	16	5	29	1	8	1	0	68
MISSISSIPPI—																			
Garlandsville.....	2	21	5	39	0	6	1	13	3	90	0	16	5	29	1	8	1	0	68
Vicksburg.....	6	2	28	5	23	2	23	1	0	90	0	16	5	29	1	8	1	0	68
TEXAS—																			
Austin.....	20	21	4	19	15	6	0	0	3	90	21	13	3	29	5	15	1	2	89
New Wied.....	21	10	8	18	8	1	1	0	23	90	1	0	8	2	0	1	3	2	17
TENNESSEE—																			
Glenwood.....	7	10	4	7	8	7	5	4	38	90	7	3	5	6	7	10	25	0	65
Knoxville.....	33	11	5	4	10	2	12	7	0	84	0	3	4	17	2	13	3	14	56
Memphis.....	3	11	5	16	1	22	1	19	12	90	0	3	4	17	2	13	3	14	56
KENTUCKY—																			
Ballardsville.....	13	4	1	0	2	13	12	45	0	90	0	1	0	0	2	4	0	2	0
Danville.....	8	19	0	5	26	14	7	5	0	84	4	4	0	5	14	17	9	6	59
Millersburg.....	3	8	4	1	7	8	5	0	11	47	0	3	4	17	2	13	3	14	56
Springdale.....	7	12	1	1	5	16	7	5	36	90	0	3	4	17	2	13	3	14	56
OHIO—																			
College Hill.....	4	9	4	2	6	9	12	3	33	82	0	1	1	0	5	5	0	2	14
Germantown.....	9	16	0	2	1	31	2	17	0	78	3	4	0	2	0	36	1	7	53
Granville.....	1	10	1	1	2	16	7	2	24	64	1	3	0	0	0	9	8	4	25
Hillsborough.....	2	14	3	5	1	16	0	8	1	50	0	3	0	0	0	9	0	3	15
Jackson.....	18	3	4	5	10	7	1	5	38	91	1	0	0	0	0	1	35	1	38
Marietta.....	1	0	0	0	5	1	6	3	59	75	0	0	1	0	0	8	11	3	23
Oberlin.....	14	8	4	1	10	16	4	10	22	89	0	0	0	0	2	5	43	9	59



NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Savannah .....	5	0	0	0	0	12	54	15	4	90	4	0	0	0	0	11	36	12	63
Zanesville .....	24	9	2	9	4	27	3	6	4	88	—	—	—	—	—	—	—	—	—
MICHIGAN—																			
Ann Arbor, [Winchell] .....	6	10	8	5	0	33	3	3	22	90	8	6	8	1	0	12	16	11	56
Ann Arbor, [Woodruff] .....	6	12	6	14	8	21	5	3	12	87	1	6	1	2	2	6	41	13	72
Battle Creek .....	3	8	5	6	24	15	4	12	13	90	4	5	2	1	2	24	23	14	75
Cooper .....	5	2	10	0	0	0	37	2	34	90	1	3	10	0	0	0	37	2	53
Detroit .....	3	26	5	9	17	24	4	2	0	90	—	—	—	—	—	—	—	—	—
Flint .....	22	3	0	1	15	14	3	5	0	63	—	—	—	—	—	—	—	—	—
Grand Rapids .....	3	16	14	8	0	15	8	3	23	90	2	4	1	1	2	0	7	2	28
Monroe, [Whelpley] .....	0	9	4	2	3	5	0	65	0	88	0	10	2	0	0	9	0	67	88
St. James .....	11	2	7	12	4	32	1	19	2	90	1	1	1	1	1	24	9	18	56
INDIANA—																			
Kendallville .....	5	1	7	15	6	31	14	7	0	86	3	0	0	0	1	2	3	3	12
Milton .....	11	3	0	2	2	6	2	10	54	90	3	0	0	0	0	5	3	2	13
New Harmony .....	14	9	0	7	11	1	2	3	0	47	0	0	0	0	0	1	0	1	2
Richmond .....	4	6	2	0	2	8	1	2	11	45	5	2	0	3	0	8	9	2	29
ILLINOIS—																			
Athens .....	0	21	1	27	2	15	0	14	0	80	1	6	0	4	1	17	30	8	67
Augusta .....	5	14	15	9	14	7	8	6	12	90	1	6	4	1	4	4	11	1	32
Ottawa .....	7	19	4	19	11	21	1	7	1	90	7	7	0	3	1	22	6	3	49
Upper Alton .....	0	6	0	8	4	31	4	17	0	70	—	—	—	—	—	—	—	—	—
MISSOURI—																			
Hannibal .....	11	5	21	3	13	11	1	3	10	78	7	3	2	2	10	14	7	0	45
St. Louis .....	12	7	12	21	12	9	5	12	0	90	—	—	—	—	—	—	—	—	—
WISCONSIN—																			
Bellefontaine .....	3	15	9	15	5	12	13	6	5	83	1	6	6	6	3	9	27	3	61
Beloit .....	9	19	4	15	12	18	12	1	0	90	3	6	0	1	4	16	4	1	35
Ceresco .....	9	14	4	12	6	32	6	1	4	88	3	3	1	1	1	15	0	2	26
Janesville .....	12	13	0	9	18	15	6	5	12	90	—	—	—	—	—				

## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Chim or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Halifax.....	25	9	0	5	10	17	9	15	3	93	—	—	—	—	—	—	—	—	—	
CANADA EAST—																				
St Martin's.....	1	26	0	3	0	48	3	17	■	93	—	—	—	—	—	—	—	—	—	
MAINE—																				
Carmel.....	9	6	2	6	4	8	5	26	15	72	0	4	1	■	4	2	2	12	31	
Fryeburg.....	11	3	14	8	4	23	10	12	0	85	2	0	0	1	4	10	18	15	50	
Perry.....	11	11	2	6	5	36	10	12	0	93	2	13	0	2	1	27	10	4	59	
Steuben.....	6	24	0	6	0	37	6	9	6	94	5	6	0	0	1	32	14	5	63	
NEW HAMPSHIRE—																				
Concord.....	8	5	3	26	0	22	0	29	0	93	—	—	—	—	—	—	—	—	—	
Exeter.....	5	14	8	14	3	13	17	16	2	92	3	5	1	13	2	9	13	8	54	
Great Falls.....	■	13	2	7	1	18	1	20	10	78	0	0	0	0	0	1	4	2	7	
Harover.....	5	5	0	20	3	19	14	27	48	93	1	0	0	3	4	4	0	4	16	
Londonderry.....	0	4	7	7	6	4	3	14	0	93	1	1	3	1	2	1	14	4	27	
Manchester.....	20	3	11	6	17	9	10	16	1	93	0	0	6	6	1	1	28	11	53	
Salmon Falls.....	5	4	5	16	2	16	8	13	24	93	3	2	1	1	0	6	10	8	31	
VERMONT—																				
Brandon.....	25	0	3	2	41	2	5	3	12	93	5	0	0	■	7	3	9	11	35	
Burlington.....	5	2	1	4	55	2	5	9	0	93	1	■	0	0	■	0	0	0	1	
Castleton.....	17	1	2	1	18	4	0	1	49	93	2	1	1	0	2	0	0	0	■	
Craftsbury.....	6	9	3	3	37	12	7	16	0	93	4	4	1	1	14	12	25	17	78	
St. Johnsbury.....	■	0	■	0	0	24	3	61	0	88	1	0	0	0	0	20	6	12	39	
MASSACHUSETTS—																				
Amherst.....	2	4	7	25	0	15	2	33	1	89	1	1	0	3	3	8	■	17	39	
Mendon.....	1	8	4	8	2	39	3	28	0	93	1	7	5	8	1	40	6	24	92	
Nantucket.....	7	25	1	12	7	13	6	12	10	93	—	—	—	—	—	—	—	—	—	
New Bedford.....	8	15	0	11	5	24	3	23	1	90	1	3	3	0	4	7	6	9	33	
Newburyport.....	13	10	9	16	7	11	9	11	0	86	—	—	—	—	—	—	—	—	—	
North Attleboro'.....	16	8	5	6	24	9	10	15	0	93	6	7	3	4	6	15	4	17	62	
Princeton.....	5	14	14	5	2	12	26	15	0	93	2	5	3	0	1	3	10	4	28	
Richmond.....	0	0	■	0	1	44	0	48	0	93	0	■	0	2	0	31	2	29	64	
Southwick.....	1	7	1	■	9	4	1	5	7	35	0	1	1	1	0	7	8	2	20	
Springfield.....	7	5	1	5	3	12	1	13	46	93	1	2	1	5	5	11	4	16	45	
Taunton.....	13	9	2	17	2	22	10	18	0	93	5	9	2	16	0	17	2	6	57	
Williamstown.....	19	1	0	9	11	5	5	15	19	84	6	4	4	6	4	0	0	3	27	
Worcester.....	3	15	2	12	0	19	2	40	0	93	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Providence.....	4	16	1	5	8	24	■	28	0	86	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
New London.....	13	9	2	7	8	26	0	28	0	93	—	—	—	—	—	—	—	—	—	
Pomfret.....	4	20	1	7	10	26	2	23	0	93	■	9	0	6	5	11	2	22	55	
Saybrook.....	23	8	9	8	3	14	11	8	3	87	2	1	1	4	4	4	8	7	31	
West Cornwall.....	4	2	0	11	6	18	4	30	0	75	—	—	—	—	—	—	—	—	—	
NEW YORK—																				
Angelica.....	0	5	3	12	3	35	17	17	0	92	0	2	0	4	4	20	17	8	55	
Baldwinsville.....	0	0	10	2	9	24	8	29	0	82	0	0	0	0	0	6	24	27	57	
Beaver Brook.....	11	3	23	14	3	7	11	26	4	102	—	—	—	—	—	—	—	—	—	
Beverly.....	8	17	0	13	7	20	2	21	4	92	0	5	4	7	2	18	9	10	55	
Buffalo, [Salisbury].....	10	1	0	1	1	■	10	5	17	54	0	0	0	■	0	1	5	5	11	
Canton.....	3	21	0	2	3	41	2	8	2	82	2	17	0	■	2	38	2	5	66	
Gouverneur.....	8	4	0	0	3	41	4	33	0	93	11	1	■	0	0	35	16	15	78	
Lodi.....	3	3	1	17	16	8	3	19	23	93	2	2	0	1	9	6	11	17	48	
Madrid.....	0	11	0	0	0	29	■	4	29	82	0	5	0	0	0	26	12	7	50	
New York city.....	21	45	15	13	21	28	20	17	6	186	—	—	—	—	—	—	—	—	—	
New York city, [Deaf and Dumb Institution].....	4	10	5	13	5	16	17	23	0	93	■	2	2	5	1	17	21	9	57	
Ogdensburg.....	5	1	5	0	8.5	4.5	1	5	0	30	—	—	—	—	—	—	—	—	—	
Penn Yan.....	2	8	■	0	34	21	25	3	0	93	—	—	—	—	—	—	—	—	—	
Sag Harbor.....	0	23	5	11	6	20	2	11	1	79	0	■	2	8	1	14	8	20	62	
Smithville.....	3	8	6	4	25	30	8	■	0	93	4	■	0	0	10	33	16	11	80	
Spencertown.....	11	2	3	3	14	25	5	29	1	93	7	4	0	3	5	20	11	29	79	
Wampsville.....	1	1	6	13	28	8	24	12	0	93	1	1	■	16	18	6	23	12	83	



No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY—																				
Bloomfield .....	2	25	0	6	23	20	11	6	0	93	—	—	—	—	—	—	—	—	—	
Burlington .....	2	12	4	2	7	18	13	5	31	94	0	1	3	4	8	11	0	0	27	
Lambertville .....	4	13	1	7	3	17	2	30	0	77	—	—	—	—	—	—	—	—	—	
PENNSYLVANIA—																				
Bedford .....	0	0	0	6	1	32	5	34	0	78	0	0	0	3	1	22	6	16	48	
Byberry .....	6	28	3	4	9	10	10	20	3	93	1	10	2	2	9	8	34	18	84	
Freeport .....	18	13	17	5	23	11	1	5	0	93	—	—	—	—	—	—	—	—	—	
Gettysburg .....	8	18	4	8	14	14	11	11	3	91	0	3	2	4	1	9	14	11	44	
Harrisburg .....	4	0	1	20	6	4	8	39	0	82	0	0	0	3	1	0	4	19	27	
Lima .....	2	16	5	8	4	6	2	18	32	93	1	3	0	0	2	7	11	13	37	
Morrisville .....	9	13	5	6	2	16	3	13	26	93	4	7	1	4	0	9	11	14	50	
Moss Grove .....	0	0	3	3	8	7	30	8	15	74	0	0	0	0	2	5	44	2	53	
Norristown .....	0	6	19	1	0	5	32	24	0	87	1	3	15	1	1	18	11	50	50	
Philadelphia .....	13	17	4	3	4	24	7	21	0	93	1	0	0	2	1	3	9	0	16	
Pittsburg .....	0	0	0	0	7	19	7	5	0	38	2	2	2	0	0	0	5	1	12	
Pocopson .....	10	6	1	2	5	16	15	24	14	93	0	0	0	1	0	0	1	0	2	
Randolph .....	1	0	1	27	12	9	11	15	11	87	2	1	0	2	0	20	12	15	52	
West Haverford .....	2	4	16	2	3	16	3	13	3	62	4	2	0	1	0	2	8	23	23	
MARYLAND—																				
Frederick .....	4	8	1	3	11	14	11	18	28	93	4	0	2	1	6	3	22	9	47	
Schellman Hall .....	0	1	4	2	3	10	50	23	0	93	1	4	1	5	3	5	42	1	62	
VIRGINIA—																				
Alexandria .....	9	22	2	11	19	9	5	16	0	93	—	—	—	—	—	—	—	—	—	
Ashland .....	5	0	0	0	18	5	2	1	62	93	5	0	0	0	12	9	5	4	35	
Crichton's Store .....	36	8	0	0	13	24	7	2	2	92	5	5	0	4	1	27	15	3	60	
Lewisburg .....	0	0	0	0	2	0	5	0	0	7	0	0	0	0	4	2	28	0	34	
Montcalm .....	5	5	0	1	2	4	3	1	0	21	2	2	0	0	1	0	8	0	13	
Winchester .....	0	0	0	2	4	6	17	0	64	93	0	0	0	0	0	3	12	0	15	
NORTH CAROLINA—																				
Chapel Hill .....	24	3	2	3	7	6	32	13	0	90	1	4	1	0	10	10	13	1	40	
SOUTH CAROLINA—																				
Camden .....	3	40	7	9	9	11	3	6	5	93	0	4	0	5	4	10	9	14	46	
St. John's .....	19	6	5	8	0	4	5	15	0	62	—	—	—	—	—	—	—	—	—	
GEORGIA—																				
Augusta .....	4	10	1	1	0	2	0	0	0	18	—	—	—	—	—	—	—	—	—	
Savannah .....	31	11	8	14	10	4	8	7	0	93	—	—	—	—	—	—	—	—	—	
Sparta .....	1	49	4	5	6	8	4	16	0	93	0	3	2	0	3	5	5	7	31	
The Rock .....	1	11	0	6	0	1	0	11	0	30	—	—	—	—	—	—	—	—	—	
Whitemarsh Island .....	7	39	3	5	5	6	5	6	17	93	0	11	0	4	1	5	5	4	30	
FLORIDA—																				
Cedar Keys .....	12	39	12	4	8	6	1	8	2	90	2	28	12	3	4	4	2	5	60	
Jacksonville .....	5	49	1	2	0	14	5	10	7	93	3	27	4	10	0	15	6	5	70	
Key West .....	16	26	8	6	0	0	0	3	3	62	—	—	—	—	—	—	—	—	—	
Knox Hill .....	10	29	15	11	4	13	4	5	1	92	2	1	8	10	4	6	9	3	43	
Warrington .....	15	27	4	20	5	10	0	12	0	93	3	6	0	26	2	14	0	18	69	
ALABAMA—																				
Tuscaloosa .....	2	5	2	12	2	5	2	7	37	74	—	—	—	—	—	—	—	—	—	
MISSISSIPPI—																				
Garlandville .....	2	44	1	22	0	5	2	11	6	93	0	20	1	20	0	4	1	2	48	
Oxford .....	0	7	7	33	19	8	7	12	0	93	3	2	1	8	25	4	8	2	53	
LOUISIANA—																				
New Orleans .....	9	12	18	3	0	1	2	1	0	46	1	0	1	1	1	0	3	2	9	
TEXAS—																				
Austin .....	40	12	1	10	16	5	0	7	2	93	17	8	2	17	10	4	3	5	66	
New Wied .....	25	17	13	14	5	3	2	3	11	93	5	2	8	1	2	0	4	5	27	
TENNESSEE—																				
Glenwood .....	4	5	4	8	4	14	6	6	42	93	3	1	0	8	3	9	26	7	57	
Knoxville .....	9	12	14	6	10	12	2	10	0	75	—	—	—	—	—	—	—	—	—	
Memphis .....	1	12	12	14	0	21	0	12	6	78	0	5	5	5	0	11	0	6	32	
KENTUCKY—																				
Ballardsville .....	8	2	6	14	7	29	20	7	0	93	1	0	0	2	0	5	3	0	11	
Danville .....	5	9	8	9	11	28	9	11	2	92	0	1	0	4	2	28	16	4	55	
Millersburg .....	5	0	0	1	2	11	6	6	53	84	—	—	—	—	—	—	—	—	—	
Springdale .....	1	3	7	1	8	22	8	7	36	93	—	—	—	—	—	—	—	—	—	





No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Halifax.....	13	7	1	12	14	21	5	16	0	89	---	---	---	---	---	---	---	---	---	
CANADA EAST—																				
St. Martin's.....	2	18	0	8	5	20	4	33	0	90	---	---	---	---	---	---	---	---	---	
MAINE—																				
Carmel.....	0	6	1	16	5	14	2	28	10	82	0	3	1	14	3	14	1	10	46	
Fryeburg.....	8	16	3	4	4	17	12	23	0	87	1	0	0	2	1	14	8	26	52	
Perry.....	14	5	2	5	4	26	8	26	0	90	11	7	1	4	6	26	8	13	76	
Steuben.....	0	22	1	9	3	30	9	13	0	87	1	2	1	3	1	22	12	13	55	
Windham.....	3	5	0	10	6	3	2	21	5	55	---	---	---	---	---	---	---	---	---	
NEW HAMPSHIRE—																				
Concord.....	0	8	0	8	13	16	1	44	0	90	---	---	---	---	---	---	---	---	---	
Exeter.....	8	5	1	12	4	15	27	16	0	89	5	4	1	9	3	13	18	9	62	
Great Falls.....	9	5	1	7	3	15	4	23	0	67	2	0	0	3	1	5	2	3	17	
Hanover.....	6	2	0	11	11	22	10	29	0	91	3	0	0	1	1	5	4	7	21	
Londonderry.....	3	2	0	13	4	6	15	19	25	87	0	0	0	2	3	6	14	4	29	
Manchester.....	7	0	3	3	12	6	35	1	0	67	7	0	3	3	12	6	35	1	67	
Salmon Falls.....	11	8	0	6	4	10	10	24	17	90	4	0	2	1	6	7	9	13	42	
VERMONT—																				
Brandon.....	18	0	3	0	32	7	5	13	6	90	7	0	0	0	4	5	6	16	38	
Burlington.....	20	0	0	9	31	4	13	13	0	90	---	---	---	---	---	---	---	---	---	
Castleton.....	19	0	0	1	11	26	6	2	25	90	---	---	---	---	---	---	---	---	---	
St. Johnsbury.....	0	0	0	0	0	20	1	69	0	90	0	0	0	2	1	24	4	9	40	
MASSACHUSETTS—																				
Amherst.....	7	1	1	22	1	0	5	39	0	85	1	0	0	5	3	7	5	20	41	
Mendon.....	5	13	0	2	3	30	7	30	0	90	5	13	1	1	8	26	5	31	90	
Nantucket.....	5	8	0	10	8	16	8	27	7	89	---	---	---	---	---	---	---	---	---	
New Bedford.....	3	8	0	5	9	18	18	24	0	85	1	3	0	4	4	12	6	3	33	
Newburyport.....	18	1	3	1	26	4	14	20	0	87	---	---	---	---	---	---	---	---	---	
North Attleboro'.....	11	1	3	5	18	18	15	19	0	90	9	1	1	6	14	10	10	14	65	
Princeton.....	0	12	2	1	9	20	33	13	0	90	0	2	0	0	4	6	21	8	41	
Richmond.....	0	4	0	12	0	30	0	44	0	90	0	1	0	13	0	29	0	21	64	
Southwick.....	6	7	1	5	9	7	2	12	7	56	1	3	0	3	2	8	2	4	23	
Springfield.....	11	0	0	0	10	14	2	22	31	90	7	0	0	0	6	14	2	36	65	
Taunton.....	10	12	0	7	5	10	18	25	3	90	6	11	0	10	6	6	0	9	54	
Williamstown.....	6	0	1	5	16	11	16	21	14	90	7	3	5	21	3	0	0	3	42	
Worcester.....	8	10	0	2	6	26	6	32	0	90	---	---	---	---	---	---	---	---	---	
CONNECTICUT—																				
New London.....	4	6	0	6	8	27	5	34	0	90	---	---	---	---	---	---	---	---	---	
Pomfret.....	5	5	1	9	8	19	9	34	0	90	3	4	1	6	9	13	7	18	61	
Saybrook.....	11	7	1	5	8	13	17	23	5	90	0	6	3	0	6	9	12	4	40	
West Cornwall.....	10	2	0	16	4	22	8	28	0	90	---	---	---	---	---	---	---	---	---	
NEW YORK—																				
Angelica.....	1	5	7	19	6	35	12	5	0	90	0	2	2	10	7	25	27	5	78	
Baldwinsville.....	7	1	2	5	6	13	28	24	0	86	4	0	0	0	0	2	36	27	69	
Beaver Brook.....	4	1	14	12	4	9	14	40	1	99	---	---	---	---	---	---	---	---	---	
Beverly.....	4	0	0	12	3	34	4	13	5	83	2	1	1	15	7	12	10	10	58	
Canton.....	9	6	0	2	3	40	1	10	0	71	9	5	0	1	3	36	2	8	64	
Gouverneur.....	19	7	0	2	14	24	8	16	0	90	15	8	0	0	16	21	8	16	84	
Lodi.....	2	1	1	19	5	23	14	20	5	90	2	0	0	0	4	6	32	17	61	
New York city.....	11	12	0	20	14	21	42	60	0	180	---	---	---	---	---	---	---	---	---	
New York city, [Deaf and Dumb Institution].....	1	2	1	9	0	5	24	18	0	60	0	0	0	7	3	5	36	14	65	
Ogdensburg.....	1	1	3.5	3	3.5	5	6	6	0	29	---	---	---	---	---	---	---	---	---	
Penn Yan.....	6	0	0	0	21	21	39	3	0	90	---	---	---	---	---	---	---	---	---	
Sag Harbor.....	10	10	4	7	9	20	4	24	2	90	4	5	2	6	6	32	9	13	77	
Smithville.....	12	10	8	5	19	21	12	3	0	90	8	3	0	1	3	39	29	4	87	
Spencertown.....	11	2	0	1	19	31	3	23	0	90	3	1	0	1	1	29	10	31	76	
Wampsville.....	1	2	8	4	8	11	50	6	0	90	2	1	9	4	7	11	46	6	86	
NEW JERSEY—																				
Bloomfield.....	3	4	0	7	2	41	12	21	0	90	---	---	---	---	---	---	---	---	---	
Burlington.....	8	2	1	0	5	19	34	7	14	90	2	2	1	0	9	15	17	4	50	
Lambertville.....	3	6	0	8	3	15	4	33	0	72	---	---	---	---	---	---	---	---	---	

No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
PENNSYLVANIA—																				
Bedford .....	1	0	0	4	0	33	11	28	0	77	0	0	0	1	0	31	10	23	65	
Byberry .....	0	2	1	13	3	14	18	27	3	90	0	0	0	2	0	12	30	22	74	
Freeport .....	6	2	1	1	48	17	12	3	0	90										
Gettysburg .....	6	4	0	3	5	33	18	19	3	91	0	1	0	0	4	18	27	20	70	
Harrisburg .....	5	3	6	12	2	6	55	0	0	89	1	0	0	4	1	1	3	28	38	
Lima .....	9	0	1	8	6	6	5	27	22	90	2	2	0	1	0	19	14	18	56	
Morrisville .....	10	3	1	7	0	22	0	31	4	90	1	1	0	2	4	11	20	30	69	
Moss Grove .....	0	0	0	4	22	34	17	4	0	81	1	0	0	0	4	20	47	5	77	
Norristown .....	0	3	4	10	2	7	36	16	0	78	0	0	0	6	1	13	40	1	61	
Philadelphia .....	5	6	1	6	4	31	12	25	0	90	0	0	0	2	1	8	6	3	20	
Pocopson .....	7	0	0	4	2	21	30	25	0	89										
Randolph .....	0	0	0	12	6	41	7	16	8	90	0	1	0	2	3	28	14	19	67	
West Haverford .....	2	1	1	2	2	13	18	15	7	61	3	0	0	0	0	5	10	18	36	
DELAWARE—																				
Newark .....	6	5	0	5	3	12	9	22	0	62	5	1	0	0	4	1	4	6	21	
MARYLAND—																				
Frederick .....	9	1	2	5	12	18	19	17	7	90	2	0	0	0	7	13	29	11	62	
Schellman Hall .....	1	0	0	6	3	8	58	14	0	90	3	0	2	3	0	6	48	7	69	
VIRGINIA—																				
Alexandria .....	10	4	3	4	23	17	10	19	0	90										
Ashland .....	9	0	0	2	1	22	0	3	53	90	4	0	0	0	3	26	4	2	39	
Crichton's Store .....	14	2	0	2	25	24	19	1	2	89	6	1	0	3	5	32	19	0	66	
Lewisburg .....	0	0	0	0	1	1	9	0	0	11	0	0	0	1	2	10	38	8	51	
Montcalm .....	1	3	0	0	1	11	8	2	0	26	0	0	0	0	2	9	4	2	17	
Winchester .....	0	0	0	0	0	5	35	4	45	89	0	0	0	0	0	0	17	3	20	
NORTH CAROLINA—																				
Chapel Hill .....	4	7	2	1	14	23	22	17	0	90	1	2	1	0	0	22	3	3	40	
Thornbury .....	5	8	4	2	3	26	21	10	11	90	1	0	0	1	1	11	19	2	35	
SOUTH CAROLINA—																				
All Saints .....	5	0	1	3	9	33	25	0	2	90	0	0	1	0	5	12	15	4	37	
Camden .....	0	11	2	7	0	24	19	17	6	89	0	0	0	3	0	13	15	13	44	
St. John's .....	3	5	3	11	1	11	3	23	0	60										
GEORGIA—																				
Augusta .....	2	18	2	3	0	31	20	14	0	90										
Savannah .....	8	3	8	3	9	12	25	22	0	90	0	0	1	0	2	3	1	0	7	
Sparta .....	1	11	4	7	0	30	13	24	0	90	1	1	0	3	1	9	9	8	32	
The Rock .....	0	6	0	1	0	1	2	18	0	28										
Whitemarsh Island .....	6	0	5	1	1	10	15	25	21	90	1	1	0	1	4	5	10	1	23	
FLORIDA—																				
Cedar Keys .....	12	3	0	5	3	6	12	13	7	61	2	1	0	2	4	3	6	5	23	
Jacksonville .....	6	13	0	0	7	32	3	22	6	89	0	6	0	1	2	16	8	4	37	
Key West .....	23	13	0	3	3	2	4	6	0	60										
Knox Hill .....	15	12	4	2	5	12	11	13	2	76	0	0	0	0	3	12	11	4	30	
Warrington .....	9	7	3	0	4	19	4	32	4	90	1	2	0	1	2	12	9	25	52	
ALABAMA—																				
Greene Springs .....	4	0	1	2	1	0	18	4	5	43	1	0	0	0	0	2	6	1	10	
Tuscaloosa .....	3	5	7	12	3	9	0	21	18	84										
MISSISSIPPI—																				
Garlandville .....	0	0	0	16	0	9	12	42	2	00	0	4	0	10	0	8	10	0	41	
Oxford .....	4	2	6	8	8	21	30	11	0	96	9	7	2	7	14	4	2	1	46	
LOUISIANA—																				
New Orleans .....	19	3	6	7	19	5	0	0	0	69	0	1	1	2	7	2	6	2	21	
TEXAS—																				
Austin .....	36	4	3	4	20	8	3	10	21	109	11	0	0	10	10	7	5	3	116	
New Wied .....	38	6	7	8	3	3	0	6	11	90	0	0	2	1	0	0	0	1	4	
TENNESSEE—																				
Glenwood .....	10	0	5	5	10	9	8	17	17	90	0	2	0	1	2	7	21	10	43	
Knoxville .....	4	11	2	7	11	20	25	9	0	89										
KENTUCKY—																				
Danville .....	0	2	2	4	6	35	18	7	7	90	1	0	0	0	0	12	21	15	49	
Millersburg .....	9	0	2	3	15	8	4	21	21	83										
Springdale .....	4	2	0	3	6	36	11	7	21	90										
OHIO—																				
College Hill .....	0	1	0	1	3	16	26	0	25	78	2	1	0	0	0	4	14	2	29	



NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>OHIO—Continued.</b>																			
Germantown .....	0	6	0	1	1	37	1	22	0	63	0	1	0	0	0	24	1	16	42
Granville .....	0	4	1	1	0	35	19	3	19	82	0	0	0	0	0	6	8	2	15
Hillsborough .....	1	2	0	10	5	28	0	14	0	60	0	0	0	0	1	5	3	6	15
Jackson .....	14	2	11	2	5	16	29	7	4	90	1	0	0	0	1	6	35	6	49
Marietta .....	3	0	0	2	14	8	11	4	36	78	0	0	0	1	6	9	13	4	33
Mount Vernon .....	0	0	0	0	6	16	37	0	27	86	0	0	0	0	0	11	47	0	58
Norwalk .....	1	1	0	1	16	31	17	11	1	79	5	3	1	0	0	23	13	23	68
Oberlin .....	1	1	0	1	16	31	17	11	6	84	1	0	0	0	1	12	40	13	67
Perrysburg .....	3	5	26	12	8	2	25	5	0	90	—	—	—	—	—	—	—	—	—
Zanesville .....	5	1	0	4	5	39	21	15	0	90	—	—	—	—	—	—	—	—	—
<b>MICHIGAN—</b>																			
Ann Arbor, [Winchell] ..	4	2	0	6	9	33	15	15	6	90	4	2	0	0	2	11	37	25	81
Ann Arbor, [Woodruff] ..	9	2	2	4	6	35	18	7	7	90	2	1	0	0	1	9	39	17	69
Battle Creek .....	4	2	0	0	16	31	17	18	2	90	4	2	0	0	0	20	30	29	85
Brest .....	1	21	0	2	0	10	1	55	0	90	—	—	—	—	—	—	—	—	—
Cooper .....	1	0	3	0	3	58	8	14	90	0	0	3	2	0	0	46	11	62	—
Detroit .....	26	6	1	0	4	13	17	14	7	88	—	—	—	—	—	—	—	—	—
Flint .....	8	0	2	0	20	28	12	15	0	85	—	—	—	—	—	—	—	—	—
Grand Rapids .....	3	5	4	0	3	21	28	2	22	88	3	0	0	0	0	4	15	9	31
Grand Traverse .....	4	0	3	6	21	5	38	7	5	89	4	0	3	5	20	3	33	5	73
Monroe, [Whelpley] .....	1	21	0	3	0	10	1	54	0	90	—	—	—	—	—	—	—	—	—
St. James .....	6	3	4	7	8	19	1	39	3	90	2	2	1	0	2	17	10	38	72
<b>INDIANA—</b>																			
Madison .....	—	—	—	—	—	—	—	—	—	—	2	5	6	0	1	29	26	18	87
Milton .....	3	2	2	2	0	14	19	13	35	90	0	1	0	0	0	4	1	5	11
New Harmony .....	5	2	2	6	0	11	20	14	0	69	0	0	0</						

No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NOVA SCOTIA—																				
Halifax .....	17	4	0	5	7	15	13	20	1	82										
CANADA EAST—																				
St Martin's .....	0	25	1	2	1	10	6	26	22	93										
MAINE—																				
Carmel .....	3	6	3	12	4	2	1	36	17	84	3	5	2	10	2	2	0	23	47	
Fryeburg .....	10	7	3	0	3	11	6	11	27	78	0	0	0	0	0	12	17	10	39	
Perry .....	11	7	1	3	8	11	16	36	0	93	8	9	1	3	6	12	17	10	66	
Steuben .....	6	40	0	2	0	16	6	18	5	93	6	0	0	0	0	21	0	10	43	
NEW HAMPSHIRE—																				
Concord .....	2	17	0	5	0	36	0	33	0	93										
Exeter .....	13	7	0	2	0	16	44	11	0	93	12	7	0	2	0	14	33	6	74	
Great Falls .....	7	18	0	0	1	13	12	33	0	84	1	0	0	2	0	4	6	1	14	
Hanover .....	20	5	0	7	8	14	0	39	0	93	0	0	0	1	0	0	1	10	18	
Londonderry .....	4	9	4	2	0	4	3	37	30	93	1	0	0	0	1	3	14	3	22	
Manchester .....	20	6	3	3	0	11	14	34	0	91	11	4	5	1	1	7	34	14	77	
Salmon Falls .....	9	10	2	0	0	11	15	33	13	93	0	0	0	1	2	4	10	5	22	
VERMONT—																				
Brandon .....	28	1	2	3	25	4	1	20	8	92	4	0	0	0	0	2	4	4	14	
Burlington .....	15	11	3	1	34	3	0	15	1	92	1	0	0	0	1	0	0	0	2	
Castleton .....	35	0	0	0	23	8	2	5	20	93	0	0	0	0	0	2	2	1	5	
St. Johnsbury .....	0	1	0	0	0	24	0	65	0	90	0	0	0	0	11	0	19	0	30	
MASSACHUSETTS—																				
Amherst .....	10	10	2	12	3	7	5	31	1	81	0	0	0	0	0	3	3	5	11	
Mendon .....	3	24	2	0	0	27	4	33	0	93	1	24	2	0	0	24	9	32	92	
Nantucket .....	7	5	3	7	0	16	4	41	10	93										
New Bedford .....	12	9	2	2	22	7	37	0	0	93	2	0	0	2	0	6	0	6	22	
Newburyport .....	30	6	0	6	9	6	16	15	0	88										
North Attleboro' .....	21	4	6	2	6	18	13	23	0	93	11	0	3	2	7	13	14	10	69	
Princeton .....	3	18	10	0	0	9	26	27	0	93	1	3	0	0	0	4	12	10	30	
Richmond .....	0	24	0	3	1	21	0	44	0	93	1	17	0	4	4	20	1	30	77	
Southwick .....	7	15	1	1	8	5	6	13	8	64	1	0	0	0	0	9	2	3	15	
Springfield .....	9	8	0	1	0	8	0	26	41	93	3	7	0	0	1	2	3	24	40	
Taunton .....	3	7	4	9	4	17	13	34	2	93	3	7	5	7	2	17	12	10	63	
Westfield .....	33	11	2	2	3	4	15	18	0	88										
Williamstown .....	11	2	6	7	8	6	9	13	13	75	1	0	2	6	2	3	4	8	26	
Worcester .....	2	16	1	2	0	28	2	42	0	93										
CONNECTICUT—																				
New London .....	6	1	0	5	12	14	14	9	0	61										
Pomfret .....	10	14	0	1	1	25	3	39	0	93	6	13	0	1	1	25	5	19	70	
Saybrook .....	16	11	4	1	0	9	17	34	1	93	1	1	0	0	4	5	16	18	48	
West Cornwall .....	3	8	1	8	3	20	9	40	0	92										
NEW YORK—																				
Angelica .....	1	8	2	10	7	31	20	15	0	94	2	1	0	1	4	20	39	12	79	
Baldwinsville .....	0	7	13	5	1	11	11	34	0	88	2	0	0	1	0	1	28	31	63	
Beaver Brook .....	9	4	11	12	3	8	12	31	1	91										
Beverly .....	1	26	0	6	4	20	7	24	1	89	3	3	0	4	6	20	15	10	61	
Buffalo, [Salisbury] .....	11	8	6	2	4	18	6	21	3	79	2	1	1	0	1	11	11	7	34	
Canton .....	3	18	2	0	1	35	5	22	4	90	1	16	0	0	1	31	5	18	74	
Fishkill .....	6	5	2	2	1	4	4	3	3	30										
Gouverneur .....	15	22	0	1	7	32	4	12	0	93	5	16	0	0	10	25	9	11	76	
Lodi .....	4	0	5	15	9	18	12	25	5	93	0	0	0	0	1	1	16	7	25	
New York city .....	12	34	0	0	0	33	15	92	0	186										
New York city, [Deaf and Dumb Institution] .....	0	0	0	1	1	11	25	38	9	93	1	0	1	0	3	19	32	19	77	
Penn Yan .....	4	3	2	0	26	16	22	20	0	93										
Sag Harbor .....	18	15	0	7	3	16	11	22	1	93	4	3	0	4	4	18	15	19	67	
Smithville .....	12	27	7	2	17	11	12	5	0	93	22	5	2	0	14	24	10	14	91	
Spencertown .....	27	6	0	3	31	10	4	12	0	93	7	4	0	0	8	7	15	14	55	
Wampsville .....	0	3	16	6	10	8	34	12	0	89	0	3	16	5	10	10	33	11	88	
NEW JERSEY—																				
Bloomfield .....	6	18	0	0	0	25	0	44	0	93										
Burlington .....	0	16	0	0	0	11	32	16	12	93	5	3	0	0	0	4	5	2	19	
Lambertville .....	3	20	1	0	2	14	3	42	0	85										



No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
PENNSYLVANIA—																				
Bedford.....	0	0	0	3	0	19	11	45	0	78	0	0	0	3	0	16	7	40	66	
Gettysburg.....	13	10	0	2	14	13	4	25	12	93	0	0	0	1	1	8	15	23	53	
Harrisburg.....	3	0	6	12	8	5	12	45	0	91	0	0	0	1	3	1	5	23	33	
Lima.....	6	18	2	2	1	10	3	31	19	92	0	0	4	1	0	5	18	12	40	
Morrisville.....	16	14	1	0	0	23	10	19	10	93	2	3	4	0	0	5	28	25	67	
Moss Grove.....	1	0	1	2	8	15	7	8	57	1	0	0	0	0	12	46	1	60		
Norristown.....	0	3	4	5	3	10	27	26	0	78	0	1	2	0	0	8	41	6	58	
Philadelphia.....	9	16	0	0	2	23	11	32	0	93	0	0	0	0	0	2	4	3	9	
Pittsburg.....	1	0	1	7	4	12	4	12	12	53	0	2	0	4	0	0	0	0	5	
Pocopson.....	9	3	2	3	0	4	31	39	0	91	0	0	1	0	0	2	2	2	7	
West Haverford.....	2	5	2	1	0	7	10	22	13	62	1	1	0	0	0	0	6	14	22	
DELAWARE—																				
Newark.....	2	2	0	1	0	7	7	22	0	41	1	1	0	0	0	2	1	5	10	
MARYLAND—																				
Bladensburg.....	2	1	6	1	2	13	4	20	0	49										
Frederick.....	12	7	2	2	3	14	13	24	15	92	2	0	0	0	2	2	42	9	57	
Schellman Hall.....	0	1	0	2	1	8	64	17	0	93	0	2	0	1	0	9	61	6	79	
VIRGINIA—																				
Alexandria.....	20	10	0	4	22	10	3	23	0	92										
Ashland.....	12	0	0	0	14	8	2	4	53	93	0	0	0	0	0	2	17	7	26	
Crichton's Store.....	19	2	2	0	26	21	15	5	3	93	12	0	0	0	0	33	24	1	70	
Lewisburg.....	0	0	0	0	0	0	8	2	0	10	1	0	0	0	0	0	20	2	23	
Montcalm.....	0	8	1	0	5	17	18	2	0	51	0	1	0	0	0	3	10	1	15	
Winchester.....	0	0	0	0	0	0	19	5	0	24	0	0	0	0	0	0	19	5	24	
NORTH CAROLINA—																				
Chapel Hill.....	19	7	2	9	11	11	14	20	0	93	1	0	0	2	4	22	10	10	49	
Thornbury.....	7	5	4	1	8	15	23	10	18	91	0	0	0	0	1	6	18	1	32	
SOUTH CAROLINA—																				
All Saints.....	15	4	1	6	15	30	14	6	2	93	4	2	1	0	1	19	12	5	44	
Camden.....	13	18	0	6	0	18	12	22	3	92	3	1	0	1	1	8	13	16	43	
St. John's.....	7	0	0	10	4	15	2	15	0	62										
Columbia.....	0	0	1	2	3	2	5	8	0	21										
GEORGIA—																				
Savannah.....	9	4	11	5	7	6	26	25	0	93	0	0	0	2	3	2	4	3	14	
Sparta.....	1	19	5	3	0	18	5	40	0	91	0	0	0	1	2	12	13	2	30	
The Rock.....	0	0	0	0	0	0	0	5	0	5										
Whitemarsh island.....	9	10	5	0	4	11	7	26	0	72	1	0	1	0	4	5	2	12	25	
FLORIDA—																				
Cedar Keys.....	14	19	4	3	2	11	7	20	13	93	4	11	3	0	1	8	10	12	47	
Jacksonville.....	19	10	2	1	6	20	8	12	14	92	0	5	5	4	4	8	3	1	30	
Key West.....	22	15	7	4	0	2	4	5	3	62										
Warrington.....	15	17	3	4	2	16	4	29	3	93	4	11	3	5	1	13	5	33	75	
ALABAMA—																				
Greene Springs.....	7	3	11	4	8	5	20	8	20	86	3	0	0	0	1	4	9	8	25	
Tuscaloosa.....	3	11	2	16	1	6	7	22	12	80										
MISSISSIPPI—																				
Garlandville.....	2	1	5	8	3	17	8	49	0	93	2	1	1	9	4	17	7	22	63	
Oxford.....	1	2	7	19	6	19	25	14	0	93	4	0	6	10	12	6	6	6	50	
LOUISIANA—																				
New Orleans.....	16	14	13	6	9	8	11	12	3	92	2	0	0	1	3	3	13	4	26	
TEXAS—																				
Austin.....	44	1	0	1	17	12	7	8	3	93	8	0	3	0	14	15	3	10	53	
New Wied.....	40	3	0	2	1	14	9	16	8	93	1	0	3	1	0	0	0	4	9	
TENNESSEE—																				
Glenwood.....	3	14	0	8	10	15	4	21	20	93	0	2	0	1	1	13	14	10	41	
Knoxville.....	13	17	13	1	15	17	10	7	0	93										
KENTUCKY—																				
Ballardsville.....	7	1	3	8	24	26	19	5	0	93	1	0	0	0	0	2	2	3	8	
Danville.....	2	2	0	3	22	26	20	18	0	93	0	0	0	0	1	17	18	14	50	
Millersburg.....	8	0	0	0	5	6	6	6	62	93										
OHIO—																				
Gallipolis.....	2	0	0	0	3	1	2	2	0	10										
Germantown.....	4	7	0	2	1	39	2	29	7	91	2	5	0	2	0	26	0	19	55	
Granville.....	10	1	1	2	9	38	14	18	0	93	3	1	0	0	0	5	0	4	13	

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Hillsborough	1	2	0	11	0	27	0	22	0	63	0	0	0	0	0	4	2	7	13
Madison	9	3	3	12	28	16	13	9	0	93	11	2	1	7	34	12	13	5	86
Marietta	0	0	0	0	4	8	9	12	58	91	0	0	0	0	4	3	19	3	29
Mount Vernon	0	0	0	0	2	10	39	0	39	90	0	0	0	0	0	7	44	0	51
Norwalk	8	4	1	0	32	13	42	10	13	123	6	4	0	0	0	15	13	26	64
Norberlin	7	0	3	2	14	31	8	28	0	93	2	0	0	0	0	5	31	10	48
Perrysburg	24	12	23	7	5	3	12	3	0	89									
Zanesville	2	0	0	9	2	43		29	0	93									
MICHIGAN—																			
Ann Arbor, [Woodruff]	6	5	5	15	5	27	8	18	3	92	3	2	0	2	1	10	23	19	60
Ann Arbor, [Winchell]	7	2	13	5	10	25	13	15	3	93	12	3	0	0	4	12	29	12	78
Battle Creek	4	2	13	8	11	22	11	14	8	93	4	3	5	3	0	13	36	19	83
Cooper	5	2	19	2	5	5	41	3	11	93	1	5	17	0	1	1	29	15	69
Detroit	8	22	8	1	3	33	11	7	0	93									
Flint	17	4	0	6	22	15	8	12	0	84									
Grand Traverse	7	11	1	6	12	47	8	27	2	121	2	3	0	0	25	13	32	6	81
Monroe, [Whelpley]	0	7	0	7	1	24	3	51	0	93	0	4	0	4	1	26	1	57	93
Monroe, [Young]	0	3	0	0	15	39	10	17	0	93									
St. James	15	8	2	10	2	16	9	24	7	93	5	1	1	1	3	10	4	28	53
INDIANA—																			
Madison											0	8	0	4	2	38	8	12	72
Milton	2	6	0	1	3	17	7	10	43	89	2	1	0	0	0	3	6	3	15
New Harmony	5	1	0	5	12	14	14	9	0	61									
ILLINOIS—																			
Athens	3	3	1	22	0	20	7	29	0	85	0	1	0	3	0	0	8	30	51
Augusta	0	5	3	17	9	20	11	20	8	93	1	2	0	2	3	3	7	10	28
Manchester	11	1	2	7	16	4	5	16	31	93	10	1							



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1854.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
NOVA SCOTIA—													
Albion Mines .....	2.677	5.075	2.835	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CANADA EAST—													
St Martin's .....	2.855	2.545	3.648	8.339	3.418	8.304	0.174	2.265	6.167	4.844	5.540	1.886	49.985
MAINE—													
Biddeford .....	-----	5.000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Carmel .....	2.200	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Fryeburg .....	3.450	-----	-----	-----	6.583	2.667	1.666	-----	-----	2.625	-----	-----	-----
Perry .....	-----	1.800	3.100	3.500	4.700	4.320	1.310	0.570	3.700	7.200	13.000	4.000	-----
Steuben .....	-----	-----	3.010	-----	5.200	4.800	2.200	0.450	5.300	3.400	3.250	6.000	-----
Windham .....	-----	8.750	14.500	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
NEW HAMPSHIRE—													
Concord .....	?	?	2.250	?	3.080	2.250	1.708	0.250	6.875	2.250	?	?	-----
Exeter .....	-----	-----	-----	-----	-----	-----	-----	0.100	-----	-----	-----	-----	-----
Great Falls .....	-----	-----	-----	-----	-----	2.593	1.560	0.216	5.132	3.615	7.794	-----	-----
Hanover .....	2.876	2.772	2.183	4.505	3.455	3.921	1.242	0.116	5.325	2.459	3.506	2.210	34.570
Londonderry .....	2.770	4.670	3.000	5.090	3.040	2.220	2.290	0.000	-----	4.100	8.300	3.900	-----
Manchester .....	2.905	5.403	2.311	5.774	3.602	2.247	2.465	2.500	5.295	2.562	7.561	2.374	42.999
Salmon Falls .....	2.714	3.802	3.415	4.067	2.094	2.153	1.647	0.189	5.524	3.112	6.130	1.908	36.750
VERMONT—													
Burlington .....	1.820	1.650	1.690	3.600	1.620	2.880	1.600	0.610	4.440	2.260	2.170	1.110	25.450
Craftsbury .....	19.750	22.750	-----	9.500	-----	-----	-----	-----	-----	-----	-----	-----	-----
St. Johnsbury .....	1.860	3.010	1.920	4.010	1.500	1.740	0.530	0.900	3.730	0.850	2.320	-----	-----
MASSACHUSETTS—													
Amherst .....	2.977	4.938	3.105	8.328	4.460	1.751	3.525	0.988	5.458	2.305	7.120	2.390	47.345
Mendon .....	-----	12.500	0.600	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Nantucket .....	2.101	4.885	1.159	5.954	2.479	2.022	4.827	2.195	7.803	3.108	5.840	5.057	47.430
New Bedford .....	1.770	5.040	1.910	6.070	3.170	2.690	6.610	0.210	7.440	1.320	8.590	3.020	47.840
North Attleboro' .....	3.410	5.265	2.916	6.723	4.030	2.320	2.150	2.900	6.165	3.150	2.098	4.553	45.680
Newburyport .....	2.550	1.925	3.129	2.435	2.950	1.851	1.804	?	2.175	2.674	4.600	3.300	-----
Princeton .....	2.390	5.790	3.160	7.740	2.350	3.140	3.380	0.220	5.070	2.650	8.100	2.270	46.260
Richmond .....	4.150	8.517	9.150	1.830	7.862	8.125	4.250	1.875	5.715	7.125	8.872	?	-----
Southwick .....	1.990	4.230	2.080	10.950	4.920	2.900	3.220	0.880	5.410	3.340	7.590	3.330	50.840
Springfield .....	2.770	4.870	2.280	7.790	4.100	1.850	7.470	0.880	4.540	2.440	8.130	3.250	50.370
Westfield .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.090	-----
Williamstown .....	-----	-----	-----	-----	-----	-----	-----	-----	5.860	1.930	4.710	1.100	-----
Wood's Hole .....	3.062	9.725	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Worcester .....	2.820	6.630	3.450	6.690	6.780	3.050	5.680	0.350	5.530	5.030	9.820	3.340	59.170
RHODE ISLAND—													
North Scituate .....	-----	-----	-----	7.610	4.450	2.010	-----	-----	-----	-----	-----	-----	-----
Providence .....	1.800	4.850	2.850	6.300	3.600	3.600	2.450	0.300	6.100	1.900	9.150	3.350	37.100
CONNECTICUT—													
Pomfret .....	3.940	7.150	1.810	6.700	3.460	5.430	3.390	0.530	5.710	2.450	9.630	6.940	57.140
Salisbury .....	1.032	-----	-----	7.500	4.584	2.868	5.328	0.888	5.004	27.120	-----	-----	-----
Saybrook .....	-----	3.750	-----	7.000	-----	2.000	5.000	-----	-----	1.875	8.625	4.370	-----
West Cornwall .....	2.000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
NEW YORK—													
Beaver Creek .....	-----	-----	5.750	-----	4.500	3.925	2.450	1.825	7.025	2.975	5.400	0.500	-----
Canton .....	23.500	12.500	10.500	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Chatham .....	1.100	2.800	-----	14.000	-----	-----	-----	-----	-----	-----	-----	-----	-----
Falconer .....	2.900	3.000	2.600	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Gouverneur .....	2.620	0.300	2.000	2.600	1.350	3.500	0.100	1.850	4.750	4.900	2.800	2.216	28.980
Houseville .....	2.460	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Lodi .....	0.880	1.188	1.062	4.375	1.562	2.000	2.062	0.688	1.620	1.125	1.062	2.560	20.184
Madrid .....	1.620	2.400	2.600	4.210	2.540	3.650	0.260	-----	5.880	2.720	-----	-----	-----
New York city .....	2.230	1.425	4.810	10.110	4.280	2.290	2.810	1.060	4.150	2.750	4.390	2.130	42.435
New York city, [Deaf & Dumb Institution] .....	2.230	4.810	1.425	10.110	4.280	2.290	2.810	1.750	4.150	2.750	4.390	2.130	43.225
Penn Yan .....	1.060	1.250	1.890	4.110	1.470	1.690	0.600	1.890	1.510	1.500	1.360	1.330	19.660
Sag Harbor .....	3.380	3.860	3.430	10.080	3.600	2.870	5.650	0.600	11.690	2.220	9.410	5.730	61.920
Smithville .....	2.820	8.460	2.400	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Spencertown .....	-----	-----	-----	-----	-----	-----	3.681	0.853	-----	1.686	3.638	2.472	-----
Troy .....	2.485	2.538	2.514	5.841	1.943	3.083	2.615	1.105	-----	-----	-----	-----	-----
NEW JERSEY—													
Bloomfield .....	1.110	4.899	1.193	10.244	3.753	1.559	3.681	0.743	3.331	2.364	3.889	0.815	37.581
Newark .....	1.790	5.026	-----	-----	16.520	2.100	3.580	1.125	-----	2.440	-----	-----	-----
Lambertville .....	1.890	6.375	1.320	6.547	4.408	4.950	5.058	1.262	2.495	2.755	3.320	2.745	43.135



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1854—Continued.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>PENNSYLVANIA—</b>													
Bedford .....	1.392	1.238	1.441	2.833	0.984	1.182	1.367	0.485	.....	2.628	0.880	1.130	.....
Brookville .....	.....	.....	.....	.....	.....	.....	3.150	0.700	2.900	2.300	.....	.....	.....
Bustleton .....	1.080	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Byberry .....	2.628	4.940	1.476	7.244	.....	.....	.....	0.903	2.580	2.795	3.183	.....	.....
Ceres .....	2.100	1.100	1.700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gettysburg .....	3.620	3.599	1.895	5.370	3.315	2.840	1.620	0.905	2.460	1.270	3.630	2.700	33.224
Harrisburg .....	3.500	15.000	0.793	5.309	3.162	5.228	2.510	3.165	0.743	3.570	3.122	9.000	55.102
Lima .....	3.490	6.170	1.300	6.580	6.550	2.710	4.300	3.020	3.410	1.600	3.370	3.310	45.810
Morrisville .....	2.600	5.100	1.300	7.300	6.700	5.000	5.600	1.100	2.700	2.100	3.100	2.400	45.000
Moss Grove .....	2.650	3.400	2.610	5.400	2.710	2.850	1.600	2.500	.....	2.000	3.000	3.600	.....
Norristown .....	3.340	6.250	1.750	6.450	4.360	4.340	2.770	2.150	3.000	1.960	3.620	3.740	43.790
Philadelphia .....	2.320	4.200	1.625	8.145	7.299	3.441	3.837	0.918	4.883	1.918	3.460	3.185	45.231
Pittsburg .....	2.626	2.875	2.343	3.590	2.320	0.700	0.723	0.630	1.915	2.267	1.595	1.680	23.264
Pocopson .....	3.000	8.660	1.430	6.970	4.300	3.390	3.500	1.540	3.970	1.870	3.570	3.700	45.900
Randolph .....	.....	.....	.....	.....	.....	3.250	3.500	.....	4.400	4.500	4.550	.....	.....
Sugar Grove .....	2.900	2.860	2.230	4.150	4.330	.....	.....	.....	.....	.....	.....	.....	.....
Warrior's Mark .....	.....	.....	1.440	5.840	3.618	5.243	3.942	.....	.....	.....	.....	.....	.....
West Haverford .....	3.154	.....	1.026	.....	.....	3.548	4.047	1.100	.....	.....	2.760	.....	.....
Youngsville .....	.....	2.500	11.500	11.250	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>MARYLAND—</b>													
Frederick .....	3.264	5.960	1.194	6.200	3.696	1.196	1.606	0.331	1.993	2.474	3.092	1.893	32.899
Schellman Hall .....	4.312	3.000	.....	4.000	2.250	5.000	2.000	1.910	4.500	3.500	5.750	2.750	.....
<b>DISTRICT OF COLUMBIA—</b>													
Washington .....	4.232	7.598	1.118	5.379	2.944	2.339	1.094	.....	.....	.....	.....	.....	.....
<b>VIRGINIA—</b>													
Alexandria .....	3.584	6.211	1.535	5.028	3.444	2.482	0.658	1.642	2.896	2.077	3.714	1.756	35.027
Ashland .....	4.396	2.471	5.427	6.564	1.370	2.520	2.859	1.057	1.012	3.504	1.763	2.405	35.248
Crichton's Store .....	8.350	6.650	2.050	5.250	4.300	4.350	0.950	4.850	0.300	2.400	1.400	3.500	43.950
Huntersville .....	.....	.....	12.000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lewisburg .....	2.600	3.000	4.300	2.425	0.532	1.48	1.700	.....	.....	.....	.....	.....	.....
Lynchburg .....	.....	5.600	5.200	3.700	2.700	5.800	.....	1.600	2.600	.....	.....	.....	.....
Montcalm .....	.....	.....	.....	.....	.....	.....	4.370	.....	1.500	1.625	2.875	1.500	.....
New Creek Depot .....	.....	3.300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portsmouth .....	11.020	4.320	2.790	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Smithfield .....	.....	.....	.....	.....	.....	.....	6.804	2.545	1.639	2.320	3.958	2.444	.....
<b>NORTH CAROLINA—</b>													
Jackson .....	2.641	3.626	2.834	3.743	2.039	1.714	2.762	.....	.....	.....	2.410	2.149	.....
<b>SOUTH CAROLINA—</b>													
Aiken .....	.....	.....	.....	.....	6.128	2.601	11.427	1.429	6.259	0.359	0.769	1.244	.....
All Saints .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.790	1.730	.....
Camden .....	7.070	4.100	2.310	3.408	4.950	6.189	8.270	4.500	6.100	2.530	0.960	1.190	51.577
St John's .....	4.470	2.700	0.110	1.950	4.630	3.970	6.910	6.950	8.000	1.980	1.290	1.490	44.450
Whitemarsh Island .....	2.150	2.630	1.060	2.700	6.090	6.060	6.430	4.480	5.760	0.230	2.600	0.990	41.180
<b>GEORGIA—</b>													
Augusta .....	.....	.....	.....	.....	.....	.....	4.338	.....	.....	.....	.....	.....	.....
Culloden .....	8.960	7.940	2.830	1.500	3.070	2.930	.....	.....	.....	.....	.....	.....	.....
Savannah .....	2.528	2.530	2.030	1.985	6.516	3.830	7.982	4.522	7.457	0.482	2.304	0.978	43.144
Sparta .....	7.370	6.100	2.000	3.400	4.620	2.226	4.190	3.370	7.900	1.350	0.660	1.170	44.350
<b>FLORIDA—</b>													
Cedar Keys .....	5.375	2.130	0.625	5.250	0.218	4.670	3.860	6.375	3.427	3.438	3.312	0.937	39.617
Jacksonville .....	3.020	2.150	1.310	4.350	4.450	5.800	6.670	8.900	10.400	1.500	3.550	4.200	56.300
Key West .....	1.750	3.150	1.030	2.380	0.950	5.280	3.950	3.900	8.830	1.510	0.200	8.450	41.380
Knox Hill .....	2.530	6.239	3.135	1.769	3.406	5.472	2.815	5.309	2.583	3.826	1.408	1.420	39.912
Warrington .....	3.750	6.000	2.500	9.333	1.688	2.815	3.600	4.250	2.312	3.312	3.312	0.125	41.997
<b>ALABAMA—</b>													
Greene Springs .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.870	.....
Monroeville .....	7.506	7.500	4.000	1.625	3.562	4.000	4.600	3.312	4.625	1.500	.....	1.250	.....
Tuscaloosa .....	5.643	.....	.....	.....	.....	3.671	2.177	2.509	4.161	3.022	2.615	1.361	.....
Wetokaville .....	12.750	8.812	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>MISSISSIPPI—</b>													
Lake Washington .....	.....	.....	.....	.....	.....	.....	1.700	0.090	.....	.....	.....	.....	.....
Jackson .....	7.230	5.280	6.390	2.590	4.400	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg .....	.....	.....	.....	.....	.....	.....	.....	.....	1.353	.....	.....	.....	.....
<b>LOUISIANA—</b>													
New Orleans .....	0.662	9.841	4.125	3.705	.....	4.010	29.450	3.480	.....	4.840	1.550	1.160	.....



No. 50.—INCHES OF RAIN AND MELTED SNOW, 1854—Continued.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>TEXAS—</b>													
New Wied .....	0.270	1.990	0.760	1.070	7.210	3.280	2.020	0.250	4.290	1.600	2.040	0.920	25.700
<b>TENNESSEE—</b>													
Glenwood .....	5.277	1.751	9.506	1.367	7.010	2.887	2.370	1.256	2.231	5.696	2.388	1.290	43.029
Knoxville .....	8.300	4.734	3.340	3.410	2.840	7.410	3.610	3.800	1.580	2.890	2.300	2.020	46.234
Lebanon .....	7.406	1.584	4.147	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>KENTUCKY—</b>													
Danville .....	5.909	2.044	8.599	3.024	6.970	2.249	-----	-----	0.314	3.348	3.438	2.557	-----
Millersburg .....	4.700	3.070	7.500	1.100	5.370	1.880	-----	-----	0.026	3.880	2.630	1.340	-----
Springdale .....	4.920	3.050	10.260	2.080	5.460	3.810	1.600	1.560	1.920	5.190	3.910	2.440	46.200
<b>OHIO—</b>													
College Hill .....	4.012	5.188	9.055	2.759	5.613	2.746	4.450	1.470	1.325	2.995	3.685	-----	-----
Gallipolis .....	-----	-----	-----	12.650	8.650	0.875	1.910	2.116	1.325	3.190	1.652	2.555	-----
Geneva Hall .....	-----	1.650	5.250	5.250	3.160	-----	-----	-----	-----	-----	-----	-----	-----
Germantown .....	3.706	4.393	5.972	4.566	10.465	1.951	3.371	1.369	1.087	2.800	3.425	1.327	44.431
Granville .....	2.850	3.250	3.900	3.860	5.580	4.040	2.350	1.500	0.820	8.280	3.410	1.850	41.690
Keene .....	2.660	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Marietta .....	2.645	2.235	3.532	2.690	2.064	3.432	1.960	3.070	1.508	3.860	1.760	3.455	32.211
Mount Vernon .....	1.750	2.450	3.350	4.310	3.150	-----	-----	-----	-----	-----	-----	1.350	-----
Norwalk .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.940	1.400	1.560	-----
Oberlin .....	0.960	3.150	2.960	4.270	3.480	1.950	2.440	1.070	0.650	3.430	1.630	2.030	27.960
Perrysburg .....	-----	-----	-----	5.125	3.562	3.000	5.750	-----	4.440	-----	2.687	2.250	-----
Savannah .....	-----	-----	3.376	5.558	5.641	4.460	2.750	1.763	2.365	-----	-----	-----	-----
Urbana .....	3.610	3.760	5.410	5.750	6.020	2.800	1.670	1.990	1.970	4.460	2.620	1.290	41.350
Yankeetown .....	-----	-----	-----	-----	-----	5.250	-----	1.75	-----	-----	-----	-----	-----
Zanesville .....	-----	-----	-----	-----	6.250	-----	2.139	2.243	0.566	6.097	1.987	1.408	-----
<b>MICHIGAN—</b>													
Ann Arbor, [Winchell] .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.926	1.626	-----
Ann Arbor, [Woodruff] .....	2.080	1.100	2.030	3.150	3.150	4.480	2.290	0.190	3.680	3.670	1.940	1.650	26.260
Battle Creek .....	1.630	0.720	0.165	1.400	3.400	5.680	1.070	0.700	4.000	4.070	1.890	1.010	25.735
Brooklyn .....	2.780	-----	2.020	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Cooper .....	-----	-----	-----	-----	-----	6.478	1.107	0.708	-----	-----	-----	-----	-----
Detroit .....	3.155	1.744	3.530	5.408	3.282	3.070	2.821	1.383	8.748	7.089	3.672	2.594	46.496
Flint .....	-----	-----	-----	2.340	2.115	3.652	1.225	1.524	2.233	3.033	1.652	1.115	-----
Grand Rapids .....	-----	-----	-----	1.560	5.060	5.500	2.420	0.150	1.340	3.330	1.970	-----	-----
Monroe, [Whelpley] .....	6.200	7.812	3.750	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
St. James .....	-----	-----	1.750	-----	3.625	-----	3.375	3.250	2.000	1.292	1.000	-----	-----
<b>INDIANA—</b>													
Green Castle .....	1.150	1.000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Kendallsville .....	-----	3.400	3.060	6.368	6.504	6.925	7.075	2.980	4.383	-----	-----	-----	-----
La Fayette .....	-----	-----	-----	-----	5.900	-----	-----	-----	-----	-----	-----	-----	-----
Logansport .....	-----	-----	-----	-----	-----	-----	1.625	3.312	-----	-----	-----	-----	-----
New Harmony .....	2.700	3.520	7.880	3.030	3.155	2.160	0.178	4.170	0.560	4.310	2.650	1.270	35.575
Richmond .....	2.420	4.000	4.385	4.430	5.735	2.345	2.485	1.570	3.385	4.050	2.300	1.500	38.605
<b>ILLINOIS—</b>													
Athens .....	1.250	2.010	2.160	3.580	7.660	3.840	1.760	1.330	1.250	3.760	1.090	1.440	30.730
Batavia .....	-----	-----	0.375	0.133	2.600	2.050	3.100	-----	-----	-----	-----	-----	-----
Manchester .....	-----	-----	-----	-----	-----	-----	1.010	3.299	-----	5.280	1.024	1.187	-----
Upper Alton .....	1.400	0.171	2.261	1.135	3.198	0.212	0.010	0.860	2.121	-----	0.067	1.024	-----
<b>MISSOURI—</b>													
Hannibal .....	0.312	1.906	3.810	3.359	4.500	4.500	1.249	1.843	1.900	2.906	0.500	0.890	27.675
St. Louis .....	1.180	3.110	7.490	7.600	6.300	3.210	0.920	1.800	1.440	4.150	1.940	1.490	40.630
<b>WISCONSIN—</b>													
Beloit .....	1.150	1.600	1.850	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ceresco .....	-----	-----	-----	-----	-----	-----	8.620	3.470	2.520	2.790	6.500	-----	-----
Janesville .....	1.190	7.000	1.400	1.310	4.450	5.500	7.700	1.200	1.220	3.500	0.250	1.750	36.470
Milwaukee .....	-----	-----	1.330	2.070	3.730	5.760	6.150	0.970	2.810	3.600	0.430	2.030	-----
Platteville .....	10.750	9.000	0.750	-----	-----	8.000	9.000	3.000	3.000	-----	-----	3.000	-----
<b>IOWA—</b>													
Dubuque .....	2.050	1.190	1.110	0.490	5.490	5.720	4.060	2.020	1.790	3.240	0.520	0.090	27.770
Fort Madison .....	2.900	10.800	3.100	2.470	5.670	2.650	0.770	1.040	6.170	4.400	1.340	4.950	46.260
Muscatine .....	1.500	1.250	1.120	1.760	6.210	0.660	2.220	3.330	1.130	4.220	0.090	0.410	23.900
Poultney .....	0.266	0.730	2.550	1.172	6.065	5.980	6.510	2.377	1.800	5.030	0.382	0.340	33.202
Quasqueton .....	0.470	0.521	1.334	0.317	6.638	5.671	3.824	2.294	2.160	2.333	-----	0.195	-----
St. Mary's .....	-----	1.250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>MINNESOTA—</b>													
Lac qui Parle .....	-----	-----	-----	-----	2.500	-----	7.000	2.250	-----	-----	-----	-----	-----
St. Anthony's Falls .....	0.80?	0.05?	2.480	4.130	5.370	2.690	4.660	2.050	3.190	-----	0.700	-----	-----

## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1854—Continued.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
CALIFORNIA—													
Sacramento, [Hatch] .....	-----	-----	-----	-----	-----	-----	-----	-----	1.02	0.67	2.20	-----	-----
Sacramento, [Logan] .....	-----	-----	-----	1.50	0.21	0.31	0.05	sprin- kle.	1.01	0.65	1.15	-----	-----
San Francisco .....	4.25	8.41	3.17	3.31	0.02	0.40	0.00	slight shower	slight shower	2.12	0.40	0.88	-----
Stockton .....	2.64	8.94	3.60	3.24	0.33	1.00	-----	-----	-----	0.31	0.01	0.23	-----
SOUTH AMERICA—													
Assumption, Paraguay ..	7.37	5.91	5.62	5.79	1.17	1.55	0.76	1.59	-----	-----	-----	-----	-----
EASTERN CONTINENT—													
Mosul, Mesopotamia .....	2.19	3.12	1.55	1.74	0.13	.08	-----	-----	-----	0.23	0.67	3.31	13.02



## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1854.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			Range for the year.
			DATE.		HEIGHT.	DATE.		HEIGHT.	
			Day.	Hour.		Day.	Hour.		
		Inches.			Inches.			Inches.	Inches
Canada East	St. Martin's	29.71	Dec. 23	7 a. m.	30.59	Jan. 12	9 p. m.	28.54	2.05
Canada West	Hamilton (a)	29.68	Nov. 4	9 p. m.	30.22	Nov. 25	9 a. m.	28.75	1.47
Maine	Carmel	29.60	Dec. 23	2 p. m.	30.47	Dec. 4	9 p. m.	28.46	2.01
New Hampshire	Concord	29.61	Dec. 23	9 p. m.	30.40	Dec. 4	9 p. m.	28.52	1.89
	Hanover	29.42	Feb. 25	9 p. m.	30.08	Dec. 4	2 p. m.	28.41	1.67
	Manchester	29.99	Feb. 25	9 p. m.	30.70	Dec. 4	9 p. m.	28.93	1.77
Vermont	Burlington	29.59	Dec. 23	7 a. m.	30.35	Jan. 12	9 p. m.	28.73	1.62
						March 17	9 p. m.		
						Dec. 4	2 p. m.		
	St. Johnsbury	29.24	Dec. 23	7 a. m.	29.99	Dec. 4	9 p. m.	28.29	1.70
Massachusetts	Amherst	29.73	Dec. 23	2 p. m.	30.53	Dec. 4	7 a. m.	28.69	1.84
	Nantucket	29.98	Jan. 8	9 p. m.	30.80	Dec. 4	2 p. m.	29.02	1.78
	New Bedford	29.99	Jan. 3	7 a. m.	30.67	Dec. 4	2 p. m.	28.87	1.80
	North Attleboro'	9.77	Dec. 23	2 p. m.	30.58	Dec. 4	2 p. m.	28.76	1.82
	Princeton	28.80	Oct. 5	2 p. m.	29.64	Dec. 4	2 p. m.	27.76	1.88
	Southwick	29.94	Dec. 23	7 a. m.	30.75	March 16	9 p. m.	29.15	1.60
	Worcester	29.43	Dec. 23	2 p. m.	30.16	Dec. 4	2 p. m.	28.34	1.82
Connecticut	Pomfret	28.87	Dec. —	2 p. m.	29.55	Dec. 4	7 a. m.	27.93	1.88
New York	Canton	29.42	Dec. 23	7 a. m.	30.15	March 8	2 p. m.	28.26	1.89
	New York city, [D. & D. I.]	29.88	Dec. 23	7 a. m.	30.60	Dec. 4	7 a. m.	28.97	1.63
	Penn Yan (b)	29.21	Oct. 25	9 p. m.	29.73	Nov. 25	7 a. m.	28.39	1.34
			Dec. 23	7 a. m.					
	Sag Harbor	29.72	Dec. 23	2 p. m.	30.52	Dec. 4	7 a. m.	28.71	1.81
New Jersey	Bloomfield	29.86	Dec. 26	7 a. m.	30.61	Dec. 4	7 a. m.	28.91	1.73
	Burlington	29.94	Dec. 23	7 a. m.	30.70	Dec. 3	9 p. m.	29.20	1.50
	Lambertville	29.99	Dec. 23		30.70	Dec. 4		29.13	1.57
Pennsylvania	Gettysburg	29.43	Dec. 23	7 a. m.	30.08	Nov. 24	9 p. m.	28.63	1.45
	Harrisburg	29.72	Dec. 23	2 p. m.	30.39	Nov. 24	9 p. m.	28.96	1.43
	Lima	29.85	Dec. 23	7 a. m.	30.54	March 17	9 p. m.	29.05	1.49
	Morrisville	30.06	Dec. 23	7 a. m.	30.80	March 17	9 p. m.	29.30	1.50
	Norristown	29.90	Jan. 29	2 p. m.	30.69	Nov. 24	9 p. m.	29.15	1.54
	Philadelphia	29.91	Dec. 23	7 a. m.	30.50	March 7	9 p. m.	29.15	1.35
	Pittsburg, [O. S.]	28.98	Oct. 6	7 a. m.	29.67	Nov. 24	2 p. m.	28.18	1.49
Maryland	Frederick	29.69	April 3	7 a. m.	30.36	Nov. 24	2 p. m.	28.97	1.39
Virginia	Alexandria	30.02	Dec. 23	2 p. m.	30.64	Nov. 25	7 a. m.	29.33	1.31
North Carolina	Chapel Hill	29.49	Jan. 23	2 p. m.	30.07	Nov. 15	9 p. m.	28.95	1.12
South Carolina	Camden	29.89	Jan. 24	7 a. m.	30.48	Nov. 24	2 p. m.	29.23	1.25
Georgia	Savannah	30.06	Jan. 23	7 a. m.	30.61	Sept. 8	2 p. m.	29.04	1.57
	Sparta	29.42	Jan. 24	7 a. m.	29.90	Nov. 24	2 p. m.	28.88	1.02
Florida	Jacksonville	30.10	Jan. 2	9 p. m.	30.62	Dec. 15	9 p. m.	29.34	1.28
	Key West (c)	29.82	Jan. 2	2 p. m.	30.14	Nov. 25	7 a. m.	29.57	0.57
Tennessee	Glenwood	29.57	Jan. 23	7 a. m.	30.35	Jan. 11	9 p. m.	28.91	1.44
	Knoxville	29.04	Feb. 27	2 p. m.	29.84	Jan. 12	2 p. m.	28.19	1.65
Kentucky	Springdale	29.40	Jan. 6	9 p. m.	29.94	Nov. 24	7 a. m.	28.66	1.28
Ohio	Germantown	29.22	Jan. 23	7 a. m.	29.96	Jan. 12	7 a. m.	28.58	1.38
	Hillsborough	28.88	Jan. 23	2 p. m.	29.52	Nov. 24	2 p. m.	28.04	1.48
	Oberlin	29.09	Jan. 23	7 a. m.	29.67	Nov. 24	2 p. m.	28.12	1.55
Michigan	Detroit	29.53	Jan. 23	7 a. m.	30.13	Nov. 24	2 p. m.	28.53	1.60
Indiana	Milton	29.04	Jan. 23	2 p. m.	29.64	Nov. —	2 p. m.	28.12	1.52
	New Harmony	29.72	Jan. 23	7 a. m.	30.46	Nov. 24	7 a. m.	28.93	1.53
Missouri	St. Louis	29.47	Jan. 23	7 a. m.	30.26	Nov. 24	7 a. m.	28.84	1.42
						May 17	7 a. m.		
Wisconsin	Beloit	29.16	Nov. 4	7 a. m.	29.83	May 17	7 a. m.	28.35	1.48
Iowa	Dubuque	29.31	Jan. 6	7 a. m.	30.00	Nov. 24	7 a. m.	28.38	1.62
	Muscatine	29.51	Jan. 22	9 p. m.	30.15	May 17	7 a. m.	28.74	1.41
California	Sacramento, [Logan]	30.04	Jan. & Ap.		30.45	May —		29.00	1.45
	Stockton (d)	29.51	Dec. 10	7 a. m.	29.90	Jan. 14	7 a. m.	29.12	0.78

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at sunrise, 2 p. m., and sunset.

c Observations taken at 7 a. m. and 2 p. m.

d Observations taken at 8 a. m., 2 p. m., and 8 p. m.

## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1854.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	D.te.	M'n temp	Date.	Temp.	Date.	M'n temp		
CANADA EAST— St. Martin's .....	36.43	50.00	39.15	41.93	July 4	94.6	July 8	86.00	Dec. 23	-36.2	Dec. 22	-23.67	134.8	4.23
CANADA WEST— Hamilton (a) .....	49.02		46.98	49.00	July ....	86	July 20	82.50	Dec. ....	1	Dec. 19	5.50	85	.....
MAINE— Carnel .....	36.02	50.97	49.42	45.47	Sept. 6	98	July 4	82.70	Dec. 23	-32	Jan. 30	-19.67	130	5.05
NEW HAMPSHIRE— Concord .....	40.19	52.25	44.52	45.65	Sept. 6	94	July 3	84.30	Jan. 30	-25	Jan. 31	-7.67	119	4.25
Exeter .....	38.73	51.92	41.65	44.10	July 4	92	July 5, 9	80.00	Jan. 29, 30	-20	Jan. 25, 29	-6.33	112	4.88
Hanover .....	35.85	50.11	40.91	42.29	Sept. 6	90	Aug. 4	78.10	Jan. 29	-29	Jan. 29	-17.83	119	5.85
Manchester .....	39.72	56.16	47.24	47.71	July 20	103	July 4	85.30	Jan. 30	-20	Jan. 29	-7.67	123	5.28
Simon Falls .....	41.63	53.93	44.28	46.62	Sept. 6	98	July 4	85.50	Jan. ....	-22	Jan. 29	-4.00	120	4.91
VERMONT— Brandon .....	39.35	50.94	43.08	44.46	July 29	92.3	July 20	82.90	Dec. 23	-21	Dec. 22	-11.00	112.3	5.05
Burlington .....	41.89	52.41	43.33	45.85	July 20	98	July 4	85.00	Dec. 20	-20	Dec. 22	-14.33	118	3.21
Castleton .....	41.30	54.79	43.76	46.28	July 20	102	July 20	80.00	Dec. 22	-20	Dec. 22	-10.67	122	5.13
St. Johnsbury .....	37.98	47.93	41.96	41.96	Sept. 6	93	July 4	80.00	Jan. 29	-32	Jan. 29	-20.50	125	3.86
MASSACHUSETTS— Amherst .....	42.32	53.74	45.28	47.11	July 4	94	July 4	85.10	Jan. 29	-9.6	Jan. 29	-3.20	103.6	4.49
Mendon .....	42.07	52.95	44.74	46.59	July 4	94	July 4	83.10	Jan. 29	-8	Jan. 29	0.00	106	5.05
Nantucket .....	48.96	53.77	48.35	50.36	July 19	89	July 5	77.70	Jan. 29	10	Jan. 25	12.85	79	4.96
New Bedford .....	45.69	54.66	46.48	48.94	July 5	92.5	July 5	82.30	Jan. 29	-4.5	Jan. 29	6.17	97	6.37
North Attleboro? .....	43.56	54.65	44.25	47.49	July 4	95.8	July 4	85.10	Jan. 29	-8.3	Jan. 29	-0.30	104.1	4.86
Princeton .....	40.82	49.53	42.71	44.02	Jul. 4, 8, 6	89.5	July 4	81.20	Jan. 29	-3.9	Dec. 22	2.33	93.4	4.95
Southwick .....														4.78
Springfield .....	41.46	50.00	45.56	47.81	July 21	95	July 4	87.00	Jan. 29	-12	Jan. 29	1.33	107	.....
Worcester .....	43.43	53.56	46.30	47.76	July 4	93.5	July 4	87.80	Jan. 29	-6	Jan. 29	1.33	107	4.28
RHODE ISLAND— Providence .....	43.37	55.17	45.12	47.88	July 4	94	July 4	83.70	Jan. 29	-6	Jan. 29	1.80	100	5.09
CONNECTICUT— Pomfret .....	42.87	52.28	44.41	46.52	July 4	90	July 4	82.70	Jan. 29	-7	Jan. 29	1.00	97	4.73
Saturn .....	41.30	54.34	44.09	47.43	July 9	92	July 4	85.70	Dec. 20	-7	Dec. 20	0.33	100	.....
West Cornwall .....	41.03	53.90	44.22	49.72	Sept. 6	91	July 20	82.60	Dec. 20	-3	Dec. 19	0.33	94	4.65
NEW YORK— Baldwinsville .....	41.90	51.17	45.84	47.77	July 19, 20	88	July 20	81.00	Jan. 29	-3	Jan. 28	4.00	91	5.28
Canton .....	40.18	51.63	42.70	44.84	Sept. 5	95	July 17	85.20	Jan. 25	-22	Dec. 22	-17.33	123	5.78
Fishkill (b) .....	46.47	59.61	51.37	53.48	July ....	101			Dec. ....	-10			111	.....
Gouverneur .....	40.14	51.93	42.81	44.96	July 22	97	July 20	86.70	Jan. 25	-36	Dec. 19	-16.00	133	6.15
Lodi .....	44.20	55.35	45.31	48.29	Aug. 24	94	July 20	86.00	Jan. 28	-4	Jan. 28	3.00	98	6.04
New York city (c) .....	47.68	58.10	51.33	52.37	July 21	99	July 21	88.20	Dec. 20	4	Dec. 20	12.00	95	.....
New York city, [Deaf and Dumb Inst.] .....	49.35	56.60	49.66	51.94	July 21	95	July 20	86.60	Dec. 20	3	Dec. 20	10.00	92	4.86
Penn Yan (d) .....	40.49	50.00	47.46	47.68	July 19, 20	95	Sept. 6	85.30	Jan. 25	-4	Jan. 28	6.00	99	5.60
Sag Harbor .....	47.67	58.65	47.27	51.20	Sept. 5, 6	93	July 4	85.70	Jan. 29	4	Jan. 29	9.33	89	4.94
Wampsville .....	42.95	55.54	43.16	47.23	July 8, 20	94	July 21	84.00	Jan. 25	-11	Dec. 28	0.00	105	6.15
NEW JERSEY— Bloomfield .....	46.31	60.13	48.67	51.70	July 21	101	July 21	87.00	Dec. 20	1	Dec. 20	8.17	100	4.48
Burlington .....	41.80	52.41	43.33	45.85	July 21	98	July 21	83.00	Jan. 3	4	Dec. 20	10.00	94	5.86
Lambertville .....	46.28	62.77	49.18	52.78	July 21	100			Dec. 20	1			101	.....
PENNSYLVANIA— Gettysburg .....	49.20	61.47	50.54	52.95	July 21	100	July 21	88.00	Dec. 20	0	Dec. 20	11.00	100	4.46
Harri burg .....	50.00	61.11	55.40	55.72	Sept. 5, 6	97	July 21, 22	90.60	Dec. 20	11	Dec. 20	16.67	88	4.65
Lima .....	47.45	58.96	49.68	52.03	July 21	95	July 7	87.10	Dec. 3	-1.3	Dec. 20	8.00	96.3	4.91
Morrisville .....	45.99	59.32	48.92	51.41	July 21	98	July 21	85.00	Jan. 3	2	Jan. 20	11.00	96	3.61
Norristown .....	48.11	59.38	50.61	52.70	July 21	97	July 21	85.60	Dec. 20	5	Dec. 20	8.67	102	4.65
Paradise .....				53.25										
Philad-elphia .....	50.68	62.47	54.64	55.93	July 21	99	July 21	91.30	Dec. 20	7	Dec. 20	14.33	92	5.30
Pittsburg, [O. S.] .....	48.93	58.98	51.77	53.23	July 20, 21	98	Sept. 3	87.70	Jan. 2	2	Jan. 23	4.00	96	.....
West Haverford .....	47.02	61.18		54.10	July 21	98	July 21	89.50	Dec. 20	3	Dec. 20	11.00	95	4.46
MARYLAND— Frederick .....	49.69	62.10	52.78	54.86	July 21	100	July 21	90.70	Jan. 3	9.8	Dec. 20	18.00	90.2	4.70
Smithman Hall .....	49.66	62.50	61.22	57.79	Aug. 22	98	July 21	87.60	Dec. 20	5	Dec. 20	14.67	93	4.33
VIRGINIA— Alexandria .....	51.37	62.77	55.26	56.47	July 21	99.5	Aug. 2	90.30	Jan. 3, 24	12	Dec. 20	19.00	87.5	4.41
Arlington .....	51.19	66.10	56.85	58.06	Sept. 4, 5	102	July 21	83.70	Dec. 8	6	Jan. 23	14.33	96	3.82
Crichton's Store (e) .....	56.73	66.86		61.79	July 5, A. 2	103	Aug. 2	91.00	Jan. 9	19	Jan. 23	?	83	4.67
Lewisburg .....	49.04	64.36	52.71	55.37	July 30, 31	99	Aug. 1	85.30	Jan. 3	10	Jan. 23	17.33	89	4.83
NORTH CAROLINA— Chapel Hill .....	51.15	69.06	58.76	60.66	June 30	100	July 5	89.60	Jan. 21	16	Jan. 9	25.00	84	4.58
SOUTH CAROLINA— Camden .....	57.06	72.05	60.67	63.26	June 29	101.6	June 29	93.00	Dec. 6	14	Dec. 5, 21	25.23	88.6	4.70
St. John's (f) .....	57.18	70.61	61.86	62.88	June 28, 29	91	July 9	85.33	?	?	?	?	?	.....
GEORGIA— Savannah .....	60.81	74.35	65.19	66.78	Aug. 3	101.4	Aug. 3	90.30	Dec. 6	24	Jan. 9	39.13	77.4	4.23
Sparta .....	55.93	73.39	61.63	63.65	Aug. 3	99	July 18	88.00	Dec. 6	18	Dec. 20	29.67	81	4.73
Whitemarsh Island .....	61.16	70.66	63.55	65.19	July 9	95.5	July 9	87.10	Dec. 6	21	Dec. 5, 20	33.67	75.5	3.97

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 7 a. m., noon, and 6 p. m.

c Observations taken at sunrise, noon, 3 p. m., sunset, and 10 p. m.

Mean at noon, 56.94; at sunset, 54.91.

d Observations taken at sunrise, 2 p. m., and sunset.

e Hours of observation not uniform. See monthly tables.

f Observations taken at sunrise, 2 p. m., and 9 p. m.



## No. 52 —THERMOMETER—SUMMARY FOR THE YEAR 1854—Continued.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
FLORIDA—	°	°	°	°		°		°		°		°		
Cedar Keys.....	67.68	74.76	70.68	71.04	June 27	91	Aug. 2,3	88.30	Dec. 6	32	Dec. 20	41.83	59	3.62
Jacksonville.....	64.88	76.39	67.32	69.53	Sept. 5	96	July 10	89.30	Dec. 6	26	Dec. 20	39.67	68	3.46
Key West.....	73.64	79.92	.....	76.78	Aug. 1	93	June 11	86.50	Dec. 6,21	52	Dec. 6,21	55.00	41	1.18
MISSISSIPPI—														
Garlandville.....	61.64	78.83	65.57	68.68	July 1	106	July 1	92.50	Dec. 6	19	Jan. 8	26.67	87	4.30
TEXAS—														
Austin.....	60.49	75.08	63.73	66.43	Aug. 16	96	June 21	86.70	Jan. 21,22	18	Jan. 6	23.33	78	5.25
New Wied.....	63.88	64.90	65.06	64.61	Sept. 15	102	Aug. 6,10	89.60	Jan. 21	21	Jan. 6	22.67	83	5.41
TENNESSEE—														
Glenwood.....	53.65	66.85	58.14	59.55	Sept. 9	98.2	Aug. 1	88.40	Jan. 8	8.8	Jan. 21	13.93	89.4	4.91
Knoxville.....	52.88	64.18	56.01	57.69	July 18	93.5	June 30	83.00	Jan. 9	11	Jan. 23	17.58	85.5	.....
KENTUCKY—														
Danville.....	55.11	67.23	58.05	60.14	Sept. 5	99	Sept. 5	88.00	Jan. 23	5	Jan. 23	12.33	94	.....
Springdale.....	47.49	66.17	58.74	57.47	Aug. 25	103	Oct. 6	88.20	Jan. 23	— 4	Jan. 23	7.00	107	4.91
OHIO—														
Germantown.....	41.66	61.57	50.49	51.24	July 20	97.9	July 20	85.50	Jan. 23	— 7.6	Jan. 23	2.00	105.5	5.28
Hillsborough.....	49.43	60.22	51.71	53.78	July 21	98	Aug. 1	85.50	Jan. 23	— 5	Jan. 23	4.00	103	3.99
Oberlin.....	46.87	57.50	48.82	51.06	July 19	100	Sept. 4	87.00	Jan. 23	— 4	Jan. 23	3.62	104	4.19
Urbana.....	45.72	61.32	.....	53.52	Aug. 30	98	Sept. 2	.....	Jan. 23	.....	.....	.....	102	.....
Savannah.....	49.46	61.25	49.33	53.35	Sept.....	.....	.....	.....	January	— 4	.....	.....	.....	.....
MICHIGAN—														
Ann Arbor, [Woodruff].....	43.35	54.91	47.51	48.59	Aug. 30	100	Aug. 1	86.60	Dec. 19	—10	Jan. 21	— 7.00	110	5.04
Battle Creek.....	45.24	61.34	48.31	51.63	Sept. 4	101	July 31	90.00	Jan. 23	—11	Jan. 21	— 1.00	112	4.23
Detroit.....	48.62	55.87	47.43	50.64	July 19	96	July 4	87.67	Jan. 23	0	Jan. 23	5.00	96	.....
Flint.....	43.41	57.69	45.52	48.87	Aug. 30	102	.....	.....	Feb. 4	—15.5	.....	.....	117.5	.....
INDIANA—														
Milton.....	48.16	60.83	51.08	53.36	Sept. 4	98	July 30	87.70	Jan. 23	— 8	Jan. 23	3.67	106	3.89
New Harmony.....	52.69	65.73	55.96	58.13	Aug. 3	101.5	Aug. 3	92.50	Jan. 23	0	Jan. 23	9.33	101.5	4.71
Richmond (a).....	47.18	59.89	46.61	51.23	July 21	100	July 21	87.00	Jan. 20	— 9	Jan. 20	1.00	109	.....
ILLINOIS—														
Athens.....	48.48	64.43	52.58	55.16	Sept. 1	99	July 30,31	89.00	Jan. 23	—12	Jan. 23	0.03	111	4.33
Augusta.....	46.10	61.67	51.83	53.20	Aug. 31	99.5	Aug. 31	88.30	Jan. 21	—11	Jan. 21	— 0.67	110.5	3.82
Ottawa (a).....	46.67	60.27	48.12	51.69	Aug. 30	98	July 31	88.00	Jan. 23	—11	Jan. 21	— 1.33	109	4.70
IOWA—														
Dubuque.....	44.69	57.85	49.24	50.59	Sept. 4	99	July 31	87.70	Feb. 17	—15	Jan. 22	7.33	114	4.06
Fort Madison (c).....	47.84	63.27	54.74	55.28	Aug. 1	105	July 17	95.00	Jan. 21	—12	Jan. 21	6.00	117	4.00
Muscatine.....	42.47	59.69	47.67	49.94	July 17	99	July 30	84.67	Jan. 21	—14	Jan. 22	— 4.00	113	3.77
Poultney.....	41.56	56.15	43.11	46.94	Aug. 31	96	July 31	83.30	Jan. 6	—24	Jan. 22	—12.40	130	4.78
MISSOURI—														
St. Louis.....	52.67	65.45	56.98	58.37	Sept. 1	100.3	Aug. 1	91.40	Jan. 21	— 3	Jan. 21	5.33	103.3	4.25
WISCONSIN—														
Beloit.....	44.13	57.33	46.32	49.26	Aug. 30	97	July 18	88.00	Jan. 23	—19	Jan. 23	— 9.00	116	3.58
Janesville.....	41.46	56.80	44.53	47.60	July 18	98	July 18	87.00	Jan. 23	—24	Jan. 21	—13.33	122	4.08
Platteville.....	44.08	59.55	47.03	48.89	June 23	100	July 3	89.10	Jan. 23	—24	Jan. 22	—12.33	124	4.58
CALIFORNIA—														
Sacramento, [Logan].....	.....	.....	.....	59.51	July.....	101.5	.....	.....	January	19	.....	.....	82.5	.....
San Francisco (d).....	49.68	64.57	51.59	55.28	Sept.....	87	.....	.....	January	25	.....	.....	62	.....
Stockton (e).....	53.26	72.33	57.76	61.12	July 7, 8	98	Aug. 17	86.00	Jan. 7	21	Jan. 21	28.67	77	.....
MEXICO—														
Mirador (f).....	.....	.....	.....	67.42	.....	.....	May ..	82.62	.....	.....	January	51.12	.....	.....
EASTERN CONTINENT—														
Mosul, Mesopotamia.....	.....	.....	.....	68.05	July.....	109.6	.....	.....	January	30.5	.....	.....	79.1	.....

a Hours of observation not uniform. See monthly tables.

b Same temperature on the 29th, 30th, and 31st of August.

c Observations taken at 6 a. m., noon, and 7 p. m.

d Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at 9 a. m., 57.11.

e Observations taken at 8 a. m., 2 p. m., and 8 p. m.

f Hours of observation not given.

## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1854.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
CANADA EAST—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
St Martin's.....	.239	.320	.263					.822	.692	.821	2	21	29
St Martin's (a).....	.249	.332	.260	July 4	.986 <sup>b</sup>	Dec. 23	.000	.828	.752	.838	6	30	49
VERMONT—													
Burlington.....	.248	.274	.257	July 21	1.056	Dec. 8, 19	.000 <sup>c</sup>	.673	.546	.673	0	6	0
MASSACHUSETTS—													
Amherst.....	.315	.344	.326	Sept. 6	1.122	Dec. 22	.019	.837	.677	.840	36	19	36
Nantucket.....	.311	.300	.311	July 26	.813	Dec. 31	.000 <sup>d</sup>	.757	.621	.786	0	2	0
New Bedford.....	.337	.402	.345	Aug. 22	1.031	Jan. 29	.029	.910	.787	.921	29	38	46
North Attleboro' (e).....	.276	.280	.278	Sept. 6	.884	Oct. 21	.000 <sup>f</sup>	.817	.581	.803	0	0	0
Princeton.....	.263	.282	.269	Sept. 6	.796	April 2	.000	.825	.672	.789	0	0	6
Worcester.....	.250	.280	.262	July 4	.982	Dec. 9	.000 <sup>g</sup>	.649	.570	.651	0	0	0
CONNECTICUT—													
Pomfret.....	.311	.363	.323	July 21	1.033	Dec. 2	.000	.905	.783	.897	52	38	0
NEW YORK—													
New York city, [Deaf and Dumb Inst.].....	.307	.334	.323	July 26	.886	Feb. 23	.025	.742	.647	.735	30	24	22
Penn Yan (h).....		.303							.547			11	
NEW JERSEY—													
Bloomfield.....	.316	.372	.337	July 20	1.026	Nov. 10, 14	.000	.806	.621	.806	38	0	0
PENNSYLVANIA—													
Lima.....	.333	.361	.350	July 23	.984	Feb. 3	.017	.828	.617	.816	12	20	29
Norristown.....	.334	.406	.356	Sept. 6	1.108	Jan. 23	.019	.802	.648	.774	31	12	20
Philadelphia.....	.354	.383	.386	Aug. 1	1.024	Dec. 22	.029	.806	.634	.741	31	25	35
SOUTH CAROLINA—													
Camden.....	.447	.466	.474	June 28	1.313	Feb. 12	.000	.840	.541	.781	36	12	0
St John's.....	.461	.517	.506					.843	.621	.821	30	17	10
GEORGIA—													
Savannah.....	.520	.524	.540	Aug. 1	1.052	Dec. 5	.069	.821	.552	.771	38	18	31
FLORIDA—													
Jacksonville.....	.605	.707	.630	July 1	1.255	Feb. 12	.020	.880	.753	.874	34	38	5
TEXAS—													
Austin.....	.485	.453	.516	Aug. 6	.856	Jan. 21	.036	.831	.516	.779	36	10	25
New Wied.....	.547	.660	.560	July 8	1.345	Jan. 7, 26	.000	.783	.607	.780	18	0	0
TENNESSEE—													
Glenwood.....	.397	.399	.419	Aug. 19	1.070	Feb. 7, 15, 16	.000	.812	.546	.717	0	0	20
KENTUCKY—													
Springdale.....	.350	.463	.446	Aug. 23	1.345	Feb. 4	.000	.884	.650	.784	0	14	16
OHIO—													
Germantown.....	.341	.342	.354	June 29	1.039	Jan. 21	.040	.846	.567	.817	50	25	40
Hillsborough.....	.350	.365	.350	Aug. 26	1.132	March 17	.032	.847	.620	.788	8	13	11
INDIANA—													
New Harmony.....	.400	.439	.429	July 8	1.199	March 20	.023	.838	.599	.802	16	1	5
MISSOURI—													
St. Louis.....	.364	.370	.386	June 30	.971	Jan. 21	.025	.748	.515	.678	37	15	29
IOWA—													
Dubuque.....	.297	.318	.328	June 27	.137	Jan. 6	.007	.752	.558	.732	28	9	28

a See note for this place in table 26.

b Same amount June 27.

c Same amount January 22, 25, and 29, and February 3, 23, and 24.

d Same amount February 3 and April 5.

e For 11 months only—August wanting.

f Same amount February 2 and March 22.

g Same amount January 28, February 3, March 9, April 2, and November 6.

h For 11 months only—January wanting.



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1854.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
CANADA EAST—																				
St. Martin's.....	21	294	15	65	23	281	82	281	33	1095	---	---	---	---	---	---	---	---	---	
MAINE—																				
Carmel.....	0	61	16	112	35	128	76	285	132	854	8	46	9	92	21	89	42	145	452	
Fryeburg.....	108	118	63	58	39	277	114	179	39	995	7	6	9	9	12	90	169	225	527	
NEW HAMPSHIRE—																				
Concord.....	54	182	20	187	18	289	6	339	0	1095	---	---	---	---	---	---	---	---	---	
Exeter.....	68	124	68	101	33	214	214	204	8	1034	43	92	46	71	23	160	136	119	690	
Hanover.....	162	57	12	155	120	178	62	143	4	1093	25	4	5	16	22	45	55	96	268	
Manchester.....	140	51	106	61	124	161	166	254	2	1065	42	40	71	23	42	51	413	96	778	
VERMONT—																				
Brandon.....	268	2	16	44	406	52	45	149	83	1065	53	1	0	6	43	58	131	132	424	
Burlington.....	333	45	16	42	137	26	95	98	2	1094	---	---	---	---	---	---	---	---	---	
Castleton.....	283	7	8	28	244	106	36	62	317	1091	---	---	---	---	---	---	---	---	---	
St. Johnsbury.....	14	5	2	13	11	291	81	655	0	1072	---	---	---	---	---	---	---	---	---	
MASSACHUSETTS—																				
Amherst.....	61	50	24	270	53	104	50	393	6	1016	8	17	4	25	21	64	54	167	360	
Mendon.....	23	163	33	39	17	495	50	275	0	1095	18	161	35	36	20	482	54	255	1061	
Nantucket.....	59	182	17	103	82	286	56	210	85	1080	---	---	---	---	---	---	---	---	---	
New Bedford.....	79	155	18	87	52	356	64	256	7	1074	---	---	---	---	---	---	---	---	---	
North Attleboro'.....	141	92	44	32	216	135	128	181	0	969	80	84	24	34	108	122	138	124	714	
Princeton.....	35	208	48	37	29	127	255	238	7	984	12	53	11	8	11	59	182	113	449	
Richmond.....	5	122	1	113	23	368	3	430	9	1074	21	87	2	99	43	277	25	259	813	
Southwick.....	34	141	12	47	105	83	25	137	99	683	8	34	1	14	20	107	62	65	306	
Worcester.....	17	137	9	90	8	306	24	502	0	1093	---	---	---	---	---	---	---	---	---	
CONNECTICUT—																				
Pomfret.....	65	182	21	59	101	286	55	326	0	1095	29	112	8	43	57	224	63	178	714	
West Cornwall.....	47	56	35	159	50	259	118	339	1	1064	---	---	---	---	---	---	---	---	---	
NEW YORK—																				
Baldwinsville.....	56	35	95	44	34	151	197	377	0	989	17	5	2	8	4	37	330	299	700	
Canton.....	48	226	9	20	23	480	36	132	38	1012	25	168	7	14	18	398	31	92	753	
Gouverneur.....	126	199	3	8	51	402	120	186	0	1095	71	151	2	1	40	236	265	102	868	
Lodi.....	74	28	25	168	121	159	130	282	105	1092	19	7	2	5	41	71	207	168	520	
New York city.....	103	385	84	202	273	356	252	512	17	2184	---	---	---	---	---	---	---	---	---	
New York city, [Deaf & Dumb Institution].....	42	184	47	142	32	140	203	266	9	1065	12	53	63	53	22	139	314	122	778	
Penn Yan.....	56	140	10	14	290	197	295	93	0	1095	---	---	---	---	---	---	---	---	---	
Sag Harbor.....	73	165	56	106	120	270	79	201	11	1081	28	81	19	39	30	343	153	165	858	
Wampsville.....	9	17	106	95	178	106	162	112	4	1089	8	18	98	91	151	110	410	100	986	
NEW JERSEY—																				
Bloomfield.....	22	199	9	82	78	332	74	189	0	985	---	---	---	---	---	---	---	---	---	
Burlington.....	121	151	15	12	46	232	228	96	185	1086	33	74	9	8	36	94	61	15	330	
Lambertville.....	36	162	15	93	44	251	17	318	0	936	---	---	---	---	---	---	---	---	---	
PENNSYLVANIA—																				
Gettysburg.....	96	122	20	30	140	274	123	193	93	1091	16	24	7	14	33	149	237	215	695	
Harrisburg.....	29	19	65	197	87	50	246	331	0	1024	7	0	7	49	32	20	123	176	414	
Lima.....	78	189	53	96	75	99	50	230	238	1108	35	40	21	25	21	20	204	221	687	
Morrisville.....	113	155	46	61	43	247	78	210	142	1095	54	65	14	20	18	141	218	184	714	
Norristown.....	5	58	104	107	30	113	393	160	2	972	4	23	81	37	17	95	398	48	703	
Philadelphia.....	87	189	41	49	44	338	103	242	0	1093	19	9	2	13	13	94	98	43	291	
West Haverford.....	27	72	41	25	29	181	79	167	98	719	27	27	13	5	7	51	85	178	393	
MARYLAND—																				
Frederick.....	82	106	32	58	145	199	159	181	114	1076	46	14	13	18	59	94	353	87	684	
Schellman Hall.....	40	28	10	40	61	205	542	166	0	1092	26	19	24	32	31	90	603	40	865	
VIRGINIA—																				
Alexandria.....	123	155	39	103	276	124	58	200	0	1078	---	---	---	---	---	---	---	---	---	
Ashland.....	145	47	23	23	229	242	107	71	192	1079	23	2	1	0	32	47	94	23	222	
Crichton's Store.....	216	86	16	37	214	345	87	44	27	1072	81	58	12	25	55	386	210	45	872	
Lewisburg.....	---	---	---	---	---	---	---	---	---	---	18	2	1	3	16	74	207	12	333	
NORTH CAROLINA—																				
Chapel Hill.....	152	110	48	34	156	194	264	133	0	1091	34	55	22	13	111	228	114	51	628	
SOUTH CAROLINA—																				
Camden.....	75	183	90	90	108	164	88	82	44	924	17	68	14	40	25	140	92	88	484	





## No. 55.—WINDS—MEAN VELOCITY FOR THE YEAR 1854.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
CANADA EAST— St. Martin's.....	2.48	3.85	2.57	2.54	3.36	2.47	4.11	5.06	3.57	.....	.....	.....	.....	.....	.....	.....	.....	.....
MAINE— Carmel.....	16.66	7.85	5.59	5.20	4.85	6.10	6.08	11.20	6.94	18.50	8.83	4.89	5.07	4.90	7.48	6.29	13.06	8.83
Fryeburg.....	3.97	2.59	2.96	7.02	5.46	5.82	2.53	12.18	5.86	2.40	3.33	4.75	10.00	4.50	3.35	2.70	2.86	3.11
NEW HAMPSHIRE— Concord.....	3.10	3.97	1.70	4.09	4.50	3.56	4.83	7.64	5.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Exeter.....	12.54	13.68	10.12	10.77	10.15	11.46	10.21	11.74	11.33	11.10	14.39	11.48	9.76	7.10	10.33	11.20	13.55	11.56
Hanover.....	2.38	3.35	0.33	1.87	1.13	2.41	2.87	4.24	2.81	24.78	32.50	32.40	27.44	29.86	17.36	20.46	21.03	23.27
Manchester.....	3.32	3.27	2.85	2.95	2.40	2.74	3.75	4.73	3.46	3.55	5.02	4.10	8.22	7.24	4.39	3.88	5.37	4.21
VERMONT— Brandon.....	2.71	2.00	2.00	6.16	5.13	2.24	2.63	3.73	2.92	4.87	2.00	?	2.00	2.74	2.76	2.18	2.17	2.61
Burlington.....	4.34	5.17	6.12	4.17	10.88	6.26	14.07	8.69	8.30	.....	.....	.....	.....	.....	.....	.....	.....	.....
Castleton.....	8.17	10.29	5.75	7.14	6.14	7.20	8.25	9.55	5.31	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Johnsbury.....	6.00	2.00	?	?	6.00	4.17	3.45	2.99	3.48	.....	.....	.....	.....	.....	.....	.....	.....	.....
MASSACHUSETTS— Amherst.....	6.44	7.98	4.09	8.01	7.76	9.87	9.11	11.26	9.31	14.57	28.29	32.50	47.82	50.42	36.54	23.25	26.74	30.69
Mendon.....	16.78	11.39	6.48	13.92	18.59	8.15	10.54	11.53	10.09	19.29	12.09	7.68	12.22	16.65	7.29	10.81	11.12	9.74
Nantucket.....	16.53	16.98	23.17	8.57	8.09	10.62	9.95	20.63	12.90	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford.....	5.91	7.65	4.56	5.72	7.62	6.03	7.37	8.51	6.91	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Attleboro'.....	3.91	5.07	2.93	5.34	3.29	3.87	7.85	6.43	4.87	4.26	6.17	4.00	8.00	4.02	4.08	3.13	3.81	4.29
Princeton.....	4.43	3.42	2.94	2.16	5.24	4.29	3.63	4.61	1.11	2.67	2.61	2.91	2.25	2.36	3.66	3.20	3.01	3.09
Richmond.....	2.00	7.54	25.00	11.47	2.26	9.46	9.66	11.05	9.82	2.20	7.49	4.00	8.75	2.28	6.47	9.43	7.50	6.74
Southwick.....	6.53	11.67	5.00	9.78	9.13	9.82	13.92	17.71	10.14	27.33	23.12	12.00	22.08	21.18	16.65	10.75	22.33	18.00
Worcester.....	6.33	16.22	14.50	5.10	12.00	11.93	2.66	12.33	12.72	.....	.....	.....	.....	.....	.....	.....	.....	.....
CONNECTICUT— Pomfret.....	3.08	4.22	2.57	3.14	2.46	2.84	3.09	4.60	3.55	2.25	3.54	3.33	3.27	2.71	2.57	2.33	3.91	2.99
West Cornwall.....	7.67	11.50	7.29	4.85	3.26	4.98	7.00	11.26	7.65	.....	.....	.....	.....	.....	.....	.....	.....	.....
NEW YORK— Baldwinsville.....	6.13	4.34	2.53	5.43	9.55	6.77	4.08	8.98	6.58	8.35	13.00	2.00	18.50	21.75	7.17	3.65	8.53	6.32
Canton.....	2.85	5.27	4.66	6.85	4.65	6.31	10.08	6.66	5.81	2.48	4.60	5.14	7.08	4.72	5.26	5.42	6.38	5.18
Gouverneur.....	4.22	4.64	6.67	3.50	8.12	6.32	4.74	4.19	5.39	2.23	2.31	2.00	2.00	2.80	2.79	2.16	2.39	2.42
Lodi.....	5.87	5.42	4.56	9.31	10.49	10.21	8.01	12.53	9.01	2.63	2.57	3.00	5.20	4.39	3.01	3.04	3.92	3.43
New York city.....	2.06	2.67	3.17	2.76	2.16	2.07	2.31	3.88	2.74	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York city, [Deaf and dumb Institution].....	2.10	4.89	1.43	2.91	2.48	2.46	2.82	5.22	3.62	2.00	4.00	2.00	5.08	2.00	2.00	1.59	3.33	2.31
Sag Harbor.....	5.42	8.30	4.46	4.95	5.09	7.86	6.62	9.66	7.16	7.54	9.33	14.47	11.41	11.47	6.20	5.03	6.10	6.91
Wampsville.....	5.00	4.12	4.98	5.11	6.09	5.42	7.00	7.01	6.26	2.50	3.22	3.59	3.91	5.05	4.18	4.79	4.54	4.49
NEW JERSEY— Bloomfield.....	6.00	8.91	?	5.70	4.40	4.50	13.50	8.91	7.62	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burlington.....	8.72	8.83	7.33	5.75	10.31	7.20	9.62	8.64	6.76	13.64	13.07	6.78	4.00	15.42	8.95	10.54	9.57	11.26
PENNSYLVANIA— Gettysburg.....	2.93	2.92	2.11	2.21	2.53	3.57	4.77	6.64	3.63	3.87	5.29	4.29	5.25	4.30	5.06	4.87	6.56	5.40
Harrisburg.....	3.21	5.00	3.71	3.39	3.33	4.43	3.35	6.22	4.41	2.86	?	2.85	3.31	3.41	3.95	4.45	8.19	5.75
Lima.....	6.71	7.45	4.00	4.78	5.19	6.74	5.19	11.59	5.95	5.10	10.47	10.26	10.92	12.26	7.87	4.63	6.13	6.73
Morrisville.....	3.85	5.68	3.42	4.37	6.79	4.37	3.29	5.67	4.15	2.63	8.14	3.43	4.85	11.28	4.01	2.58	4.20	4.10
Norri-town.....	11.40	9.26	4.22	6.12	5.80	4.54	5.04	10.76	6.20	8.00	4.40	4.62	5.76	5.44	5.15	3.84	6.82	4.46
Philadelphia.....	5.18	4.30	4.73	4.78	4.32	3.45	4.40	6.33	4.64	2.95	8.22	4.00	7.85	8.08	4.85	4.51	6.37	5.21
West Haverford.....	8.00	12.74	7.95	7.48	4.14	7.69	4.48	10.22	7.26	9.48	14.19	15.54	15.20	15.00	15.67	10.84	11.11	12.04
MARYLAND— Frederick.....	6.11	6.28	3.45	6.67	6.46	8.44	10.62	14.61	6.90	9.33	16.91	9.33	10.40	6.57	9.20	5.95	9.32	7.60
Schellman Hall.....	3.70	4.00	3.00	5.93	7.93	4.23	3.65	4.34	4.20	2.92	3.05	2.25	3.69	3.87	3.06	2.43	6.05	2.82
VIRGINIA— Alexandria.....	5.76	4.04	2.56	3.53	3.40	3.58	3.89	7.46	4.54	.....	.....	.....	?	2.87	2.93	3.97	4.00	3.51
Ashland.....	5.03	4.57	?	3.60	3.34	6.68	5.24	4.93	2.80	3.77	4.00	2.00	.....	.....	.....	.....	.....	.....
Crichton's Store.....	3.01	2.87	3.00	3.39	3.65	3.77	5.55	5.42	3.61	29.77	27.72	23.58	24.48	33.67	11.89	6.49	12.79	15.22
Lewisburg.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11.94	13.50	4.00	13.67	14.44	9.97	11.33	23.42	11.66
NORTH CAROLINA— Chapel Hill.....	3.88	3.14	3.00	2.47	3.22	3.34	3.65	4.89	3.60	2.67	2.64	2.55	2.46	3.30	3.23	2.73	2.35	2.96
SOUTH CAROLINA— Camden.....	7.12	10.05	6.02	5.40	5.84	9.00	10.22	10.71	7.88	11.18	9.28	5.71	8.10	10.04	15.24	11.54	7.61	11.02
GEORGIA— Savannah.....	5.24	6.64	6.73	6.44	5.16	4.20	4.14	5.72	5.45	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sparta.....	4.57	6.43	4.74	5.94	4.11	6.96	7.51	7.62	6.76	5.00	11.23	10.75	7.45	9.33	11.08	9.69	7.47	9.49
Whitemarsh Island.....	7.92	16.56	9.66	8.56	11.17	8.68	7.67	10.53	8.95	6.55	15.12	5.14	6.33	9.91	9.83	6.88	4.93	8.63
FLORIDA— Cedar Keys.....	8.30	9.66	8.02	6.79	8.90	10.52	10.85	11.50	8.98	4.31	3.92	4.83	4.78	5.61	6.59	6.35	5.64	5.23
Jacksonville.....	4.23	6.00	5.26	3.91	5.48	6.95	4.85	4.60	5.34	3.69	6.56	3.18	4.12	4.44	5.50	2.70	5.34	5.13
Key West.....	15.47	12.60	13.77	11.15	13.97	4.29	10.75	12.07	12.60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Warrington.....	7.57	7.82	9.03	7.29	4.41	7.43	6.55	5.18	6.52	6.93	8.00	17.60	9.46	11.17	7.95	6.60	4.90	7.33
MISSISSIPPI— Garlandsville.....	10.00	3.73	4.94	4.00	8.11	5.48	4.13	7.76	5.20	8.83	6.17	7.17	4.38	16.83	5.74	5.10	6.32	6.69
TEXAS— Austin.....	7.45	3.43	3.79	5.05	4.95	5.20	3.11	4.94	5.00	4.10	3.49	3.79	4.20	4.29	3.74	2.29	2.72	3.88
New Wied.....	9.80	4.40	3.75	6.06	10.07	7.04	5.28	4.75	6.13	4.67	4.80	2.21	3.05	5.14	7.50	2.18	2.09	3.24
TENNESSEE— Glenwood.....	4.22	3.89	2.32	4.66	5.44	6.74	5.34	9.38	5.65	3.33	4.53	2.24	4.59	4.95	5.03	2.82	4.63	3.89
OHIO— Germantown.....	2.97	2.69	2.00	2.16	2.12	2.78	3.56	3.31	2.75	2.12	2.44	2.00	2.25	2.70	2.83	2.78	2.46	2.66
Hillsborough.....	9.44	6.10	5.50	5.26	9.18	9.54	16.50	10.57	8.72	2.00	7.36	?	5.00	10.33	7.43	10.00	5.76	7.07
Oberlin.....	8.10	9.85	4.53	5.47	7.12	12.25	11.98	12.71	9.17	4.29	22.24	8.52	10.80	7.76	13.92	5.09	10.89	7.61

No. 55.—WINDS—MEAN VELOCITY FOR THE YEAR 1854—Continued.

NAME OF STATION.	SURFACE CURRENT.								MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MICHIGAN—																		
Ann Arbor, [Woodruff] ....	6.07	6.75	3.48	4.34	3.77	8.65	10.14	7.68	6.14	8.22	9.58	5.22	8.35	4.32	8.22	3.91	4.87	4.92
Battle Creek .....	7.97	10.12	6.78	7.01	4.77	11.22	10.18	10.64	7.93	6.44	7.85	8.46	5.60	7.30	8.38	8.22	7.83	7.32
Detroit .....	4.77	4.08	2.51	3.32	2.47	4.71	6.31	7.03	4.52	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monroe, [Whelpley] .....	2.50	7.80	5.02	3.95	6.89	7.40	7.65	7.32	7.02	.....	.....	.....	.....	.....	.....	.....	.....	.....
INDIANA—																		
Milton .....	10.08	4.16	2.13	3.42	3.11	5.38	7.22	7.56	3.28	29.18	28.54	22.40	15.87	35.00	28.08	23.53	20.06	25.47
New Harmony .....	12.91	6.29	8.00	10.62	17.92	11.27	12.00	12.39	11.78	.....	.....	.....	.....	.....	.....	.....	.....	.....
ILLINOIS—																		
Athens .....	4.47	4.44	4.00	4.28	4.50	4.71	10.84	5.22	4.75	18.80	23.42	12.00	22.02	23.50	12.13	8.82	12.07	12.79
Augusta .....	5.56	7.19	7.03	8.33	8.60	10.18	9.60	10.68	8.13	5.56	8.03	2.76	3.72	4.65	5.04	3.25	6.05	4.33
Ottawa .....	5.48	6.27	4.51	5.21	6.85	5.34	9.53	6.77	5.94	7.14	8.22	3.00	5.10	5.00	4.18	5.28	4.98	5.17
MISSOURI—																		
Hannibal .....	9.78	6.47	4.78	5.41	6.11	9.98	7.95	15.00	7.16	10.23	10.94	7.61	25.00	10.02	11.35	8.82	13.96	10.45
St. Louis .....	5.00	8.15	9.00	9.76	8.33	9.62	11.71	9.97	10.20	.....	.....	.....	.....	.....	.....	.....	.....	.....
WISCONSIN—																		
Beloit .....	4.11	5.48	4.35	3.28	4.42	5.94	4.71	4.75	4.28	3.49	6.17	3.00	3.00	3.71	4.44	3.50	4.23	4.14
Janesville .....	3.15	3.42	2.73	2.85	2.90	3.48	3.53	3.04	2.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
Platteville .....	9.62	9.49	8.58	6.51	4.97	7.65	7.83	8.40	7.68	11.02	10.10	7.98	7.13	4.19	7.31	5.01	6.90	6.65
IOWA—																		
Dubuque .....	11.30	9.68	5.41	3.91	5.73	7.18	7.27	11.02	6.23	17.81	17.54	32.22	16.17	23.78	14.78	13.60	10.80	14.41
Fort Madison .....	5.15	3.89	2.82	4.90	5.86	6.12	5.33	10.23	6.49	12.57	12.59	12.09	10.17	10.97	8.53	7.83	14.77	10.15
Muscatine .....	3.67	3.75	3.54	4.23	4.62	3.84	6.01	6.86	4.85	4.00	4.13	3.43	4.28	3.96	3.69	3.88	3.97	3.81
Foultney .....	3.94	7.60	4.08	4.35	4.36	4.82	7.60	8.28	3.53	5.50	9.68	6.67	8.25	8.61	4.79	4.27	8.68	5.77





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REDUCTIONS

OF

METEOROLOGICAL OBSERVATIONS

FOR THE YEAR 1855.

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# No. 1.—LIST OF STATIONS AND OBSERVERS, 1855.\*

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Aiken, S. C.....	33 32	81 34	565	12	H. W. Ravenel.
Alexandria, Va.....	38 48	77 01	56	12	Benjamin Hallowell.
All Saints, S. C. (a).....	33 40	79 17	20	12	Rev. A. Glennie.
Amherst, Mass.....	42 22	72 34	267	12	Prof. E. S. Snell.
Angelica, N. Y.....	42 15	78 01	1,500	9	Dr. E. M. Alba.
Ann Arbor, Mich. (b).....	42 15	83 30	—	12	L. Woodruff.
Ann Arbor, Mich. (c).....	42 16	83 44	891	12	Prof. A. Winchell.
Annapolis, Md.....	38 59	76 30	34	2	Dr. A. Zumbrock.
Arcola, Ohio (d).....	41 55	81 06	—	2	Miss Ardelia Cunningham.
Asbland, Va.....	38 38	81 57	—	9	Samuel Couch.
Athens, Ill.....	39 52	89 56	—	12	Joel Hall.
Auburn, Ala.....	32 37	85 36	—	11	Prof. J. Darby.
Augusta, Ga.....	38 28	81 54	—	8	William Haines.
Augusta, Ill.....	40 12	90 45	—	12	Dr. S. B. Mead.
Austin, Texas.....	30 20	97 46	—	12	Dr. Samuel K. Jennings, jr.
Baldwinsville, N. Y.....	43 04	76 41	—	12	John Bowman.
Ballardsville, Ky.....	38 24	85 31	—	3	Dr. John Swain.
Battle Creek, Mich.....	42 20	85 01	—	12	Dr. W. M. Campbell.
Bedford, Pa.....	40 01	78 30	—	10	Samuel Brown.
Beloit, Wis.....	42 30	89 04	750	12	Prof. Wm. Porter.
Bellefontaine, Wis.....	40 20	83 46	—	1	Joseph Shaw.
Berea, Ohio (e).....	—	—	—	1	Prof. G. M. Barber.
Beverly, N. Y. (f).....	41 23	72 12	180	12	Thomas B. Arden.
Blackwell's Island, N. Y.....	41 14	74 01	—	1	Dr. Wm. W. Sanger.
Bladensburg, Md.....	38 57	76 58	—	11	B. O. Lowndes.
Bloomfield, N. J.....	40 49	74 11	12	12	Robert L. Cooke.
Boston, Mass.....	42 22	71 03	—	10	—
Bowling Green, Ky.....	37 00	86 25	—	2	J. C. Herrick.
Brandon, Vt.....	43 45	73 08	—	12	David Buckland.
Buffalo, N. Y.....	42 50	78 53	—	4	Elias O. Salisbury.
Burlington, N. J.....	40 00	75 12	26	12	Rev. Adolph Frost.
Burlington, Vt. (g).....	44 29	73 11	346	12	Prof. Zadock Thompson.
Camden, S. C.....	34 17	80 33	275	12	Dr. J. A. Young.
Camden, Ark.....	33 32	92 48	—	1	J. J. McElrath.
Canton, N. Y.....	44 38	76 15	304	12	E. W. Johnson.
Carlisle, Pa. (h).....	40 12	77 11	500	1	Prof. W. C. Wilson.
Carmel, Me.....	44 47	69 00	175	12	John J. Bell.
Castleton, Vt.....	43 34	73 09	—	5	D. Underwood.
Cedar Keys, Fla. (i).....	29 08	83 03	—	12	Judge Augustus Steele.
Ceresco, Wis.....	43 50	88 57	917	8	Miss Mary E. Baker.
Chapel Hill, N. C. (j).....	35 54	79 17	—	12	Prof. James Phillips.
Charleston, S. C.....	32 46	79 57	—	12	Dr. John L. Dawson.
Chestertown, Md.....	39 14	76 02	—	6	James Alfred Pearce, jr.
Cheviot, Ohio.....	39 07	84 34	—	3	Ebenezer Hannaford.
Cincinnati, Ohio.....	39 06	84 15	—	10	Reporter for Boston Telegraph.
Cincinnati, Ohio.....	39 06	84 25	—	1	John Lea.
Cincinnati, Ohio (k).....	39 06	84 25	—	5	F. W. Hurtt and G. W. Harper.
Cleveland, Ohio.....	41 35	81 44	—	8	G. A. Hyde.
Columbus, Miss.....	33 30	88 29	500	12	James S. Lull.
Concord, N. H.....	43 12	71 29	374	12	Dr. Wm. Prescott.
Cooper, Mich.....	42 40	85 31	—	11	Mrs. Octavia C. Walker.
Craftsbury, Vt.....	44 40	72 29	1,100	9	James A. Paddock.

\* For the different names by which in some cases the same place is designated by the observers, see the General List of Stations in the introduction.

a Waccamaw.

b 3½ miles E.S.E. from Ann Arbor.

c University of Michigan.

d Near Buffalo.

e Baldwin's Institute.

f Philipstown.

g University of Vermont.

h Dickinson College.

i Atsena Otie.

j University of North Carolina.

k Woodward High School.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1855.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Crichton's Store, Va.....	41 20?	77 50?	-----	12	Lieut. R. F. Astrop.
Danville, Ky.....	37 40	84 31	950	9	O. Beatty.
Dayton, Ohio.....	39 44	84 10	-----	1	
Detroit, Mich.....	42 24	83 00	620	12	Rev. George Duffield.
Dubuque, Iowa.....	42 29	90 50	680	12	Dr. Asa Horr.
Eagle River, Mich.....	47 26	82 02	-----	1	
East Montpelier, Vt.....	44 18	72 31	-----	12	B. J. Wheeler.
Easton, Pa. (a).....	40 43	75 16	340	12	Selden J. Coffin.
Exeter, N. H.....	42 58	70 55	-----	12	Rev. L. W. Leonard.
Fairfield, Iowa.....	41 01	91 57	940	12	Dr. J. M. Shaffer.
Fishkill, N. Y.....	41 34	74 18	42	8	William Harkness.
Flint, Mich.....	42 58	83 39	-----	12	Drs. D. Clark and M. Miles.
Flushing, N. Y.....	40 46	73 52	-----	5	
Fort Madison, Iowa.....	40 37	91 28	-----	12	Daniel McCready.
Frederick, Md.....	39 24	77 18	-----	12	Henry E. Hanshew.
Friendship, Tenn.....	35 50	89 25	-----	4	Dr. Rt. T. Turner.
Fryeburg, Me.....	44 03	71 00	-----	12	George B. Barrows.
Gallipolis, Ohio.....	39 00	82 01	520	12	Dr. G. W. Livesay.
Gardiner, Me.....	44 11	69 46	75	12	B. H. Gardiner.
Garlandville, Miss.....	32 23	89 20	-----	5	Rev. E. S. Robinson.
Germantown, Ohio.....	39 30	84 20	720	12	L. Groneweg.
Gettysburg, Pa.....	39 51	77 15	-----	12	Prof. M. Jacobs.
Glenwood, Tenn. (b).....	36 28	87 13	481	12	William M. Stewart.
Gouverneur, N. Y.....	44 25	75 35	-----	12	Dr. P. O. Williams.
Grand Rapids, Mich.....	43 00	86 00	743	12	Alfred E. Currier.
Granville, Ohio.....	40 04	82 34	-----	12	Prof. S. N. Sanford.
Greene Springs, Ala. (c).....	32 50	87 46	-----	10	Prof. H. Tutwiler.
Great Falls, N. H.....	43 18	70 52	250	6	H. E. Sawyer.
Hamilton, Canada.....	43 15	79 56	-----	5	Dr. Wm. Craigie.
Hannibal, Mo. (d).....	39 44	91 23	-----	5	O. H. P. Lear.
Harrisburg, Pa.....	40 16	76 50	-----	12	Dr. John Heisely.
Hillsborough, Ohio.....	39 13	83 30	1,000	12	Rev. J. McD. Mathews.
Horton, Nova Scotia.....	45 06	64 25	95	4	A. P. S. Stewart.
Hiram, Ohio.....	41 20	81 15	765	2	S. S. Hillier.
Jackson, Miss.....	32 23	90 08	-----	3	Hatch & Co.
Jackson, Ohio.....	39 07	82 30	700	8	George L. Crookham.
Jackson, Ohio.....	39 07	82 30	-----	8	M. Gilmer.
Jackson, Ohio.....	39 07	82 30	-----	2	S. B. Wood.
Jacksonville, Fla.....	30 15	82 00	14	12	Dr. A. S. Baldwin.
Janesville, Wis.....	42 42	89 09	768	12	J. F. Willard.
Keokuk, Iowa.....	40 25	91 21	-----	1	Mrs. Ida E. Ball.
Key West, Fla. (e).....	24 33	81 48	4	12	Wm. C. Dennis.
Knox Hill, Fla. (f).....	30 30	86 01	148	12	John Newton.
Knoxville, Tenn. (g).....	35 59	83 54	1,000	6	Prof. T. L. Griswold.
La Grange, Ga.....	33 02	84 55	-----	1	
Lac qui Parle, Min. (h).....	45 00	95 30	-----	8	Rev. S. R. Riggs.
Lambertville, N. J.....	40 23	74 56	-----	12	L. H. Parsons.
Lebanon, Tenn.....	36 15	86 15	-----	1	Prof. Benjamin C. Jillson.
Lewisburg, Va.....	37 49	80 28	-----	12	Dr. Thomas Patton.
Lima, Pa. (i).....	39 55	75 25	196	12	Joseph Edwards.
Lodi, N. Y.....	42 37	76 53	-----	12	John Lefferts.
Londonderry, N. H.....	42 53	71 20	-----	10	R. C. Mack.
Lowville, N. Y.....	43 45	75 38	-----	7	J. Carroll House.
Madison, Ind.....	-----	-----	-----	6	C. Barnes.
Madison, Ohio.....	41 55	81 06	725	1	Miss Ardelia Cunningham.
Madison, Wis.....	43 05	89 25	892	1	Prof. J. W. Sterling.
Madrid, N. Y.....	44 43	75 33	280	4	E. A. Dayton.
Manchester, Ill.....	39 33	90 35	723	12	John Grant.
Manchester, N. H.....	42 59	71 28	300	12	Hon. Samuel N. Bell.

a Lafayette College.  
b Near Clarksville.  
c Havana.

d Dry Ridge.  
e Salt ponds, 2½ miles E. N.E. from Key West.  
f Orange Hill.

g East Tennessee University.  
h Hazlewood.  
i Chromedale, near Lima.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1855.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fet.		
Marietta, Ohio	39 25	81 29		5	Prof. J. W. Andrews.
Meadville, Pa.	41 39	80 11		8	T. F. Thickstun.
Mendon, Mass.	42 06	71 34		12	Dr. John George Metcalf.
Millersburg, Ky.	38 40	84 27	804	9	Rev. G. S. Savage.
Milton, Ia.	39 47	85 02	800	12	Dr. V. Kersey.
Milwaukee, Wis.	43 04	87 57	593	12	Carl Winkler.
Milwaukee, Wis. (a)	43 04	87 59	658	2	F. C. Pomeroy.
Mirador, Mexico	19 50	96 25	3,500	12	Carl Sartorius.
Monroe, Mich.	41 56	83 22	590	12	Miss Helen Irene Whelpley.
Monroe, Mich.	41 58	83 24		2	Capt. A. D. Perkins.
Monroeville, Ala.	31 33	87 25		7	S. J. Cumming.
Montcalm, Va.	38 05	78 21	450	1	Charles J. Meriwether.
Montreal, Canada	45 31	73 33	118	5	Dr. A. Hall.
Morrisville, Pa.	40 12	74 53	30	12	Ebenezer Hance.
Moss Grove, Pa. (b)	41 40	79 51		12	Francis Schreiner.
Mosul, Mesopotamia	36 22	43 14 E.		12	
Mount Harris, Me.	44 40	69 08½	1,200		Louis McLean Tilton.
Mount Vernon, Ohio	40 25	82 31		4	F. A. Benton.
Muscatine, Iowa	41 26	91 05	586	12	T. S. Parvin.
Nantucket, Mass.	41 17	70 06	30	12	Hon. William Mitchell.
Nazareth, Pa.	40 43	75 21		1	Hermann Brickenstein.
Newark, Ohio	40 06	82 28		5	Lewis M. Dayton.
Newark, Del., [Delaware College]	39 38	75 47	120	4	Prof. W. A. Crawford.
Newark, N. J.	40 45	74 10		12	W. A. Whitehead.
Nengenenge, Africa	0 00	10 20 E.	?	7	Rev. A. Bushnell.
New Bedford, Mass.	41 39	70 56	90	12	Samuel Rodman.
Newburyport, Mass.	42 49	70 53		12	Dr. H. C. Perkins.
New Harmony, Ia.	38 08	87 09	320	12	John Chappellamith.
New Lisbon, Ohio	40 45	80 46		5	
New London, Conn.	41 22	72 09	90	10	Rev. Tyron Edwards, D. D.
New Orleans, La.	29 57	90 00		12	Dr. E. H. Barton.
New Wied, Texas	29 42	98 15		12	Prof. L. C. Ervendberg.
New York city (c)	40 42	74 01	159	12	Prof. O. W. Morris.
Norristown, Pa.	40 08	75 19	153	12	Rev. J. Grier Balston.
North Attleboro', Mass.	41 52	71 23	175	12	Henry Rice.
Norwalk, Ohio	41 13	82 43		1	Gustavus A. Hyde.
Oberlin, Ohio	41 20	82 15	800	12	Prof. J. H. Fairchild.
Ogdensburg, N. Y.	44 43	75 26		11	W. E. Guest.
Oldtown, Me. (d)	44 48	68 45	137	8	Rev. Samuel H. Merrill.
Ottawa, Ill.	41 20	88 47		12	Dr. J. O. Harris.
Oswego, N. Y.	43 25	76 35		11	Capt. William S. Malcolm.
Ovid, N. Y. (e)	42 41	76 52		2	J. N. Chickering, jr.
Oxford, Miss. (f)	34 20	89 25	300	12	Prof. L. Harper.
Paradise, Pa.	40 00	76 08		12	Jacob Frantz.
Pella, Iowa	41 30	92 55		12	E. H. A. Scheeper.
Penn Yan, N. Y.	42 42	77 07	740	12	Dr. H. P. Sartwell.
Perry, Me.	45 00	67 06	100	12	William D. Dana.
Perrysburg, Ohio	41 39	83 40		12	F. Hollenbeck.
Philadelphia, Pa.	39 57	75 11	53	12	Prof. James A. Kirkpatrick.
Pittsburg, Pa., [Oakland Station]	40 32	80 02	850	12	W. W. Wilson.
Pittsburg, Pa., [Marine Hospital]				12	Wm. Martin and John Hastings.
Platteville, Wis.	42 45	90 00		12	Dr. J. L. Pickard.
Pocopson, Pa.	39 54	75 37	218	12	Fenelon Darlington.
Pomfret, Conn.	41 52½	72 00	1,000	12	Rev. D. Hunt.
Port Gibson, Miss.	31 50	91 00		1	Prof. J. Boyd Elliott.
Portland, Me.	43 37	70 19		3	Henry Willis.
Pottsville, Pa.	40 41	76 24		12	Dr. A. Heger.
Poultney, Iowa (g)	42 40	91 21		12	Dr. Benjamin F. Odell.
Princeton, Mass.	42 28	71 53	1,113	12	Hon. John Brooks.

a Two miles north of the centre of the city.

b Kingsley's.

c Deaf and Dumb Institute.

d Blue Hill.

e Seneca Collegiate Institute.

f University of Mississippi.

g Plum Spring.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1855.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Providence, R. I. (a) .....	41 49	71 25	120	12	Prof. A. Caswell.
Quasqueton, Iowa.....	42 23	91 43	888	10	Dr. Edwin C. Bidwell.
Randolph, Pa.....	41 28	80 10	1,720	7	O. T. Hobbs.
Red River Settlement, Hudson's Bay Territory.....	58 06	97 00	853	7	Donald Gunn.
Red Wing, Minn. (b).....	44 34	92 30	-----	2	Rev. Jabez Brooks.
Richmond, Mass. (c).....	42 24	73 20	-----	11	William Bacon.
Richmond, Ohio.....	40 20	81 01	-----	10	Jacob M. Desellein.
Sacramento, Cal.....	38 35	121 40	-----	3	Dr. F. W. Hatch.
Sacramento, Cal.....	38 35	121 40	30	3	Dr. T. M. Logan.
Sag Harbor, N. Y.....	41 00	72 20	40	11	Ephraim N. Byram.
St. Augustine, Fla.....	29 54	81 26	-----	1	Dr. P. B. Mauraan.
St. James, Mich.....	45 44	85 27	598	12	James J. Strang.
St. Johnsbury, Vt.....	44 30	74 01	-----	5	James K. Colby.
St. Joseph, Minn.....	48 55	98 00	-----	2	O. A. Kellum.
St. Louis, Mo.....	38 37	90 16	482	12	Dr. George Engelmann.
St. Martin, Canada East.....	45 32	73 36	118	12	Dr. Charles Smallwood.
Salmon Falls, N. H.....	43 30?	71 00	-----	3	George B. Sawyer.
San Francisco, Cal.....	38 00	122 00	-----	1	Dr. H. Gibbons.
Saugatuck, Mich.....	40 30?	85 50?	-----	11	L. H. Streng.
Savannah, Ga.....	32 05	81 07	42	12	Dr. John F. Posey.
Savannah, Ohio.....	41 12	82 31	-----	9	Dr. John Ingram.
Saybrook, Conn. (d).....	41 16	72 20	10	11	James Rankin.
Smithfield, Va.....	37 00	76 40	-----	12	Dr. John B. Purdie.
Smithville, N. Y.....	44 00	76 01	-----	12	J. E. Breed.
Southwick, Mass.....	42 02	4 51	265	12	Amasa Holcomb.
South Thomaston, Me.....	44 06	69 12	-----	1	Joshua Bartlett.
Sparta, Ga.....	33 17	83 09	550	12	Dr. and Mrs. E. M. Pendleton.
Spencertown, N. Y.....	43 19	73 41	800?	12	A. W. Moorehouse.
Springdale, Ky.....	38 07	85 24	570	11	Mrs. Lawrence Young.
Springfield, Mass.....	42 06	72 35	199	12	Lucius C. Allin.
Stratford, N. H.....	44 40	71 34	-----	5	William B. G. Brown.
Steuben, Me.....	44 44	67 50	50	12	J. D. Parker.
Superior, Wis.....	46 38½	92 03½	658	7	William H. Newton.
Sykesville, Md. (e).....	39 23	76 57	700	12	Miss Harriott M. Baer.
Taunton, Mass.....	41 49	71 09	-----	1	Albert Schlegel.
The Rock, Ga.....	32 54	84 24	833	12	Dr. James Anderson.
Thornbury, N. C. (f).....	36 20	77 21	-----	4	Prof. Daniel Morelle.
Toronto, Canada.....	43 39	79 21	-----	12	Magnetic Observatory.
Tuscaloosa, Ala. (g).....	33 12	87 28	245?	3	George Benagh.
Unionville, Ohio.....	41 50	81 00	-----	7	Miss Ardelia Cunningham.
Up Park Camp, Jamaica.....	17 59	76 56	225	3	Col. W. B. Marlow.
Upper Alton, Ill.....	39 00	89 36	-----	12	Dr. John James.
Urbana, Ohio.....	40 06	83 43	1,015	12	Prof. M. G. Williams.
Wampsville, N. Y.....	43 04	75 50	500	12	Dr. Stillman Spooner.
Warrington, Fla. (h).....	30 21	87 16	12	12	John Pearson.
Washington, D. C.....	38 53	77 01	40	12	Smithsonian Institution.
Watertown, N. Y.....	43 56	74 55	-----	1	Dr. P. O. Williams.
Westfield, Mass.....	42 06	72 44	-----	12	Rev. Emerson Davis, D. D.
West Haverford, Pa.....	40 00	75 21	-----	12	Dr. Paul Swift.
Whitemarsh Island, Ga.....	32 00	81 00	18	12	R. T. Gibson.
Williamstown, Mass. (i).....	42 43	71 13	-----	12	James Orton.
Winchester, Va.....	39 15	78 10	-----	9	John W. Marvin.
Windham, Me.....	43 49	70 17	-----	2	Samuel A. Eveleth.
Wood's Hole, Mass. (j).....	41 40	70 17	25	3	R. B. Gifford.
Worcester, Mass.....	42 16	71 48	536	12	Dr. Edward A. Smith.
Zanesville, Ohio.....	39 58	82 29	700	11	Dr. John G. F. Holston.

a Brown University.  
b Hamline University.  
c Elmwood.  
d Lynde Point.

e Schellman Hall.  
f Near Jackson.  
g University of Alabama.

h Navy Yard at Pensacola.  
i William's College.  
Palmouth.

## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton (a).....	29.65			30.50			28.80
St. Martin's.....	29.92	8	9 p. m.	30.72	22	7 a. m.	29.05
Toronto.....	29.64			30.55			28.72
Maine.....Carmel.....	29.66	6	7 a. m.	30.65	27	7 a. m.	28.83
Gardiner.....	29.92	0	7 a. m.	30.75	27	7 a. m.	28.93
Steuben.....	30.14	5	9 p. m.	30.89	19	2 p. m.	29.21
New Hampshire—Concord.....	29.71	6	7 a. m.	30.60	26	9 p. m.	28.61
Great Falls.....	29.60	5	7 a. m.	30.44	19	2 p. m.	28.67
Manchester.....	30.09	5	7 a. m.	30.91	26	9 p. m.	29.14
Vermont.....Burlington.....	29.67	5	9 p. m.	30.49	27	7 a. m.	28.65
St. Johnsbury.....	29.37	8	2 p. m.	30.10	27	7 a. m.	28.30
Massachusetts—Amherst.....	29.83	6	7 a. m.	30.66	26	9 p. m.	28.76
Nantucket.....	30.11	6	7 a. m.	30.86	26	9 p. m.	29.15
New Bedford.....	29.98	6	7 a. m.	30.75	27	7 a. m.	29.14
Newburyport.....	30.04	5	8 a. m.	31.07	26	9 p. m.	29.09
North Attleboro'.....	29.89	6	7 a. m.	30.71	26	9 p. m.	28.87
Princeton.....	28.87	5	7 a. m.	29.68	26	9 p. m.	27.88
Southwick (b).....	29.94	6	7 a. m.	30.83	26	9 p. m.	29.06
Westfield.....	31.08	6	2 p. m.	31.50	20	9 p. m.	30.84
Williamstown.....	29.29	6	7 a. m.	30.09	26	9 p. m.	28.29
Worcester.....	29.45			30.17			28.59
Rhode Island—Providence (c).....	29.92	6	Sunrise.	30.65	26	10 p. m.	28.82
Connecticut—Pomfret.....	28.96	6	7 a. m.	29.70	26	9 p. m.	28.03
New York—Canton.....	29.43	8	2 p. m.	30.27	27	7 a. m.	28.56
New York city.....	29.99	8	2 p. m.	30.72	26	9 p. m.	29.05
Oswego (d).....	29.57	8	12 m.	30.35	22	7 a. m.	28.78
Penn. Yan(e).....	29.22	8	Sunrise.	30.00	22	Sunrise.	28.39
Sag Harbor.....	29.84	6	2 p. m.	30.58	26	9 p. m.	28.91
Spencertown.....	29.02	8	2 p. m.	30.08	26	9 p. m.	28.25
New Jersey—Bloomfield.....	29.91	8	2 p. m.	30.66	26	9 p. m.	28.95
Burlington (f).....	30.10	8	2 p. m.	30.78	27	9 p. m.	29.27
Lambertville.....	30.03	8	9 p. m.	30.78	22	7 a. m.	29.16
Newark (g).....	30.01			30.79			29.23
Pennsylvania—Bedford.....	29.15	8	7 a. m.	29.89	26	9 p. m.	28.50
Gettysburg.....	29.49	8	7 a. m.	30.20	22	7 a. m.	28.78
Harrisburg.....	29.75	6	7 a. m.	30.40	22	7 a. m.	29.05
Lima.....	29.93	8	7 a. m.	30.62	26	2 p. m.	29.04
Morrisville (f).....	30.18	8	2 p. m.	30.90	22	7 a. m.	29.35
Norristown.....	29.99	8	7 a. m.	30.79	22	2 p. m.	29.24
Philadelphia.....	29.97	8	2 p. m.	30.61	26	2 p. m.	29.16
Pittsburg, [Oakland Station].....	28.97	8	7 a. m.	29.79	21	9 p. m.	28.02
Pittsburg, [Marine Hospital] (h).....	28.97	8	9 a. m.	29.80	21	9 p. m.	28.05
Pottsville.....	29.29	8	7 a. m.	30.05	22	7 a. m.	28.12
Maryland—Frederick.....	29.76	8	7 a. m.	30.46	21	9 p. m.	29.01
Dist. of Columbia—Washington.....	30.11	8	7 a. m.	30.81	26	2 p. m.	29.35
Virginia—Alexandria.....	30.09			30.80			29.33
Montcalm (i).....	29.38			29.65			28.78
North Carolina—Chapel Hill.....	29.52	8	2 p. m.	30.07	21	9 p. m.	28.88
Thornbury.....	30.10	8	7 a. m.	30.75	26	7 a. m.	29.36
South Carolina—All Saint's.....	30.07	8	2 p. m.	30.56	28	9 p. m.	29.44
Camden.....	29.96	8	9 p. m.	30.49	21	9 p. m.	29.23
Charleston.....				30.71			29.64
Georgia—La Grange (e).....	29.10	0	Sunrise.	29.52	21	Noon.	28.49
Savannah.....	30.12	8	9 p. m.	30.61	28	2 p. m.	29.47
Sparta.....	29.48	8	9 p. m.	29.92	28	2 p. m.	28.90
The Rock (j).....	29.39			29.80			29.10

a Observations taken at 9 a. m. and 9 p. m.

b Incomplete.

c Observations taken at sunrise, 1 p. m., and 10 p. m.

d Observations taken at 6 a. m., noon, and 6 p. m., and not corrected for temperature.

e Observations taken at sunrise, noon, and sunset.

f Not corrected for temperature.

g Observations taken at 7 a. m. and 5 p. m.

h Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

i For the first 11 days of the month only.

j Observations taken morning, 3 p. m., and evening.



## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida .....	Cedar Keys.....	29.97	5 7 a. m.	30.30	28 2 p. m.	29.52	
	Jacksonville.....	30.17	8 9 p. m.	30.60	28 2 p. m.	29.58	
	Key West.....	29.82	7 2 p. m.	30.05	27 7 a. m.	29.65	
	Knox Hill (a).....	29.80	30 9 p. m.	30.12	28 2 p. m.	29.31	
	Warrington.....	30.09	9 7 a. m.	30.44	28 7 a. m.	29.57	
Alabama .....	Auburn.....	29.40	9 7 a. m.	29.83	21 2 p. m.	28.76	
	Tuscaloosa.....	29.91	9 7 a. m.	30.34	21 7 a. m.	29.25	
Mississippi.....	Oxford.....	29.60	7 9 p. m.	30.12	21 7 a. m.	29.04	
Louisiana.....	New Orleans.....	30.29	8 9 p. m.	30.86	21 7 a. m.	29.85	
Texas.....	New Wied.....	29.02	31 7 a. m.	29.60	22 7 a. m.	28.38	
Tennessee.....	Glenwood.....	29.60	7 9 p. m.	30.23	21 7 a. m.	28.77	
	Knoxville.....	29.07	7 9 p. m.	29.57	21 2 p. m.	28.24	
Kentucky.....	Ballardsville.....	29.08	8 7 a. m.	29.74	21 2 p. m.	28.21	
	Springdale.....	29.41	7 2 p. m.	30.15	21 2 p. m.	28.52	
Ohio.....	Cincinnati, [Hurt] (b).....	29.45	7 9 p. m.	30.19	21 12 m.	28.37	
	Germantown.....	29.23	8 7 a. m.	29.97	21 2 p. m.	28.25	
	Granville.....	28.95	8 7 a. m.	29.72	21 2 p. m.	28.04	
	Hillsborough.....	28.86	8 7 a. m.	29.57	21 2 p. m.	27.92	
	Marietta.....	29.21	8 7 a. m.	29.94	21 2 p. m.	28.41	
	Oberlin.....	29.05	8 7 a. m.	29.89	21 9 p. m.	28.16	
	Perrysburg (c).....	29.33	8 7 a. m.	30.16	21 9 p. m.	28.40	
	Urbana.....	28.74	8 7 a. m.	29.47	21 2 p. m.	27.47	
	Zanesville.....	29.18	8 7 a. m.	29.85	21 2 p. m.	28.29	
Michigan.....	Ann Arbor, [Winchell].....	29.01	8 7 a. m.	29.81	24 9 p. m.	28.09	
	Detroit.....	29.48	8 7 a. m.	30.30	21 9 p. m.	28.54	
	Monroe, [Perkins] (d).....	28.89	8 2 p. m.	29.65	21 9 p. m.	28.00	
Indiana.....	Madison.....	29.47	7 9 p. m.	30.18	21 2 p. m.	28.52	
	Milton.....	29.02	7 9 p. m.	29.67	21 2 p. m.	28.07	
	New Harmony.....	29.67	7 9 p. m.	30.32	21 7 a. m.	28.77	
Illinois.....	Upper Alton.....	29.44	7 9 p. m.	30.14	21 7 a. m.	28.67	
Missouri.....	St. Louis.....	29.47	7 9 p. m.	30.19	21 7 a. m.	28.64	
Wisconsin.....	Beloit.....	29.16	7 9 p. m.	29.81	21 2 p. m.	28.64	
	Ceresco.....	29.04	9 9 p. m.	29.66	16 9 p. m.	28.55	
	Milwaukie.....	29.22	7 9 p. m.	29.97	21 2 p. m.	28.68	
Iowa.....	Dubuque.....	29.26	7 9 p. m.	29.93	12 2 p. m.	28.83	
	Muscatine.....	29.49	4 7 a. m.	e 29.93	19 2 p. m.	29.10	
	Quasqueton.....	29.05	8 7 a. m.	29.59	27 7 a. m.	28.60	
California.....	Sacramento, [Logan].....	29.95	-----	30.34	-----	29.44	
	Sacramento, [Hatch].....	30.07	-----	30.28	-----	29.55	

a Observations taken for the last 18 days of the month only.

b Observations taken at 7 a. m., noon, and 9 p. m.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Not corrected for temperature.

e Same height at 7 a. m. and 2 p. m. on the 9th, and 7 a. m. on the 14th.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	Inches.				Inches.
British America .. Hamilton (a) .....	29.62				29.20
Toronto .....	29.62				29.17
St. Martin's .....	29.82	12	2 p. m.	3	7 a. m.
Maine .....	29.49	14	7 a. m.	3	2 p. m.
Gardiner .....	29.72	14	7 a. m.	3	2 p. m.
Steuben .....	29.92	13	9 p. m.	19	7 a. m.
New Hampshire .. Concord .....	29.53	13	7 a. m.	26	2 p. m.
Great Falls .....	29.42	13	2 p. m.	3	2 p. m.
Manchester .....	29.91	13	7 a. m.	26	2 p. m.
Vermont .....	29.56	28	9 p. m.	3	2 p. m.
Massachusetts .. Amherst .....	29.66	13	7 a. m.	26	2 p. m.
Nantucket .....	29.88	13	7 a. m.	5	7 a. m.
New Bedford .....	29.74	13	9 p. m.	15	9 p. m.
Newburyport .....	29.88	13	7 a. m.	3	2 p. m.
North Attleboro' .....	29.70	13	7 a. m.	26	2 p. m.
Princeton .....	28.67	13	7 a. m.	26	2 p. m.
Westfield .....	30.96	13	9 p. m.	11	9 p. m.
Williamstown .....	29.14	13	7 a. m.	5	7 a. m.
Wood's Hole .....	29.15	14	7 a. m.	5	2 p. m.
Worcester .....	29.38	13	7 a. m.	26	2 p. m.
Rhode Island .. Providence (d) .....	29.71	13	10 p. m.	5	1 p. m.
Connecticut .. Pomfret .....	28.80	13	7 a. m.	20	2 p. m.
New York .....	29.39	15	7 a. m.	3	7 a. m.
New York city .....	29.89	28	9 p. m.	5	7 a. m.
Oswego .....	29.49	28	9 p. m.	5	7 a. m.
Sag Harbor .....	29.68	13	2 p. m.	5	7 a. m.
Spencertown .....	29.14	28	9 p. m.	4	9 p. m.
Penn Yan .....	29.11	21	2 p. m.	5	Sunrise.
New Jersey .....	29.76	28	9 p. m.	5	2 p. m.
Bloomfield (e) .....	29.98	28	9 p. m.	5	2 p. m.
Burlington .....	29.89	12	9 p. m.	5	7 a. m.
Lambertville .....	29.94				29.56
Newark (f) .....	29.04	21	2 p. m.	5	7 a. m.
Pennsylvania .. Bedford .....	29.39	28	9 p. m.	5	7 a. m.
Gettysburg .....	29.71	28	9 p. m.	5	7 a. m.
Harrisburg .....	29.79	28	9 p. m.	8	2 p. m.
Lima .....	30.05	28	9 p. m.	5	7 a. m.
Morrisville (e) .....	29.85	28	9 p. m.	8	2 p. m.
Norristown .....	29.84	28	9 p. m.	8	2 p. m.
Philadelphia .....	28.92	21	7 a. m.	16	9 p. m.
Pittsburg, [Oakland Station] .....	28.95	28	9 p. m.	5	7 a. m.
Pittsburg, [Marine Hospital] .....	29.17	28	9 p. m.	5	7 a. m.
Pottsville .....	29.61	12	9 p. m.	5	2 p. m.
Maryland .....	30.01	28	9 p. m.	8	9 p. m.
Frederick .....	30.00	28	9 p. m.	5	7 a. m.
Dist. of Columbia .. Washington .....	29.41	28	9 p. m.	8	2 p. m.
Virginia .....	29.96	21	7 a. m.	8	2 p. m.
Alexandria .....	29.85	21	7 a. m.	8	2 p. m.
North Carolina .. Chapel Hill .....					29.37
South Carolina .. All Saints .....	30.04	21	7 a. m.	8	2 p. m.
Camden .....	29.39	21	7 a. m.	8	2 p. m.
Charleston .....	29.92	4	7 a. m.	8	2 p. m.
Georgia .....	30.10	20	9 p. m.	8	2 p. m.
Savannah .....	29.74	4	2 p. m.	11	7 a. m.
Sparta .....	29.86	28	9 p. m.	5	7 a. m.
Florida .....	30.07	21	2 p. m.	8	7 a. m.
Cedar Keys .....	29.35	28	9 p. m.	8	7 a. m.
Jacksonville .....	29.89	17	7 a. m.	7	9 p. m.
Key West .....					29.40
Knox Hill .....					
Warrington .....					
Alabama .....					
Autburn .....					
Tuscaloosa .....					

a Observations taken at 9 a. m. and 9 p. m.

b Same height at 7 a. m. on the 14th.

c Same height at 9 p. m. on the 13th.

d Observations taken at sunrise, 1 p. m., and 10 p. m.

e Not corrected for temperature.

f Observations taken at 7 a. m. and 5 p. m.

g Same height at 2 p. m. on the 5th.

h Same height at 7 a. m. on the 21st.

i Same height at 7 a. m. on the 19th.



## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		HEIGHT.		HEIGHT.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
Mississippi.....Oxford.....	29.60	28	9 p. m.	7	9 p. m.
Louisiana.....New Orleans.....	30.28	28	9 p. m.	7	2 p. m.
Texas.....New Wied.....	29.03	28	7 a. m.	7	9 p. m.
Tennessee.....Glenwood.....	29.60	28	9 p. m.	7	2 p. m.
.....Knoxville.....	29.02	21	7 a. m.	8	2 p. m.
Kentucky.....Ballardsville.....	29.05	21	7 a. m.	7	2 p. m.
.....Springdale.....	29.40	21	7 a. m.	7	2 p. m.
Ohio.....Cincinnati, [Hurt].....	29.50	28	9 p. m.	7	9 p. m.
.....Germantown.....	29.24	28	9 p. m.	7	2 p. m.
.....Granville.....	28.95	28	9 p. m.	7	2 p. m.
.....Hillsborough.....	28.85	28	9 p. m.	7	2 p. m.
.....Marietta.....	29.23	28	9 p. m.	7	2 p. m.
.....Oberlin.....	29.08	28	9 p. m.	7	2 p. m.
.....Perrysburg.....	29.36	28	9 p. m.	13	9 p. m.
.....Urbana.....	29.75	20	9 p. m.	7	2 p. m.
.....Zanesville.....	29.17	28	9 p. m.	7	9 p. m.
Michigan.....Ann Arbor, [Winchell].....	29.03	28	9 p. m.	13	9 p. m.
.....Detroit.....	29.50	21	7 a. m.	2	9 p. m.
.....Monroe (c).....	28.82	21	2 p. m.	14	7 a. m.
Indiana.....Madison.....	29.47	28	9 p. m.	7	2 p. m.
.....Milton.....	29.07	20	9 p. m.	7	2 p. m.
.....New Harmony.....	29.78	28	9 p. m.	7	2 p. m.
Illinois.....Upper Alton.....	29.51	28	9 p. m.	7	2 p. m.
Missouri.....St. Louis.....	29.54	28	9 p. m.	7	7 a. m.
Wisconsin.....Beloit.....	29.23	28	9 p. m.	13	7 a. m.
.....Cresco.....	29.12	28	2 p. m.	13	7 a. m.
.....Milwaukie.....	29.31	20	2 p. m.	28	2 p. m.
Iowa.....Dubuque.....	29.37	28	9 p. m.	12	2 p. m.
.....Muscatine.....	29.61	20	7 a. m.	13	7 a. m.
.....Quasqueton.....	29.13	28	9 p. m.	12	2 p. m.

a Same height at 7 p. m. and at 2 p. m. on the 15th.

b Same height at 7 a. m. on the 21st and at 9 p. m. on the 22nd.

c Not corrected for temperature.

d Same height at 9 p. m. on the 7th.

e Same height at 2 p. m. on the 20th.

## No. 4—BAROMETER, CORRECTED TO 32° F., MARCH, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.56	-----	-----	30.04	-----	-----	29.00
St. Martin's .....	29.72	1	7 a. m.	30.19	23	9 p. m.	29.04
Toronto .....	29.51	-----	-----	30.08	-----	-----	28.79
Maine .....	29.43	1	7 a. m.	29.99	24	2 p. m.	28.81
Carmel .....	29.67	2	7 a. m.	30.11	24	2 p. m.	29.09
Gardiner .....	29.84	1	7 a. m.	30.36	24	2 p. m.	29.22
Steuben .....	29.47	1	7 a. m.	29.97	24	7 a. m.	28.77
New Hampshire .. Concord .....	29.36	1	7 a. m.	29.89	24	7 a. m.	28.87
Great Falls .....	29.89	1	7 a. m.	30.37	24	2 p. m.	29.28
Manchester .....	29.49	1	7 a. m.	30.07	24	7 a. m.	28.77
Vermont .....	29.08	1	7 a. m.	29.59	24	7 a. m.	28.34
Burlington .....	29.62	1	7 a. m.	30.14	24	2 p. m.	29.04
St. Johnsbury .....	29.87	1	7 a. m.	<i>b</i> 30.35	24	2 p. m.	29.32
Massachusetts .. Amherst .....	29.82	1	7 a. m.	30.27	24	2 p. m.	29.13
Nantucket .....	29.83	1	7 a. m.	30.38	24	2 p. m.	29.20
New Bedford .....	29.67	1	7 a. m.	30.18	24	2 p. m.	29.06
Newburyport .....	28.66	1	7 a. m.	<i>c</i> 29.10	24	2 p. m.	28.08
North Attleboro' .....	29.84	25	7 a. m.	30.51	24	7 a. m.	29.29
Princeton .....	30.96	1	2 p. m.	<i>e</i> 31.14	27	2 p. m.	30.82
Southwick (d) .....	29.15	1	7 a. m.	29.64	24	2 p. m.	28.60
Westfield .....	29.13	1	7 a. m.	29.59	24	2 p. m.	28.55
Williamstown .....	29.35	1	7 a. m.	29.80	24	7 a. m.	28.85
Wood's Hole .....	29.66	1	Sunrise.	30.18	21	1 p. m.	29.08
Worcester .....	28.77	1	7 a. m.	29.22	24	2 p. m.	28.21
Rhode Island .. Providence (a) .....	29.26	1	9 p. m.	29.91	23	9 p. m.	28.63
Connecticut .....	29.89	1	7 a. m.	30.36	24	9 p. m.	29.25
Pomfret .....	29.44	1	7 a. m.	<i>c</i> 29.90	23	9 p. m.	28.88
New York .....	29.10	1	2 p. m.	29.60	23	Sunset.	28.55
Canton (f) .....	29.63	2	7 a. m.	30.10	24	2 p. m.	29.05
New York city .....	29.08	1	7 a. m.	29.66	23	9 p. m.	28.52
Oswego (g) .....	29.74	1	2 p. m.	30.22	24	7 a. m.	29.22
Penn Yan .....	29.94	1	9 p. m.	30.47	24	2 p. m.	29.46
Sag Harbor .....	29.87	1	7 a. m.	<i>h</i> 30.35	24	-----	29.32
Spencertown .....	29.88	-----	-----	30.40	-----	-----	29.38
New Jersey .....	29.00	1	7 a. m.	<i>c</i> 29.50	24	7 a. m.	28.47
Bloomfield .....	29.36	1	7 a. m.	29.87	24	7 a. m.	28.79
Burlington (g) .....	29.67	1	7 a. m.	30.17	24	7 a. m.	29.11
Lambertville .....	29.76	1	7 a. m.	30.28	24	2 p. m.	29.20
Newark (i) .....	30.03	1	7 a. m.	30.50	24	2 p. m.	29.45
Pennsylvania .. Bedford .....	29.81	1	7 a. m.	30.35	24	2 p. m.	29.16
Gettysburg .....	29.80	1	7 a. m.	30.27	24	2 p. m.	29.31
Harrisburg .....	28.91	1	2 p. m.	29.49	26	2 p. m.	28.39
Lima .....	28.89	1	9 p. m.	29.42	15	9 a. m.	28.44
Morrisville (g) .....	29.16	1	7 a. m.	29.67	24	7 a. m.	28.56
Norristown .....	29.51	1	7 a. m.	30.01	24	7 a. m.	29.01
Philadelphia .....	29.95	1	7 a. m.	30.51	24	2 p. m.	29.36
Pittsburg, [Oakland Station] .....	29.95	1	7 a. m.	30.47	24	2 p. m.	29.36
Pittsburg, [Marine Hospital] (j) .....	29.40	2	7 a. m.	29.81	31	9 p. m.	28.91
Pottsville .....	29.97	1	7 a. m.	30.44	24	2 p. m.	29.41
Maryland .....	29.96	2	7 a. m.	30.34	31	9 p. m.	29.23
Frederick .....	29.86	1	7 a. m.	30.29	31	9 p. m.	29.42
Dist. of Columbia .. Washington .....	-----	-----	-----	30.47	-----	-----	29.44
Alexandria .....	30.04	1	7 a. m.	<i>e</i> 30.42	31	2 p. m.	29.40
North Carolina .. Chapel Hill .....	29.42	17	9 p. m.	29.79	31	2 p. m.	29.08
Thornbury .....	29.46	-----	-----	29.65	-----	-----	29.35
South Carolina .. All Saints .....	29.90	2	7 a. m.	30.23	21	2 p. m.	28.93
Camden .....	30.10	1	7 a. m.	30.43	12	9 p. m.	29.45
Charleston .....	-----	-----	-----	-----	-----	-----	-----
Georgia .....	-----	-----	-----	-----	-----	-----	-----
Savannah .....	-----	-----	-----	-----	-----	-----	-----
Sparta .....	-----	-----	-----	-----	-----	-----	-----
The Rock (k) .....	-----	-----	-----	-----	-----	-----	-----
Florida .....	-----	-----	-----	-----	-----	-----	-----
Cedar Keys .....	-----	-----	-----	-----	-----	-----	-----
Jacksonville .....	-----	-----	-----	-----	-----	-----	-----

a For changes in hours of observation, see tables of thermometer for this month.

b Same height at 7 a. m. on the 2d.

c Same height at 2 p. m. on the 1st.

d Observations irregular. None at 9 p. m., except on the 13th and 15th.

e Same height at 9 p. m. on the 1st.

f Observations omitted from the 7th to the 16th of this month.

g Not corrected for temperature.

h Same height at 2 p. m. and 9 p. m. on the 1st.

i Observations taken at 7 a. m. and 5 p. m.

j Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

k Observations taken morning, 3 p. m., and evening.



## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida -----							
Key West -----	29.73	2	2 p. m.	29.92	31	7 a. m.	29.42
Knox Hill -----	29.87	1	7 a. m.	30.24	31	2 p. m.	29.56
Warrington (a) -----	30.04	1	7 a. m.	30.48	13	9 p. m.	29.73
Alabama -----							
Auburn -----	29.35	1	7 a. m.	29.70	13	2 p. m.	29.07
Tuscaloosa -----	29.85	1	7 a. m.	30.35	12	9 p. m.	29.32
Mississippi -----							
Oxford -----	29.66	1	7 a. m.	30.02	14	9 p. m.	29.07
Louisiana -----							
New Orleans -----	30.24	1	7 a. m.	30.71	12	9 p. m.	29.88
Texas -----							
New Wied (b) -----	28.92	1	7 a. m.	29.52	16	7 a. m.	28.46
Tennessee -----							
Glenwood -----	29.56	1	7 a. m.	30.07	12	9 p. m.	28.87
Knoxville -----	29.01			29.48			28.56
Lebanon -----	29.49			29.95			28.98
Kentucky -----							
Ballardsville -----	29.03	1	7 a. m.	29.50	13	7 a. m.	28.37
Springdale -----	29.38	1	7 a. m.	29.90	13	7 a. m.	28.67
Ohio -----							
Berea -----	28.89	1	2 p. m.	29.55	26	2 p. m.	28.31
Germantown -----	29.18	1	7 a. m.	29.77	13	7 a. m.	28.49
Granville -----	28.92	23	2 p. m.	29.46	13	2 p. m.	28.23
Hillsborough -----	28.81	1	7 a. m.	29.33	13	2 p. m.	28.15
Marietta -----	29.19	1	7 a. m.	29.68	24	7 a. m.	28.70
Oberlin -----	29.01	1	7 a. m.	29.58	13	2 p. m.	28.37
Perrysburg (c) -----	29.29	1	7 a. m.	29.87	13	1 p. m.	28.63
Urbana -----	28.70	1	2 p. m.	29.23	13	2 p. m.	28.07
Zanesville -----	29.11	1	7 a. m.	29.65	13	2 p. m.	28.52
Michigan -----							
Ann Arbor, [Winchell] -----	28.95	1	7 a. m.	29.49	13	2 p. m.	28.31
Detroit -----	29.42	1	7 a. m.	29.99	13	2 p. m.	28.76
Indiana -----							
Madison -----	29.46	1	7 a. m.	29.97	13	7 a. m.	28.77
Milton -----	29.01	1	9 p. m.	29.47	13	7 a. m.	28.24
New Harmony -----	29.66	1	7 a. m.	30.17	13	7 a. m.	28.94
Illinois -----							
Upper Alton -----	29.47	1	7 a. m.	29.96	12	9 p. m.	28.33
Missouri -----							
St. Louis -----	29.48	1	7 a. m.	30.03	12	9 p. m.	28.78
Wisconsin -----							
Beloit -----	29.11	1	7 a. m.	29.62	13	2 p. m.	28.37
Ceresco -----	28.97	1	7 a. m.	29.47	13	2 p. m.	28.19
Milwaukee -----	29.21	1	7 a. m.	29.71	13	2 p. m.	28.40
Iowa -----							
Dubuque -----	29.27	1	7 a. m.	29.76	13	7 a. m.	28.52
Muscatine -----	29.45	28	2 p. m.	d 29.90	13	7 a. m.	28.75
Quasqueton -----	29.02	1	7 a. m.	29.49	13	7 a. m.	28.31
California -----							
Sacramento, [Logan] -----	29.98			30.45			29.00
Sacramento, [Hatch] (e) -----	30.01			30.16			29.72
San Francisco (f) -----	29.82			29.96			29.50

a Observations taken at sunrise, noon, and sunset.

b Not corrected for temperature.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Same height at 9 p. m. on the 28th and 7 a. m. on the 29th.

e Observations taken at sunrise, noon, and 10 p. m.

f Observations taken at sunrise, 9 a. m., noon, and 10 p. m. Mean at 9 a. m., 29.83.

## No. 5.—BAROMETER, CORRECTED TO 32° F., 1855.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
British America .. Hamilton, (a) Canada .....	29.69				29.32
St. Martin's .....	29.85	29	7 a. m.	2	7 a. m.
Toronto .....	29.65				29.23
Maine .....	29.54	29	9 p. m.	1	9 p. m.
Gardiner .....	29.77	30	7 a. m.	1	9 a. m.
Steuben .....	29.95	2	2 p. m.	1	9 p. m.
New Hampshire .. Concord .....	29.59	4	7 a. m.	1	2 p. m.
Great Falls .....	29.49	29	7 a. m.	1	2 p. m.
Manchester .....	29.94	29	7 a. m.	1	2 p. m.
Vermont .....	29.59	28	2 p. m.	1	2 p. m.
Burlington .....	29.18				28.28
St. Johnsbury .....	29.74	23	9 p. m.	1	2 p. m.
Massachusetts .. Amherst .....	29.95	4	7 a. m.	1	2 p. m.
Nantucket .....	29.86				28.87
New Bedford .....	29.93	4	7 a. m.	1	2 p. m.
Newburyport .....	29.78	4	7 a. m.	1	2 p. m.
North Attleboro' .....	28.78				27.84
Princeton .....	29.96	4	7 a. m.	1	2 p. m.
Southwick (d) .....	30.07	4	9 p. m.	11	9 p. m.
Westfield .....	29.23	4	7 a. m.	2	7 a. m.
Williamstown .....	29.21	4	2 p. m.	1	2 p. m.
Wood's Hole .....	29.44	25	9 p. m.	1	2 p. m.
Worcester .....	29.76	4	6 a. m.	1	2 p. m.
Rhode Island .. Providence (a) .....	28.88	4	7 a. m.	1	2 p. m.
Connecticut .. Pomfret .....	29.40	27	9 p. m.	1	2 p. m.
New York .....	29.95	4	7 a. m.	1	2 p. m.
Canton .....	29.24	14	Sunset.	1	Sunrise.
New York city .....	29.72	4	7 a. m.	1	2 p. m.
Penn Yan .....	29.24	28	7 a. m.	1	2 p. m.
Sag Harbor .....	29.85	4	7 a. m.	1	2 p. m.
Spencertown .....	29.97	4	7 a. m.	1	2 p. m.
New Jersey .....	29.95	4	2 p. m.	1	2 p. m.
Bloomfield .....	29.99				29.30
Burlington .....	29.12	28	7 a. m.	5	7 a. m.
Lambertville .....	29.44	28	7 a. m.	1	7 a. m.
Newark .....	29.74	28	7 a. m.	1	7 a. m.
Pennsylvania .. Bedford .....	29.85	4	7 a. m.	1	2 p. m.
Gettysburg .....	30.12	4	7 a. m.	1	7 a. m.
Harrisburg .....	29.94	23	9 p. m.	1	7 a. m.
Lima .....	29.85	28	7 a. m.	1	2 p. m.
Morrisville (f) .....	28.99	7		1	7 a. m.
Norristown .....	28.97	28	Sunrise.	1	Sunrise.
Philadelphia .....	29.23	28	7 a. m.	1	2 p. m.
Pittsburg, [Oakland Station] .....	29.23	28	7 a. m.	1	2 p. m.
Pittsburg, [Marine Hospital] (g) .....	29.57	28	7 a. m.	1	2 p. m.
Pottsville .....	29.57	28	7 a. m.	1	7 a. m.
Maryland .. Frederick .....	30.02				29.45
Dist. of Columbia .. Washington .....	30.02	28	7 a. m.	1	2 p. m.
Virginia .. Alexandria .....	29.49	28	7 a. m.	1	7 a. m.
North Carolina .. Chapel Hill .....	30.05	28	7 a. m.	1	2 p. m.
Thornbury .....	30.04	12	7 a. m.	1	2 p. m.
South Carolina .. All Saints .....	29.93	12	7 a. m.	1	2 p. m.
Camden .....					29.54
Charleston .....	30.10	12	7 a. m.	1	2 p. m.
Georgia .. Savannah .....	29.44	13	7 a. m.	6	2 p. m.
Sparta .....	29.80				29.50
The Rock (i) .....					

a For changes in hours of observation see tables of thermometer for this month.

b Same height at 7 a. m. on the 29th.

c Same height at 2 p. m. on the 4th.

d Observations irregular. None at 9 p. m., except on the 5th, 26th, and 28th.

e Same height at 2 and 9 p. m. on the 4th.

f Not corrected for temperature.

g Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

h Same height at 9 p. m. on the 6th.

i Observations taken morning, 3 p. m., and evening.



## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida ----- Cedar Keys -----	29.96	13	7 a. m.	<i>a</i> 30.13	7	7 a. m.	29.65
Jacksonville -----	30.16	13	7 a. m.	30.40	6	9 p. m.	29.85
Key West -----	29.78	4	2 p. m.	29.95	1	7 a. m.	<i>b</i> 29.58
Knox Hill -----	29.87	26	7 a. m.	30.05	1	9 p. m.	29.72
Warrington -----	30.05	12	2 p. m.	<i>c</i> 30.26	6	9 p. m.	29.74
Alabama ----- Auburn -----	29.38			29.60			29.09
Mississippi ----- Oxford -----	29.56	27	7 a. m.	29.79	2	2 p. m.	<i>d</i> 29.33
Louisiana ----- New Orleans -----	30.24	12	7 a. m.	<i>e</i> 30.40	2	2 p. m.	30.01
Texas ----- New Wied ( <i>f</i> ) -----	28.79	6	7 a. m.	29.10	2	9 p. m.	28.52
Tennessee ----- Glenwood -----	29.58	26	9 p. m.	29.94	8	2 p. m.	29.31
Knoxville -----	29.08	11	7 a. m.	29.36	1	2 p. m.	28.74
Ohio ----- Germantown -----	29.25	27	7 a. m.	29.94	1	7 a. m.	<i>g</i> 29.00
Granville -----	28.97	27	7 a. m.	29.41	20	7 a. m.	28.65
Hillsborough -----	28.90	27	7 a. m.	29.28	5	2 p. m.	28.61
Jackson, [Gilmor] ( <i>f</i> ) -----	28.99	11	2 p. m.	29.58	26	9 p. m.	28.25
Jackson, [Wood] ( <i>f</i> ) -----	29.03	27	7 a. m.	29.37	20	7 a. m.	28.29
Marietta -----	29.29	27	7 a. m.	29.69	1	7 a. m.	28.92
Oberlin -----	29.15	12	7 a. m.	29.51	5	9 p. m.	28.85
Perrysburg -----	29.40	27	7 a. m.	29.78	26	1 p. m.	29.06
Urbana -----	28.88	27	7 a. m.	29.21	6	2 p. m.	28.56
Zanesville -----	29.15	27	7 a. m.	29.54	20	7 a. m.	28.84
Michigan ----- Ann Arbor, [Winchell] -----	29.07	12	7 a. m.	<i>h</i> 29.46	7	9 p. m.	28.79
Detroit -----	29.52	12	7 a. m.	29.91	5	9 p. m.	29.22
Indiana ----- Madison -----	29.52			29.89			29.28
Milton -----	29.09	27	2 p. m.	29.43	6	7 a. m.	28.82
New Harmony -----	29.69	27	7 a. m.	30.05	8	2 p. m.	29.47
Illinois ----- Upper Alton -----	29.47	11	7 a. m.	29.87	30	2 p. m.	29.23
Missouri ----- St. Louis -----	29.48	27	7 a. m.	29.92	30	2 p. m.	29.24
Wisconsin ----- Beloit -----	29.18	27	7 a. m.	29.66	7	9 p. m.	28.87
Ceresco -----	29.08	11	2 p. m.	29.59	7	9 p. m.	28.71
Milwaukee -----	29.31	11	7 a. m.	29.74	30	2 p. m.	28.98
Iowa ----- Dubuque -----	29.31	27	7 a. m.	29.78	30	7 a. m.	28.97
Muscatine -----	29.52	11	7 a. m.	29.92	29	9 p. m.	<i>i</i> 29.23
Quasqueton -----	29.06	27	7 a. m.	29.53	17	2 p. m.	28.71

*a* Same height at 2 and 9 p. m. on the 13th.*b* Same height at 2 p. m. on the 1st.*c* Same height at 2 p. m. on the 13th.*d* Same height at 2 p. m. on the 8th.*e* Same height at 9 p. m. on the 12th, and 7 a. m. on the 18th.*f* Not corrected for temperature.*g* Same height at 2 p. m. on the 5th.*h* Same height at 7 a. m. on the 27th.*i* Same height at 7 a. m. and 2 and 9 p. m. on the 30th.

No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1855. (a)

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			
			DATE.		HEIGHT.	DATE.		HEIGHT.	
			Day.	Hour.		Day.	Hour.		
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>	
British America	Hamilton	29.72 <sup>3</sup>	27	9 a. m.	29.98	8	9 a. m.	29.44	
	St. Martin	29.93	2	9 p. m.	30.20	16	7 a. m.	29.58	
	Toronto	29.65			29.90			29.28	
Maine	Carmel (b)	29.55	29	7 a. m.	29.83	20	2 p. m.	29.21	
	Gardiner	29.75	29	9 p. m.	30.03	20	2 p. m.	29.44	
	Steuben	29.94	2	9 p. m.	30.31	21	2 p. m.	29.54	
New Hampshire	Concord	29.58	29	7 a. m.	c 29.90	20	9 p. m.	29.22	
	Great Falls	29.48	30	7 a. m.	29.77	6	2 p. m.	29.14	
	Manchester	29.95	2	7 a. m.	30.29	5	2 p. m.	29.60	
Vermont	Burlington	29.62	2	2 p. m.	29.92	20	2 p. m.	29.23	
	St. Johnsbury	29.17	30	7 a. m.	29.45	15	2 p. m.	28.85	
Massachusetts	Amherst	29.69	30	7 a. m.	30.04	15	2 p. m.	29.30	
	Nantucket	29.91	31	7 a. m.	30.30	20	2 p. m.	29.35	
	New Bedford	29.85	31	2 p. m.	30.22	20	2 p. m.	29.37	
	Newburyport	29.92	18	7 a. m.	30.23	6	2 p. m.	29.56	
	North Attleboro'	29.75	31	7 a. m.	30.11	20	7 a. m.	29.35	
	Princeton	28.79	30	7 a. m.	d 29.11	20	2 p. m.	28.45	
	Southwick (e)	29.92	31	7 a. m.	30.22	20	2 p. m.	29.62	
	Westfield	30.07	29	7 a. m.	30.27	21	2 p. m.	29.96	
	Williamstown	29.23	30	7 a. m.	29.58	8	7 a. m.	28.95	
	Worcester	29.44	29	2 p. m.	29.78	20	2 p. m.	29.09	
	Rhode Island	Providence (a)	29.74	31	6 a. m.	30.07	20	1 p. m.	29.38
	Connecticut	Pomfret	28.86	31	7 a. m.	29.20	20	2 p. m.	28.51
	New York	Canton	29.43	2	7 a. m.	29.70	20	2 p. m.	29.12
Madrid		29.67	11	7 a. m.	29.96	20	2 p. m.	29.34	
New York city		29.91	30	7 a. m.	30.22	20	2 p. m.	29.53	
Oswego		29.63	26	2 p. m.	29.85	20	9 p. m.	29.36	
Penn Yan		29.26	2	2 p. m.	29.45	8	Sunrise	28.90	
Sag Harbor		29.64	30	7 a. m.	30.02	20	7 a. m.	f 29.24	
Spencertown		29.24	3	7 a. m.	29.53	20	9 p. m.	28.86	
New Jersey	Bloomfield	29.80	31	7 a. m.	30.13	20	2 p. m.	29.43	
	Burlington	29.89	31	7 a. m.	g 30.16			29.59	
	Lambertville	29.92	30	9 p. m.	30.22	8	7 a. m.	29.56	
	Newark	29.93			30.17			29.60	
Pennsylvania	Bedford	29.08	30	7 a. m.	29.30	7	9 p. m.	28.70	
	Gettysburg	29.39	30	7 a. m.	29.65	8	7 a. m.	29.04	
	Harrisburg	29.71	30	7 a. m.	29.98	8	7 a. m.	29.34	
	Lima	29.79	30	7 a. m.	30.13	8	7 a. m.	29.38	
	Morrisville (h)	30.07	30	7 a. m.	30.40	8	7 a. m.	29.70	
	Norristown	29.86			30.18			29.45	
	Philadelphia	29.81	30	7 a. m.	30.12	7	7 a. m.	29.45	
	Pittsburg, [Oakland Station]	28.92	10	7 a. m.	29.16	7	9 p. m.	28.61	
	Pittsburg, [Marine Hospital] (i)	28.95	10	Sunrise	29.17	8	Sunrise	28.63	
Maryland	Pottsville	29.20	30	7 a. m.	29.49	8	7 a. m.	28.86	
	Frederick	29.53	30	7 a. m.	29.77	7	2 p. m.	29.22	
Dist. of Columbia	Washington	29.99	30	7 a. m.	30.29	7	9 p. m.	29.61	
Virginia	Alexandria	29.97	30	7 a. m.	30.25	8	7 a. m.	29.61	
North Carolina	Chapel Hill	29.42	30	9 p. m.	29.64	8	7 a. m.	29.11	
South Carolina	All Saints	29.94	15	7 a. m.	30.18	8	7 a. m.	29.60	
	Camden	29.85	15	7 a. m.	30.10	8	2 p. m.	29.53	
	Charleston				30.39			29.84	
Georgia	Savannah	30.00	15	7 a. m.	30.26	8	2 p. m.	29.67	
	Sparta	29.37	10	2 p. m.	29.60	7	9 p. m.	29.12	
	The Rock (j)	29.83			30.00			29.45	
Florida	Cedar Keys	29.85	1	7 a. m.	30.01	8	9 p. m.	29.67	
	Jacksonville	30.04	14	9 p. m.	30.27	8	2 p. m.	29.64	

<sup>a</sup> For changes in hours of observation see tables of thermometer for this month.

6 No observations for the first 14 days.

c Same height at 7 a. m. on the 30th.

d Same height at 7 a. m. on the 31st.

c Observations irregular; only four at 9 p. m.

f Same height at 2 p. m. on the 20th.

g Same height at 2 p. m. on the 31st.

<sup>a</sup> Not corrected for temperature.

j Observations taken at sunrise, 9 a.

29.16; minimum, 28.72.

i Observations taken in the morning

7. Observations taken in the morning, afternoon, and evening.



## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida ----- Key West .....	29.69½	3	2 p. m.	29.92	21	7 a. m.	29.60
Knox Hill .....	29.79	15	7 a. m.	29.97	7	9 p. m.	29.60
Warrington .....	29.93	1	2 p. m.	30.15	7	9 p. m.	29.71
Alabama ----- Auburn .....	29.29			29.51			29.06
Mississippi ----- Oxford .....	29.49	13	7 a. m.	<sup>a</sup> 29.69	21	9 p. m.	29.26
Louisiana ----- New Orleans .....	30.14	15	7 a. m.	30.27	8	2 p. m.	29.99
Texas ----- New Wied ( <i>b</i> ) .....	28.66	10	7 a. m.	28.90	22	2 p. m.	28.50
Tennessee ----- Glenwood .....	29.50	10	7 a. m.	29.72	7	2 p. m.	29.21
Knoxville .....	29.00	1	7 a. m.	29.20	7	2 p. m.	28.70
Kentucky ----- Springdale .....	29.36	11	2 p. m.	29.64	7	2 p. m.	29.02
Ohio ----- Germantown .....	29.20	10	7 a. m.	29.48	7	2 p. m.	28.95
Granville .....	28.97	26	7 a. m.	29.17	7	2 p. m.	28.61
Hillsborough .....	28.86	10	7 a. m.	29.10	7	2 p. m.	28.47
Jackson, [Gilmore] .....	28.97	10	2 p. m.	29.25	7	9 p. m.	28.60
Marietta .....	29.28	10	7 a. m.	29.50	7	2 p. m.	28.94
Oberlin .....	29.11	10	7 a. m.	29.39	7	2 p. m.	28.87
Perrysburg .....	29.38	10	7 a. m.	29.65	7	2 p. m.	29.08
Urbana .....	28.76	10	9 p. m.	29.01	7	2 p. m.	28.46
Michigan ----- Ann Arbor, [Winchell] .....	29.08	10	7 a. m.	29.36	15	9 p. m.	28.81
Detroit .....	29.53	10	2 p. m.	29.78	15	9 p. m.	29.22
Indiana ----- Madison .....	29.45	10	7 a. m.	29.71	7	2 p. m.	29.07
Milton .....	29.04	11	7 a. m.	29.31	31	9 p. m.	28.64
New Harmony .....	29.61	10	7 a. m.	29.87	7	2 p. m.	29.22
Illinois ----- Upper Alton .....	29.42	3	7 a. m.	29.83	22	7 a. m.	29.04
Missouri ----- St. Louis .....	29.41	10	7 a. m.	29.70	21	2 p. m.	29.03
Wisconsin ----- Beloit .....	29.20	10	7 a. m.	29.53	21	2 p. m.	28.78
Ceresco .....	29.14	10	7 a. m.	29.46	21	9 p. m.	28.57
Madison .....	29.02	10	7 a. m.	29.33	21	2 p. m.	28.57
Milwaukee .....	29.32	5	7 a. m.	29.61	31	7 a. m.	28.95
Iowa ----- Dubuque .....	29.31	10	7 a. m.	29.67	21	2 p. m.	28.80
Muscatine .....	29.49	9	7 a. m.	29.77	21	2 p. m.	28.49
Quasqueton .....	29.07	10	7 a. m.	29.39	21	9 p. m.	28.60

<sup>a</sup> Same height at 7 a. m. on the 10th.<sup>b</sup> Not corrected for temperature.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1855. (a)

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.59			29.84			29.05
St. Martin .....	29.75	18	2 p. m.	30.15	10	2 p. m.	29.27
Toronto .....	29.51			29.81			28.94
Maine .....	29.48	19	7 a. m.	29.79	8	7 a. m.	28.90
Carmel .....	29.68	18	2 p. m.	29.98	8	7 a. m.	29.16
Gardiner .....	29.93	19	2 p. m.	30.24	8	7 a. m.	29.43
Steuben .....	29.51	18	7 a. m.	b 29.82	8	7 a. m.	29.06
New Hampshire .. Concord .....	29.50	18	2 p. m.	29.82	8	7 a. m.	29.04
Great Falls .....	29.87	18	7 a. m.	c 30.16	7	9 p. m.	29.43
Manchester .....	29.49	18	7 a. m.	d 29.88	10	2 p. m.	29.65
Vermont .....	29.09	10	9 p. m.	29.77	8	7 a. m.	28.70
St. Johnsbury .....	29.64	18	7 a. m.	29.95	7	9 p. m.	29.13
Massachusetts .. Amherst .....	29.92	1	7 a. m.	30.17	8	7 a. m.	29.41
Nantucket .....	29.81	18	9 p. m.	30.08	8	7 a. m.	29.40
New Bedford .....	29.85	18	7 a. m.	30.18	8	7 a. m.	29.38
Newburyport .....	29.71	18	9 p. m.	30.01	7	9 p. m.	29.27
North Attleboro' .....	28.75	18	7 a. m.	d 29.03	7	9 p. m.	28.30
Princeton .....	29.87	19	7 a. m.	30.17	8	7 a. m.	29.48
Southwick .....	30.05	18	7 a. m.	30.22	7	9 p. m.	29.91
Westfield .....	29.17	18	6½ a. m.	29.46	7	9 p. m.	28.63
Williamstown .....	29.39	18	9 p. m.	29.67	7	9 p. m.	28.94
Worcester .....	29.69	18	10 p. m.	29.96	7	10 p. m.	e 29.25
Rhode Island .. Providence .....	28.83	18	9 p. m.	29.10	7	9 p. m.	28.43
Connecticut .. Pomfret .....	29.30	18	7 a. m.	29.66	10	2 p. m.	28.82
New York .....	29.54	18	7 a. m.	29.93	10	2 p. m.	29.08
Canton .....	29.86	27	7 a. m.	f 30.11	7	9 p. m.	29.44
Madrid .....	29.53			29.76			29.13
New York city .....	29.16	18	2 p. m.	29.46	10	2 p. m.	28.69
Oswego .....	29.61	18	9 p. m.	29.92	11	7 a. m.	29.23
Penn Yan .....	29.21	25	9 p. m.	29.56	7	9 p. m.	28.68
Sag Harbor .....	29.73	18	9 p. m.	30.02	7	9 p. m.	29.30
New Jersey .....	29.89	1	7 a. m.	h 30.15	8	7 a. m.	29.60
Bloomfield .....	29.93	27	2 p. m.	30.30	7	9 p. m.	29.50
Burlington (g) .....	29.90			30.50			29.50
Lambertville .....	29.03	27	7 a. m.	29.31	7	2 p. m.	28.65
Newark .....	29.34	27	2 p. m.	29.61	7	2 p. m.	28.92
Pennsylvania .. Bedford .....	29.64	27	9 p. m.	29.97	7	2 p. m.	29.24
Gettysburg .....	29.75	27	7 a. m.	30.03	7	9 p. m.	i 29.39
Harrisburg .....	30.03	27	7 a. m.	j 30.30	7	9 p. m.	29.65
Lima .....	29.81	27	7 a. m.	30.09	7	9 p. m.	29.45
Morrisville (g) .....	29.74	27	7 a. m.	30.02	7	9 p. m.	29.39
Notristown .....	28.85	13	7 a. m.	29.11	7	2 p. m.	28.42
Philadelphia .....	28.87	27	9 a. m.	29.19	10	9 a. m.	28.50
Pittsburg, [Oakland Station] .....	29.12	27	7 a. m.	29.41	7	2 p. m.	28.74
Pittsburg, [Marine Hospital] (k) .....	29.75	27	9 p. m.	29.97	7	2 p. m.	29.41
Pottsville .....	29.62	27	7 a. m.	29.83	10	9 p. m.	29.28
Delaware .....	29.47	27	7 a. m.	29.74	7	2 p. m.	29.09
Newark (l) .....	29.92	27	7 a. m.	30.22	10	2 p. m.	29.53
Maryland .....	29.91	27	7 a. m.	30.20	10	2 p. m.	29.57
Chestertown (m) .....	29.40	27	9 p. m.	29.63	10	2 p. m.	29.13
Frederick .....	29.96	27	2 p. m.	n 30.20	10	9 p. m.	29.65
Dist. of Columbia .. Washington .....	29.83	28	7 a. m.	30.12	10	2 p. m.	29.53
Virginia .....				30.40			29.89
Alexandria .....	30.02	28	7 a. m.	30.27	10	9 p. m.	29.75
North Carolina .. Chapel Hill .....	29.38	28	7 a. m.	29.58	10	2 p. m.	29.15
South Carolina .. All Saints .....	29.62			29.80			29.45
Camden .....							
Charleston .....							
Georgia .....							
Savannah .....							
Sparta .....							
The Rock (o) .....							

a For changes in the hours of observations, see tables of thermometer for this month.

b Same height at 9 p. m. on the 18th, and 7 a. m. on the 19th.

c Same height at 7 a. m. on the 19th.

d Same height at 9 p. m. on the 18th.

e Same height at 6 a. m. on the 8th.

f Same height at 2 p. m. on the 27th.

g Not corrected for temperature.

h Same height at 2 p. m. on the 1st.

i Same height at 9 p. m. on the 10th.

j Same height at 9 p. m. on the 9th.

k Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Maximum, 29.19; minimum, 28.50.

l Incomplete.

m For the last 22 days of the month only.

n Same height at 9 p. m. on 27th, and at 7 a. m. and 2 p. m. on 28th.

o Observations taken morning, 3 p. m., and evening.



## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida ----- Cedar Keys ( <i>a</i> ) -----	29.92	27	2 p. m.	<i>b</i> 30.04	20	7 a. m.	29.83
Jacksonville -----	30.08	27	9 p. m.	30.28	9	2 p. m.	29.85
Key West -----	29.72	27	2 p. m.	<i>c</i> 29.84	3	7 a. m.	<i>d</i> 29.58
Knox Hill -----	29.82	27	7 a. m.	<i>e</i> 30.00	10	2 p. m.	29.60
Warrington -----	29.98	28	2 p. m.	30.18	10	9 p. m.	29.75
Alabama ----- Auburn -----	29.30			29.50			29.07
Mississippi ----- Oxford -----	29.52	13	7 a. m.	29.70	5	9 p. m.	29.30
Louisiana ----- New Orleans -----	30.16	28	7 a. m.	30.30	10	2 p. m.	29.98
Texas ----- New Wied ( <i>f</i> ) -----	28.66	2	7 a. m.	28.90	6	7 a. m.	28.50
Tennessee ----- Glenwood -----	29.49	14	7 a. m.	29.77	10	7 a. m.	29.23
Knoxville -----	29.01	28	7 a. m.	29.29	10	2 p. m.	28.64
Kentucky ----- Springdale -----	29.33	13	2 p. m.	29.65	10	7 a. m.	28.98
Ohio ----- Germantown -----	29.12	28	7 a. m.	29.39	9	9 p. m.	28.75
Granville -----	28.90	13	7 a. m.	29.19	10	7 a. m.	28.48
Hillsborough -----	28.81	13	7 a. m.	29.11	7	7 a. m.	28.40
Jackson, [Gilmore] ( <i>f</i> ) -----	28.91	13	7 a. m.	29.25	10	7 a. m.	28.52
Oberlin -----	29.01	13	9 p. m.	29.30	10	7 a. m.	28.56
Perrysburg -----	29.27	13	7 a. m.	29.60	10	7 a. m.	28.81
Urbana -----	28.67	13	9 p. m.	29.00	10	7 a. m.	28.28
Zanesville -----	29.06	13	7 a. m.	29.34	7	7 a. m.	28.76
Michigan ----- Ann Arbor, [Winchell] -----	28.96	13	7 a. m.	29.31	10	7 a. m.	28.46
Detroit -----	29.40	13	9 p. m.	29.70	10	7 a. m.	28.89
Indiana ----- Madison -----	29.42	14	7 a. m.	29.72	10	7 a. m.	29.05
Milton -----	28.99	14	7 a. m.	29.28	10	7 a. m.	28.53
Illinois ----- Manchester -----	28.62	13	7 a. m.	28.96	9	9 p. m.	28.30
Upper Alton -----	29.38	13	7 a. m.	29.72	9	2 p. m.	29.12
Missouri ----- St. Louis -----	29.38	13	7 a. m.	29.74	9	2 p. m.	<i>g</i> 29.11
Wisconsin ----- Beloit -----	29.09	13	7 a. m.	29.44	9	2 p. m.	28.65
Milwaukee, [Winkler] -----	29.20	13	7 a. m.	29.51	10	7 a. m.	28.65
Superior -----	29.08	12	7 a. m.	29.43	9	2 p. m.	28.42
Iowa ----- Dubuque -----	29.21	13	7 a. m.	29.62	9	9 p. m.	28.85
Muscatine -----	29.38	13	7 a. m.	29.73	9	9 p. m.	29.05
Quasqueton -----	28.97	13	7 a. m.	29.37	9	9 p. m.	28.63

*a* For the last 16 days of the month only.*b* Same height at 9 p. m. on the 27th.*c* Same height at 2 p. m. on the 28th.*d* Same height at 7 a. m. on the 4th.*e* Same height at 7 a. m. on the 28th.*f* Not corrected for temperature.*g* Same height at 9 p. m. on the 9th.

No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1855.<sup>(a)</sup>

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. St. Martin .....	29.83	9	7 a. m.	30.10	19	2 p. m.	29.51
Toronto .....	29.61			29.83			29.34
Maine .....							
Carmel .....	29.62	15	9 p. m.	29.96	19	2 p. m.	29.34
Gardiner .....	29.80	15	9 p. m.	30.11	19	2 p. m.	29.43
Steuben .....	30.06	15	9 p. m.	30.37	19	2 p. m.	29.67
New Hampshire .. Concord .....	29.66	15	9 p. m.	29.96	19	2 p. m.	29.38
Manchester .....	30.01	15	9 p. m.	30.29	19	2 p. m.	29.72
Vermont .....							
Burlington .....	29.66	9	7 a. m.	29.91	13	9 p. m.	29.32
St. Johnsbury .....	29.20	9	7 a. m.	29.53	19	2 p. m.	28.96
Massachusetts .. Amherst .....	29.77	16	7 a. m.	30.07	13	2 p. m.	29.50
Nantucket .....	30.02	16	7 a. m.	30.32	27	7 a. m.	29.77
New Bedford .....	29.93	22	7 a. m.	30.26	27	7 a. m.	29.70
Newburyport .....	29.99	15	2 p. m.	30.37	13	2 p. m.	29.70
North Attleboro' .....	29.84	16	7 a. m.	30.15	19	2 p. m.	29.59
Princeton .....	28.89	3	7 a. m.	29.49	2	2 p. m.	28.66
Southwick .....	29.99	16	7 a. m.	30.29	27	7 a. m.	29.78
Westfield .....	30.17	16	7 a. m.	30.36	1	7 a. m.	30.02
Williamstown .....	29.29	16	6½ a. m.	29.59	13	2 p. m.	29.00
Worcester .....	29.50	9	7 a. m.	29.82	27	7 a. m.	29.27
Rhode Island .. Providence .....	29.81	15	10 p. m.	b 30.09	27	6 a. m.	29.57
Connecticut .. Pomfret .....	28.93	16	7 a. m.	29.22	1	2 p. m.	28.65
New York .....							
Canton (c) .....	29.43	8	9 p. m.	29.66	13	2 p. m.	29.17
New York city .....	29.95	16	7 a. m.	30.25	20	7 a. m.	29.80
Oswego (d) .....	29.66	17	7 a. m.	29.88	13	7 a. m.	29.40
Penn Yan .....	29.29	16	2 p. m.	29.50	13	2 p. m.	29.04
Sag Harbor .....	29.71	15	9 p. m.	30.00	13	2 p. m.	29.48
Spencertown .....	29.34	3	2 p. m.	29.56	13	2 p. m.	29.12
Madrid .....	29.70	8	7 a. m.	29.96	19	2 p. m.	29.38
New Jersey .....							
Bloomfield .....	29.84	16	7 a. m.	30.15	13	2 p. m.	29.60
Burlington (d) .....	29.98	16	7 a. m.	e 30.23	13	9 p. m.	29.80
Lambertville .....	30.12	16	7 a. m.	30.40	13	2 p. m.	29.92
Newark .....	30.03			30.32			29.89
Pennsylvania .. Bedford .....	29.11	16	7 a. m.	29.38	13	2 p. m.	28.94
Gettysburg .....	29.44	16	7 a. m.	29.72	13	2 p. m.	29.23
Harrisburg .....	29.74	16	7 a. m.	30.02	13	2 p. m.	29.56
Lima .....	29.85	16	7 a. m.	30.16	13	2 p. m.	29.61
Morrisville (d) .....	30.11	16	7 a. m.	30.40	13	9 p. m.	29.90
Norristown .....	29.89	16	7 a. m.	30.19	13	2 p. m.	29.68
Philadelphia .....	29.85	16	7 a. m.	30.13	13	2 p. m.	29.64
Pittsburg, [Oakland Station] .....	28.96	16	2 p. m.	29.16	1	2 p. m.	28.75
Pittsburg, [Marine Hospital] (f) .....	28.98	8	9 p. m.	29.19	2	Sunrise	28.79
Pottsville .....	29.23	16	7 a. m.	29.51	13	2 p. m.	29.02
Maryland .....							
Chestertown .....	29.71	16	7 a. m.	29.94	7	2 p. m.	29.52
Frederick .....	29.68	9	7 a. m.	29.78	13	2 p. m.	29.36
Dist. of Columbia .. Washington .....	30.02	16	7 a. m.	30.32	13	2 p. m.	29.81
Virginia .....							
Alexandria .....	30.00	16	7 a. m.	30.28	13	2 p. m.	29.80
North Carolina .. Chapel Hill .....	29.47	17	7 a. m.	29.66	13	2 p. m.	29.30
South Carolina .. All Saints .....	30.04	16	2 p. m.	30.22	13	9 p. m.	29.85
Camden .....	29.90	16	7 a. m.	30.11	13	2 p. m.	29.71
Charleston .....				30.42			30.05
Georgia .....							
Savannah .....	30.10	17	7 a. m.	30.27	13	2 p. m.	29.93
Sparta .....	29.44	17	7 a. m.	29.59	12	2 p. m.	29.30
The Rock (g) .....	29.45			29.60			29.35
Florida .....							
Cedar Keys .....	29.93	16	9 p. m.	h 30.05	27	7 a. m.	29.84
Jacksonville .....	30.15	16	9 p. m.	30.30	13	2 p. m.	30.02
Key West .....	29.78	9	2 p. m.	29.89	1	7 a. m.	29.70
Knox Hill .....	29.89	17	7 a. m.	30.02	3	7 a. m.	29.78
Warrington .....	30.03	17	2 p. m.	30.19	2	9 p. m.	29.88

<sup>a</sup> For changes in hours of observations, see tables of thermometer for this month.<sup>b</sup> Same height at 6 a. m. on the 16th.<sup>c</sup> Incomplete.<sup>d</sup> Not corrected for temperature.<sup>e</sup> Same height at 2 p. m. on the 16th.<sup>f</sup> Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Maximum, 29.20; minimum, 28.79.<sup>g</sup> Observations taken morning, 3 p. m., and evening.<sup>h</sup> Same height at 7 a. m. on the 17th.



No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Mississippi . . . . . Oxford	29.55	16	9 p. m.	a 29.70	14	2 p. m.	29.43
Louisiana . . . . . New Orleans	30.20	10	7 a. m.	30.37	13	9 p. m.	30.05
Texas . . . . . New Wied (b)	28.66	10	7 a. m.	28.85	14	7 a. m.	28.60
Tennessee . . . . . Glenwood	29.55	17	7 a. m.	29.76	13	2 p. m.	29.41
Kentucky . . . . . Springdale	29.39	17	7 a. m.	29.63	13	9 p. m.	29.41
Ohio . . . . . Germantown	29.22	17	7 a. m.	29.43	1	2 p. m.	29.01
	28.99	16	7 a. m.	29.20	1	9 p. m.	28.73
	28.89	17	7 a. m.	29.10	1	2 p. m.	28.71
	29.37	17	2 p. m.	29.71	1	2 p. m.	28.85
	29.11	8	2 p. m.	29.32	1	2 p. m.	28.87
	29.36	8	7 a. m.	29.59	1	7 a. m.	c 29.16
	28.79	8	2 p. m.	29.00	1	2 p. m.	28.61
	29.14	16	7 a. m.	29.37	1	2 p. m.	28.95
Michigan . . . . . Ann Arbor, [Winchell]	29.06	8	7 a. m.	29.27	1	9 p. m.	28.82
	29.00	8	7 a. m.	29.17	1	7 a. m.	28.74
	29.50	8	7 a. m.	29.72	1	2 p. m.	29.24
Indiana . . . . . Milton	29.06	16	9 p. m.	29.23	13	2 p. m.	28.84
	29.61	17	7 a. m.	29.79	13	7 a. m.	29.46
Illinois . . . . . Manchester	28.63	5	7 a. m.	d 28.76	1	9 p. m.	28.50
	29.44	17	7 a. m.	29.59	14	9 p. m.	29.28
Missouri . . . . . St. Louis	29.43	17	7 a. m.	29.61	12	9 p. m.	29.27
Wisconsin . . . . . Beloit	29.16	7	7 a. m.	29.32	1	7 a. m.	28.83
	29.27	7	2 p. m.	29.49	1	7 a. m.	28.95
	29.14	8	9 p. m.	29.42	1	7 a. m.	28.76
Iowa . . . . . Dubuque	29.27	21	7 a. m.	29.47	1	7 a. m.	28.99
	29.40	7	7 a. m.	29.61	15	7 a. m.	29.23
	29.04	6	7 a. m.	29.29	1	7 a. m.	28.77

*a* Same height at 7 a. m. on the 17th.  
*b* Not corrected for temperature.

c Same height at 1 p. m. on the 1st.  
d Same height at 7 a. m. on the 17th and 18th.

No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1855.<sup>(a)</sup>

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Montreal (b) .....	29.82			29.99			29.48
St. Martin .....	29.84	31	7 a. m.	30.20	9	9 p. m.	29.20
Toronto .....	29.65			30.02			29.13
Maine .....	29.74	20	7 a. m.	d 29.93	29	9 p. m.	29.46
Carmel (c) .....	29.81	20	7 a. m.	30.10	9	9 p. m.	e 29.21
Gardiner .....	30.06	20	7 a. m.	30.38	10	7 a. m.	29.39
Steuben .....	29.69	31	7 a. m.	30.00	9	9 p. m.	29.03
New Hampshire .. Concord .....	30.02	31	9 p. m.	30.32	10	7 a. m.	29.50
Manchester (f) .....	29.69	31	7 a. m.	30.05	9	9 p. m.	29.10
Vermont .....	29.82	20	7 a. m.	30.15	9	9 p. m.	29.23
Massachusetts .. Amherst .....	30.05	19	9 p. m.	30.37	9	9 p. m.	29.47
Nantucket .....	30.07	31	2 p. m.	30.28	9	9 p. m.	29.37
New Bedford .....	30.03	20	7 a. m.	30.35	9	9 p. m.	29.38
Newburyport .....	29.87	20	7 a. m.	30.21	9	9 p. m.	29.27
North Attleboro' .....	28.91	20	7 a. m.	29.23	9	9 p. m.	28.33
Princeton .....	29.99	19	7 a. m.	30.32	10	7 a. m.	29.48
Southwick (f) .....	29.38	20	6 1/2 a. m.	29.65	9	2 p. m.	28.74
Williamstown .....	30.20	20	7 a. m.	30.44	9	2 p. m.	29.99
Westfield .....	29.47	4	7 a. m.	29.83	10	9 p. m.	28.92
Worcester .....	29.85	20	6 a. m.	30.21	9	10 p. m.	29.20
Rhode Island .. Providence .....	28.96	20	7 a. m.	29.28	9	9 p. m.	28.42
Connecticut .. Pomfret .....	29.45	31	7 a. m.	29.83	9	2 p. m.	28.85
New York .....	29.81	10	2 p. m.	30.43	16	2 p. m.	29.41
Canton .....	30.00	31	7 a. m.	30.33	9	2 p. m.	29.48
Madrid .....	29.68	19	2 p. m.	29.97	9	7 a. m.	h 29.25
New York city .....	29.31	31	Sunrise.	29.59	9	2 p. m.	28.83
Oswego (g) .....	29.72	19	9 p. m.	d 30.08	9	9 p. m.	29.19
Penn Yan .....	29.35	31	7 a. m.	29.66	9	2 p. m.	28.85
Sag Harbor .....	29.92	28	9 p. m.	30.38	9	2 p. m.	29.35
Spencertown .....	30.04	31	9 p. m.	30.33	9	9 p. m.	29.59
New Jersey .....	30.15	31	2 p. m.	30.45	9	9 p. m.	29.71
Bloomfield .....	30.08						
Burlington (g) .....	29.14	20	7 a. m.	29.45	9	2 p. m.	28.78
Lambertville .....	29.48	19	7 a. m.	j 29.80	9	2 p. m.	29.02
Newark (i) .....	29.77	20	7 a. m.	30.10	9	2 p. m.	29.33
Bedford .....	29.89	31	7 a. m.	30.24	9	2 p. m.	29.42
Gettysburg .....	30.16	20	7 a. m.	30.50	9	2 p. m.	29.70
Harrisburg .....	29.93	31	7 a. m.	30.29	9	2 p. m.	29.45
Lima .....	29.92	20	7 a. m.	30.25	9	2 p. m.	29.51
Morrisville (g) .....	29.05	18	9 p. m.	29.36	9	7 a. m.	28.72
Norristown .....	29.01	20	Sunrise.	29.33	9	9 a. m.	28.67
Philadelphia .....	29.28	31	7 a. m.	29.63	9	9 p. m.	28.86
Pittsburg, [Oakland Station] .....	29.74	31	7 a. m.	30.00	9	2 p. m.	29.30
Pittsburg [Marine Hospital] (k) .....	29.61	20	7 a. m.	29.93	9	2 p. m.	29.22
Pottsville .....	30.07	20	7 a. m.	30.42	9	2 p. m.	29.68
Maryland .....	30.04	31	7 a. m.	30.35	9	7 a. m.	29.73
Chestertown .....	29.46	20	7 a. m.	29.69	10	2 p. m.	29.25
Frederick .....	30.00	31	9 p. m.	30.22	5	9 p. m.	29.80
Dist. of Columbia .. Washington .....	29.88	31	9 p. m.	30.11	5	2 p. m.	29.64
Virginia .....	30.06	31	9 p. m.	30.26	5	2 p. m.	29.86
Alexandria .....	29.42	19	2 p. m.	m 29.55	5	2 p. m.	29.27
North Carolina .. Chapel Hill .....	29.41			29.50			29.25
South Carolina .. All Saints .....	29.89	8	2 p. m.	30.03	6	7 a. m.	29.79
Camden .....	30.10	31	9 p. m.	30.31	5	2 p. m.	29.94
Charleston (l) .....							
Georgia .....							
Savannah .....							
Sparta .....							
The Rock (n) .....							
Florida .....							
Cedar Keys .....							
Jacksonville .....							

a For changes in hours of observation see tables of thermometer for this month.

b For 8 days only, 11th to 18th inclusive.

c Observations omitted from the 5th to the 25th of the month.

d Same height at 9 p. m. on the 31st.

e Same height at 7 a. m. on the 10th.

f Incomplete.

g Not corrected for temperature.

A Same height at 2 p. m. on the 9th.

i Observations taken at 7 a. m. and 6 p. m.

j Same height at 7 a. m. on the 20th.

k Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 29.02. Maximum, 29.33; minimum, 28.68.

l Maximum for the month, 30.38; minimum, 30.02.

m Same height at 2 p. m. on the 31st.

n Observations taken in the morning, 3 p. m., and evening.



## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida ..... Key West.....	29.74	8	2 p. m.	29.88	30	7 a. m.	29.53
Knox Hill (a).....	29.85	12	7 a. m.	29.98	6	2 p. m.	29.69
Warrington.....	30.02	12	2 p. m.	30.19	6	7 a. m.	29.83
Alabama ..... Auburn.....	29.37	31	9 p. m.	29.55	29	9 p. m.	29.17
Mississippi..... Oxford (b).....	29.49	13	2 p. m.	29.65	5	2 p. m.	29.34
Port Gibson (c).....	29.81	20	7 a. m.	29.88	31	9 p. m.	29.62
Louisiana ..... New Orleans.....	30.16	13	7 a. m.	30.36	6	9 p. m.	29.87
Texas ..... New Wied (d).....	28.65	13	7 a. m.	28.82	6	2 p. m.	e 28.50
Tennessee ..... Glenwood (f).....	29.56	13	7 a. m.	29.80	5	9 p. m.	29.27
Kentucky ..... Springdale.....	29.42	18	7 a. m.	29.68	5	9 p. m.	29.22
Ohio ..... Germantown.....	29.26	19	7 a. m.	29.55	5	7 a. m.	29.02
Granville.....	29.02	19	7 a. m.	29.32	9	7 a. m.	28.74
Hillsborough.....	28.92	19	7 a. m.	29.19	9	7 a. m.	28.69
Jackson, [Gilmore] (d).....	29.40	18	9 p. m.	29.65	16	9 p. m.	29.12
Oberlin.....	29.17	19	7 a. m.	29.48	9	7 a. m.	28.81
Perrysburg.....	29.41	19	7 a. m.	29.74	8	9 p. m.	29.08
Urbana.....	28.81	19	7 a. m.	29.09	9	7 a. m.	28.55
Zanesville.....	29.16	19	7 a. m.	29.46	9	7 a. m.	28.87
Michigan ..... Ann Arbor, [Winchell].....	29.11	19	7 a. m.	29.47	9	7 a. m.	28.75
Battle Creek.....	29.07	18	7 a. m.	29.36	8	9 p. m.	28.76
Detroit.....	29.52	18	7 a. m.	29.82	20	9 p. m.	29.15
Indiana ..... Milton.....	29.08	19	7 a. m.	29.38	16	2 p. m.	28.89
New Harmony.....	29.65	18	7 a. m.	29.91	10	2 p. m.	29.43
Illinois ..... Manchester.....	28.68	18	7 a. m.	29.01	23	9 p. m.	28.50
Upper Alton.....	29.48	19	7 a. m.	29.79	10	7 a. m.	29.28
Missouri ..... St Louis.....	29.49	18	2 p. m.	29.75	10	2 p. m.	29.26
Wisconsin ..... Beloit.....	29.22	18	7 a. m.	29.54	8	2 p. m.	28.93
Milwaukee, [Winkler].....	29.32	18	2 p. m.	29.61	8	9 p. m.	29.03
Superior.....	29.21	26	2 p. m.	29.55	11	7 a. m.	28.75
Iowa ..... Dubuque.....	29.35	18	2 p. m.	29.63	8	2 p. m.	29.08
Muscatine.....	29.47	18	7 a. m.	29.82	10	2 p. m.	29.20

a Observations omitted from the 20th to the 30th of the month.

b For the first 14 days of the month only.

c For the last 12 days of the month only.

d Not corrected for temperature.

e Same height at 2 p. m. on the 7th.

f Observations omitted from the 13th to the 23d of the month.

## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches</i>			<i>Inches</i>			<i>Inches</i>
British America .. Horton .....	29.58	24	7 a. m.	29.90	18	2 p. m.	29.22
Montreal .....	29.91	5	7 a. m.	30.24	26	9 p. m.	29.45
St. Martin .....	29.83	5	7 a. m.	30.16	26	9 p. m.	29.33
Toronto .....	29.72			30.09			29.24
Maine .....	29.68	24	7 a. m.	30.05	27	2 p. m.	29.29
Gardiner .....	29.86	15	7 a. m.	30.36	3	7 a. m.	29.21
Steuben .....	30.10	23	7 a. m.	<i>a</i> 30.42	2	2 p. m.	29.26
New Hampshire .. Concord .....	29.74	5	7 a. m.	30.05	27	7 a. m.	29.31
Manchester .....	30.06	5	7 a. m.	30.35	18	7 a. m.	29.63
Vermont .....	29.75	20	7 a. m.	30.07	29	9 p. m.	29.32
Massachusetts .. Amherst .....	29.85	20	7 a. m.	30.18	18	2 p. m.	29.40
Nantucket .....	30.09	1	7 a. m.	<i>b</i> 30.35	27	2 p. m.	29.69
New Bedford .....	30.00	20	7 a. m.	30.29	18	2 p. m.	29.53
Newburyport ( <i>c</i> ) .....	30.09	20	7 a. m.	30.39	18	1½ p. m.	29.63
North Attleboro' .....	29.91	20	7 a. m.	30.22	18	2 p. m.	29.44
Princeton .....	28.95	19	9 p. m.	29.27	27	2 p. m.	28.46
Southwick .....	30.07	20	7 a. m.	30.36	27	7 a. m.	29.68
Westfield .....	30.24	20	7 a. m.	30.46	12	2 p. m.	30.04
Williamstown .....	29.37	5	7 a. m.	<i>b</i> 29.67	27	7 a. m.	28.99
Worcester .....	29.54	5	2 p. m.	29.88	27	7 a. m.	29.16
Rhode Island .. Providence ( <i>c</i> ) .....	29.89	19	10 p. m.	<i>b</i> 30.17	18	1 p. m.	29.42
Connecticut .. Pomfret .....	29.00	5	7 a. m.	<i>b</i> 29.28	18	2 p. m.	28.61
New York .. Buffalo ( <i>c</i> ) .....	29.42	19	9 p. m.	29.70	26	2 p. m.	29.03
Canton .....	29.52	20	7 a. m.	29.82	26	9 p. m.	29.08
New York city .....	30.05	20	7 a. m.	30.34	18	2 p. m.	29.67
Oswego .....	29.61	19	9 p. m.	29.91	30	9 p. m.	29.22
Penn Yan ( <i>c</i> ) .....	29.36	19	Sunset.	29.59	26	2 p. m.	28.94
Sag Harbor .....	29.82	20	7 a. m.	30.11	27	7 a. m.	29.38
Spencertown .....	29.45	24	7 a. m.	29.83	18	2 p. m.	29.00
New Jersey .. Bloomfield .....	29.95	20	7 a. m.	30.23	27	7 a. m.	29.55
Burlington .....	30.08	24	7 a. m.	<i>d</i> 30.32	9	9 p. m.	29.70
Lambertville .....	30.19	24	7 a. m.	30.48	26	9 p. m.	29.87
Newark ( <i>c</i> ) .....	30.10			30.39			29.73
Pennsylvania .. Gettysburg .....	29.53	5	7 a. m.	29.78	19	7 a. m.	29.10
Harrisburg .....	29.86	5	7 a. m.	<i>b</i> 30.07	26	9 p. m.	29.49
Lima .....	29.95	5	7 a. m.	30.21	26	9 p. m.	29.57
Morrisville ( <i>c</i> ) .....	30.20	24	7 a. m.	<i>d</i> 30.45	26	9 p. m.	29.85
Norristown .....	30.03	20	7 a. m.	30.28	26	9 p. m.	29.66
Philadelphia .....	29.98	20	7 a. m.	30.22	18	2 p. m.	29.62
Pittsburg, [Oakland Station] .....	29.04	19	7 a. m.	29.24	26	2 p. m.	28.72
Pittsburg, [Marine hospital] ( <i>f</i> ) .....	29.04	28	9 a. m.	29.24	26	3 p. m.	28.68
Pottsville .....	29.34	1	7 a. m.	29.60	18	2 p. m.	28.99
Delaware .. Newark ( <i>g</i> ) .....	29.89	20	7 a. m.	30.21	26	2 p. m.	29.59
Maryland .. Frederick .....	29.68	24	7 a. m.	29.90	26	2 p. m.	29.34
Dist. of Columbia .. Washington .....	31.12	5	7 a. m.	30.38	26	9 p. m.	29.75
Virginia .. Alexandria .....	30.10	24	7 a. m.	30.35	26	9 p. m.	29.76
North Carolina .. Chapel Hill .....	29.53	1	9 p. m.	29.77	27	7 a. m.	29.32
South Carolina .. All Saints .....	30.04	1	2 p. m.	30.28	29	9 p. m.	29.80
Camden .....	29.93	1	7 a. m.	30.16	30	2 p. m.	29.68
Charleston .....				30.50			30.08
Georgia .. Savannah .....	30.09	1	7 a. m.	30.30	30	2 p. m.	29.84
Sparta .....	29.44	1	7 a. m.	<i>h</i> 29.61	30	2 p. m.	29.23
The Rock .....	29.47			29.60			29.30

*a* Same height at 2 p. m. and 9 p. m. on the 23d.*b* Same height at 7 a. m. on the 20th.*c* For changes in hours of observation see tables of thermometer for this month.*d* Same height at 2 p. m. on the 24th.*e* Not corrected for temperature.*f* Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Max. 29.21; min. 28.78.*g* Incomplete.*h* Same height at 2 p. m. on the 1st, and at 7 a. m. on the 2d.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Hour.	HEIGHT.	Day.	Hour.
	<i>Inches.</i>		<i>Inches.</i>		
Florida.....Cedar Keys.....	20.90	1 7 a. m.	<i>a</i> 30.04	27 7 a. m.	<i>b</i> 29.79
Jacksonville.....	30.12	1 7 a. m.	30.32	30 2 p. m.	29.91
Key West.....	29.71	1 2 p. m.	29.84	27 7 a. m.	<i>c</i> 29.60
Knox Hill.....	29.85	1 9 p. m.	30.03	30 2 p. m.	29.67
Warrington.....	30.04	1 4 p. m.	<i>d</i> 30.20	30 2 p. m.	29.81
Alabama.....Auburn.....	29.40	1 7 a. m.	29.60	-----	29.17
Mississippi.....Oxford ( <i>e</i> ).....	29.55	14 7 a. m.	29.64	29 2 p. m.	29.33
Louisiana.....New Orleans.....	30.19	1 9 p. m.	30.34	16 7 a. m.	29.93
Texas.....New Wied ( <i>f</i> ).....	28.69	30 7 a. m.	28.80	29 7 a. m.	28.58
Tennessee.....Glenwood.....	29.58	1 7 a. m.	29.75	29 9 p. m.	29.33
Kentucky.....Springdale.....	29.44	1 7 a. m.	29.64	29 9 p. m.	29.23
Ohio.....Germantown.....	29.28	7 7 a. m.	29.43	29 9 p. m.	28.99
Granville.....	29.05	7 7 a. m.	29.22	26 2 p. m.	28.78
Hiram.....	28.87	7 7 a. m.	29.09	7 2 p. m.	28.61
Hillsborough.....	28.94	1 7 a. m.	29.11	30 7 a. m.	28.68
Jackson, [Gilmor].....	29.43	1 7 a. m.	<i>g</i> 29.57	30 7 a. m.	29.15
Oberlin.....	29.18	6 7 a. m.	29.35	30 7 a. m.	28.86
Perrysburg.....	29.44	24 9 p. m.	29.65	29 9 p. m.	29.12
Urbana.....	28.83	1 9 p. m.	28.98	30 7 a. m.	28.57
Zanesville.....	29.19	7 7 a. m.	29.38	30 7 a. m.	28.91
Michigan.....Ann Arbor, [Winchell].....	29.13	19 9 p. m.	29.34	29 9 p. m.	28.79
Battle Creek.....	29.08	19 2 p. m.	<i>h</i> 29.25	29 9 p. m.	28.78
Detroit.....	29.58	19 2 p. m.	<i>h</i> 29.78	29 9 p. m.	29.23
Indiana.....Milton.....	29.10	10 7 a. m.	29.26	29 9 p. m.	28.83
New Harmony.....	29.65	6 7 a. m.	29.79	29 2 p. m.	29.42
Illinois.....Manchester.....	28.68	27 7 a. m.	28.87	18 9 p. m.	28.51
Upper Alten.....	29.48	1 9 p. m.	29.64	29 2 p. m.	29.25
Missouri.....St Louis.....	29.48	10 7 a. m.	29.65	18 2 p. m.	29.30
Wisconsin.....Beloit.....	29.24	6 7 a. m.	29.39	29 2 p. m.	29.00
Milwaukee, [Winkler].....	29.35	19 2 p. m.	29.54	29 9 p. m.	29.07
Superior.....	29.32	19 7 a. m.	<i>i</i> 29.70	28 2 p. m.	28.89
Iowa.....Dubuque.....	29.34	13 7 a. m.	29.55	17 9 p. m.	29.04
Muscatine.....	29.48	6 7 a. m.	29.69	17 9 p. m.	29.23

*a* Same height at 4 p. m. on the 1st, and 7 a. m. on the 2d.*b* Same height at 2 p. m. on the 27th, and 7 a. m., 2 and 9 p. m. on the 30th.*c* Same height at 7 a. m. on the 28th.*d* Same height at 2 p. m. on the 2d.*e* For the last 22 days of the month only.*f* Not corrected for temperature.*g* Same height at 2 p. m. on the 1st.*h* Same height at 9 p. m. on the 19th.*i* Same height at 2 and 9 p. m. on the 19th.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Horton .....	29.55	31	9 p. m.	29.99	28	9 p. m.	29.00
Montreal .....	29.73	31	7 a. m.	30.17	6	9 p. m.	29.30
St. Martin .....	29.67	31	7 a. m.	30.15	7	9 p. m.	29.19
Toronto .....	29.55			29.92			28.94
Maine .....							
Carmel (a) .....	29.56	31	9 p. m.	29.97	28	2 p. m.	29.08
Gardiner .....	29.73	31	2 p. m.	30.18	28	2 p. m.	29.27
Portland (b) .....	29.82	11	2 p. m.	30.80	28	2 p. m.	29.34
Steuben .....	29.98	31	9 p. m.	30.42	28	2 p. m.	29.44
New Hampshire .. Concord .....	29.55	31	7 a. m.	30.00	28	2 p. m.	29.06
Manchester (a) .....	29.85	10	9 p. m.	30.18	4	9 p. m.	29.43
Vermont .....							
Burlington .....	29.56	31	7 a. m.	30.03	28	7 a. m.	29.07
Massachusetts .. Amherst .....	29.66	31	7 a. m.	30.12	3	2 p. m.	29.22
Nantucket .....	29.92	31	7 a. m.	30.35	28	2 p. m.	29.40
New Bedford .....	29.83	31	7 a. m.	30.29	28	2 p. m.	29.32
Newburyport (a) .....	29.90	31	1 1/2 p. m.	30.35	3	7 a. m.	29.45
North Attleboro' .....	29.74	31	7 a. m.	30.18	28	2 p. m.	29.24
Princeton .....	28.75	31	7 a. m.	29.19	28	7 a. m.	c 28.28
Southwick (d) .....	29.84	11	7 a. m.	30.17	3	2 p. m.	29.41
Westfield .....	30.15	3	7 a. m.	30.44	28	7 a. m.	29.95
Williamstown .....	29.18	31	7 a. m.	29.62	28	7 a. m.	28.65
Worcester .....	29.39	31	2 p. m.	29.78	28	7 a. m.	28.88
Rhode Island .. Providence (a) .....	29.70	31	Sunrise	30.16	28	Sunrise	29.17
Connecticut .. Pomfret .....	28.83	31	7 a. m.	e 29.22	28	2 p. m.	28.33
New York .....							
Buffalo (a) .....	29.25	31	7 a. m.	29.61	27	9 p. m.	28.77
Canton .....	29.33	10	2 p. m.	29.79	28	7 a. m.	28.86
New York city .....	29.90	31	7 a. m.	30.30	3	7 a. m.	29.46
Oswego .....	29.21	31	7 a. m.	29.60	28	7 a. m.	28.72
Penn Yan (a) .....	29.17	31	Sunrise	29.52	28	Sunrise	28.65
Sag Harbor .....	29.63	31	9 p. m.	30.07	3	7 a. m.	29.14
Spencertown .....	29.35	31	7 a. m.	29.81	28	7 a. m.	28.81
New Jersey .....							
Bloomfield .....	29.76	31	7 a. m.	30.22	28	7 a. m.	29.27
Burlington (b) .....	29.92	31	2 p. m.	30.24	7	7 a. m.	29.50
Lambertville .....	30.00	31	2 p. m.	36.44	28	7 a. m.	29.57
Newark (a) .....	29.95			30.19			29.48
Pennsylvania .....							
Bedford .....	29.13	1	7 a. m.	29.40	24	2 p. m.	28.89
Gettysburg .....	29.38	31	7 a. m.	29.79	3	7 a. m.	28.98
Harrisburg .....	29.70	31	2 p. m.	30.03	28	7 a. m.	29.25
Lima .....	29.80	31	7 a. m.	30.18	28	7 a. m.	29.33
Morrisville (b) .....	30.04	31	7 a. m.	30.45	3	7 a. m.	29.60
Norristown .....	29.89	31	7 a. m.	30.26	3	7 a. m.	29.46
Philadelphia .....	29.83	31	7 a. m.	30.18	3	7 a. m.	29.45
Pittsburg, [Oakland Station] .....	28.90	10	7 a. m.	29.15	3	7 a. m.	28.58
Pittsburg, [Marine Hospital] (f) .....	28.93	10	9 a. m.	29.23	6	9 a. m.	28.61
Pottsville .....	29.16	31	7 a. m.	29.56	3	7 a. m.	28.78
Delaware .....							
Newark (a) .....	29.72	31	7 a. m.	g 30.07	3	7 a. m.	29.34
Maryland .....							
Chestertown .....	29.75	31	7 a. m.	30.01	3	7 a. m.	29.32
Frederick .....	29.55	31	7 a. m.	29.92	6	2 p. m.	29.20
Dist. of Columbia .. Washington .....	30.00	31	7 a. m.	30.33	2	9 p. m.	29.60
Virginia .....							
Alexandria .....	29.99	31	7 a. m.	30.30	3	7 a. m.	29.63
North Carolina .. Chapel Hill .....	29.44	26	7 a. m.	29.67	2	9 p. m.	29.12
South Carolina .. All Saints .....	29.97	26	7 a. m.	30.25	2	2 p. m.	29.61
Camden .....	29.85	26	7 a. m.	30.19	2	2 p. m.	29.48
Charleston .....				30.37			29.82
Georgia .....							
Savannah .....	30.03	26	7 a. m.	30.31	2	2 p. m.	29.70
Sparta .....	29.42	26	7 a. m.	29.64	2	2 p. m.	29.19
The Rock (h) .....	29.42			29.55			29.30

a For changes in hours of observation see tables of thermometer for this month.

b Not corrected for temperature.

c Same height at 2 p. m. on the 28th.

d Incomplete.

e Same height at 2 p. m. on the 31st.

f Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m. 28.95; max. 29.23; min. 28.61.

g Same height at 9 p. m. on the 31st.

h Observations taken morning, 3 p. m., and evening.



## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
Florida.....	Cedar Keys.....	29.88	26 7 a. m.	30.09	2 9 p. m.		29.69
	Jacksonville.....	30.09	26 7 a. m.	30.36	2 2 p. m.		29.80
	Key West.....	29.69	25 2 p. m.	29.80	12 7 a. m.		29.56
	Knox Hill.....	29.85	26 7 a. m.	30.07	2 2 p. m.		29.66
	Warrington (a).....	30.04	25 Sunrise.	30.27	5 Sunset		29.81
Alabama.....	Auburn.....	29.37	26 7 a. m.	29.58	5 9 p. m.		29.15
Mississippi.....	Oxford.....	29.57	24 9 p. m.	29.80	5 7 a. m.		29.28
Louisiana.....	New Orleans.....	30.26	7 7 a. m.	30.44	5 7 a. m.		29.91
Texas.....	New Wied (b).....	28.89	4 7 a. m.	29.37	4 9 p. m.		28.45
Arkansas.....	Camden (a).....	29.11		29.44			28.75
Tennessee.....	Glenwood.....	29.58	25 7 a. m.	29.82	4 2 p. m.		29.26
Kentucky.....	Millersburg.....	29.19	9 2 p. m.	29.53	1 7 a. m.		28.43
	Springdale.....	29.41	10 7 a. m.	29.70	4 2 p. m.		29.12
Ohio.....	Cincinnati, [Hurt].....	29.41	10 7 a. m.	c 29.65	1 2 p. m.		29.14
	Germantown.....	29.21	10 7 a. m.	d 29.44	2 2 p. m.		28.91
	Granville.....	28.97	17 7 a. m.	29.19	21 2 p. m.		28.64
	Hillsborough.....	28.85	10 7 a. m.	29.10	2 2 p. m.		28.57
	Hiram.....	28.80	16 9 p. m.	29.08	3 2 p. m.		28.54
	Jackson, [Gilmor] (b).....	29.30	10 2 p. m.	29.58	2 2 p. m.		29.06
	Oberlin.....	29.08	16 9 p. m.	29.37	27 9 p. m.		28.68
	Perrysburg.....	29.34	16 7 a. m.	29.74	27 9 p. m.		28.94
	Urbana.....	28.74	17 7 a. m.	28.98	4 2 p. m.		28.48
	Zanesville.....	29.11	16 9 p. m.	29.36	21 2 p. m.		28.82
Michigan.....	Ann Arbor, [Winchell].....	29.01	16 9 p. m.	29.34	27 9 p. m.		28.55
	Battle Creek.....	29.00	16 7 a. m.	29.32	21 7 a. m.		28.09
	Detroit.....	29.44	16 9 p. m.	29.79	27 9 p. m.		28.98
Indiana.....	Milton.....	29.03	16 9 p. m.	29.33	2 7 a. m.		28.73
	New Harmony.....	29.68	11 2 p. m.	29.91	4 9 p. m.		29.33
Illinois.....	Manchester.....	28.75	25 7 a. m.	29.08	4 7 a. m.	e	28.41
	Upper Alton.....	29.47	11 7 a. m.	29.80	4 2 p. m.		29.11
Missouri.....	St. Louis.....	29.49	11 7 a. m.	29.83	4 2 p. m.		29.07
Wisconsin.....	Beloit.....	29.18	11 7 a. m.	29.45	3 9 p. m.		28.80
	Milwaukee, [Winkler].....	29.28	4 7 a. m.	29.91	26 7 a. m.		28.91
	Superior.....	29.30	23 9 p. m.	29.76	27 2 p. m.		28.79
Iowa.....	Dubuque.....	29.32	11 7 a. m.	29.65	1 2 p. m.		28.80
	Muscatine.....	29.49	12 7 a. m.	29.86	3 9 p. m.		29.05
	Quasqueton (a).....	29.08	11 7 a. m.	29.45	3 2 p. m.		28.61
West Indies.....	Up Park Camp, Jamaica (a).....	29.75	27 9½ a. m.	f 29.89	12 3½ p. m.		29.62

a For changes in hours of observation see tables of thermometer for this month.

b Not corrected for temperature.

c Same height at 7 a. m. on the 16th.

d Same height at 9 p. m. on the 16th.

e Same height at 1 p. m. on the 4th.

f Same height at 9½ a. m. on the 28th.

## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America..Horton .....	29.57	12	2 p. m.	30.10	29	2 p. m.	28.86
Montreal .....	29.88	9	2 p. m.	30.29	28	2 p. m.	29.11
St. Martin .....	29.84	9	9 p. m.	30.26	28	7 a. m.	29.02
Toronto .....	29.66			30.13			28.98
Maine .....	29.69	9	9 p. m.	30.19	28	9 p. m.	28.97
Gardiner .....	29.87	12	7 a. m.	30.30	21	2 and 9.	29.20
Portland (a) .....	29.95	17	9 p. m.	30.50	29	7 a. m.	29.25
Steuben .....	30.07	12	7 a. m.	30.59	25	7 a. m.	29.23
New Hampshire..Concord .....	29.69	10	7 a. m.	30.11	28	2 p. m.	b 29.00
Manchester .....	30.10	12	7 a. m.	30.48	28	9 p. m.	29.44
Vermont .....	29.71	9	9 p. m.	30.13	28	2 p. m.	28.97
Massachusetts..Amherst .....	29.81	10	7 a. m.	30.22	28	2 p. m.	29.13
Nantucket .....	30.02	10	7 a. m.	30.40	29	7 a. m.	29.37
New Bedford .....	29.95	10	7 a. m.	30.32	29	7 a. m.	29.25
Newburyport .....	30.04	10	7 a. m.	30.46	28	2 p. m.	29.34
North Attleboro' .....	29.87	10	7 a. m.	30.27	29	7 a. m.	29.17
Princeton .....	28.87	10	7 a. m.	29.27	28	9 p. m.	28.21
Southwick (c) .....	30.10	10	7 a. m.	30.38	29	7 a. m.	29.39
Westfield .....	30.21	10	7 a. m.	30.50	28	2 p. m.	29.90
Williamstown .....	29.31	10	7 a. m.	29.68	29	7 a. m.	28.56
Worcester .....	29.51	10	7 a. m.	29.88	29	7 a. m.	28.44
Rhode Island .....	29.86	10	Sunrise.	30.24	28	1 p. m.	29.16
Connecticut .....	28.95	10	7 a. m.	29.32	29	7 a. m.	28.32
New York .....	30.09	10	7 a. m.	30.42	28	9 p. m.	29.41
Blackwell's Island .....	29.40	9	2 p. m.	29.77	28	9 p. m.	28.62
Buffalo (d) .....	29.45	9	9 p. m.	29.89	28	2 p. m.	28.70
Canton .....	30.03	10	7 a. m.	30.35	28	9 p. m.	29.39
New York city .....	29.74	9	2 p. m.	30.14	28	7 a. m.	28.96
Ogdensburg .....	29.32	9	2 p. m.	29.73	27	9 p. m.	28.80
Oswego .....	28.90	9	2 p. m.	29.28	28	2 p. m.	28.27
Ovid .....	29.28	9	2 p. m.	29.65	27	Sunrise.	28.63
Penn Yan (d) .....	29.49	9	9 p. m.	29.85	28	9 p. m.	28.79
Spencertown .....	29.93	10	2 p. m.	30.29	28	2 p. m.	29.26
New Jersey .....	30.07	20	2 p. m.	30.35	28	9 p. m.	29.50
Bloomfield .....	30.16	22	9 p. m.	30.46	28	9 p. m.	29.56
Burlington (a) .....	30.05			30.37			29.40
Lambertville .....	29.16	9	7 a. m.	29.48	28	2 p. m.	28.63
Newark .....	29.53	9	7 a. m.	29.83	28	2 p. m.	28.86
Pennsylvania .....	29.85	9	7 a. m.	30.12	28	7 a. m.	29.31
Bedford .....	29.93	10	7 a. m.	30.23	28	2 p. m.	29.28
Gettysburg .....	30.15	22	9 p. m.	30.48	28	9 p. m.	29.52
Harrisburg .....	29.97	20	2 p. m.	30.30	28	9 p. m.	29.12
Lima .....	29.95	10	7 a. m.	30.22	28	9 p. m.	29.33
Morrisville (a) .....	29.01	9	7 a. m.	29.35	28	2 p. m.	28.45
Norristown .....	29.01	22	9 a. m.	29.39	28	3 p. m.	28.46
Philadelphia .....	29.29	9	7 a. m.	29.62	28	2 p. m.	28.67
Pittsburg, [Oakland Station] .....	29.80	20	7 a. m.	30.13	28	2 p. m.	29.25
Pittsburg, [Marine Hospital] (e) .....	30.12	20	7 a. m.	30.43	28	2 p. m.	29.45
Pottsville .....	29.88	20	7 a. m.	30.09	28	2 p. m.	29.23
Delaware .....	29.66	20	7 a. m.	29.93	28	2 p. m.	29.06
Newark (c) .....	30.12	20	7 a. m.	30.44	28	2 p. m.	29.46
Maryland .....	30.11	22	2 p. m.	30.43	28	2 p. m.	29.47
Annapolis (f) .....	29.83	22	9 p. m.	29.77	28	9 p. m.	29.00
Chestertown .....	30.04	22	9 p. m.	30.32	28	9 p. m.	29.50
Frederick .....	29.93	22	9 p. m.	30.23	28	2 p. m.	29.41
Dist. of Columbia..Washington .....				30.39			29.68
Alexandria .....							
North Carolina..Chapel Hill .....							
South Carolina..All Saints .....							
Camden .....							
Charleston .....							

a Not corrected for temperature.

b Same height at 9 p. m. on the 28th.

c Incomplete.

d See notes on tables of thermometer for this month.

e Observations taken at sunrise, 9 a. m., 3 and 9 p. m. Max. 29.39; min. 28.56.

f Observations taken at sunrise, 7 a. m., 2 and 9 p. m. Max. 30.34; min. 29.51.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1855.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Georgia	Savannah	30.08	22	9 p. m.	30.35	28	2 p. m.	29.61
	Sparta	29.45	22	9 p. m.	29.66	28	2 p. m.	29.05
	The Rock (a)	29.40			29.60			29.30
Florida	Cedar Keys	29.89	23	7 a. m.	30.07	28	7 a. m.	29.58
	Jacksonville	30.09	22	2 p. m.	30.31	28	2 p. m.	29.61
	Key West	29.65	25	2 p. m.	29.80	29	7 a. m.	29.49
	Knox Hill	29.84	22	9 p. m.	30.04	28	2 p. m.	29.56
	St. Augustine	30.15	14	7 a. m.	30.37	28	2 p. m.	29.70
	Warrington (b)	30.00	22	Noon	30.23	11	Sunset	29.79
Alabama	Auburn	29.37	22	9 p. m.	29.61	28	2 p. m.	29.00
Mississippi	Oxford	29.56	19	7 a. m.	29.92	5	9 p. m.	29.31
Louisiana	New Orleans	30.20	19	7 a. m.	30.44	6	2 p. m.	29.90
Texas	New Wied (c)	28.89	27	7 a. m.	29.27	4	9 p. m.	28.48
Arkansas	Camden	29.31	22	7 a. m.	29.84	4	9 p. m.	28.66
Tennessee	Glenwood	29.59	22	7 a. m.	29.99	28	2 p. m.	29.24
Kentucky	Millersburg (d)	29.21	19	7 a. m.	29.52	28	7 a. m.	28.83
	Springdale	29.44	22	7 a. m.	29.88	28	2 p. m.	29.00
Ohio	Cincinnati, [Hurt]	29.50	22	7 a. m.	29.90	28	2 p. m.	29.05
	Germantown	29.31	27	7 a. m.	29.71	9	2 p. m.	28.83
	Granville	29.01	22	7 a. m.	29.40	28	7 a. m.	28.52
	Hillsborough	28.90	22	7 a. m.	29.28	28	2 p. m.	28.40
	Jackson (c)	29.34	22	2 p. m.	29.69	28	2 p. m.	28.78
	Oberlin	29.14	9	7 a. m.	29.50	28	7 a. m.	28.62
	Perrysburg (d)	29.40	9	7 a. m.	29.80	28	1 p. m.	28.90
	Urbana	28.81	22	2 p. m.	29.13	28	9 p. m.	28.37
	Zanesville	29.19	22	7 a. m.	29.58	28	2 p. m.	28.70
	Ann Arbor, [Winchell]	29.08	22	7 a. m.	29.49	28	7 a. m.	28.56
Michigan	Battle Creek	29.06	9	7 a. m.	29.45	28	7 a. m.	28.59
	Detroit	29.55	22	7 a. m.	29.95	28	7 a. m.	29.01
	Milton	29.06	22	7 a. m.	29.40	28	7 a. m.	28.58
Indiana	New Harmony	29.68	22	7 a. m.	30.13	5	2 p. m.	29.29
	Manchester (d)	28.78	22	7 a. m.	29.28	5	1 p. m.	28.32
Illinois	Upper Alton	29.49	21	9 p. m.	29.93	5	2 p. m.	29.01
	St. Louis	29.49	22	7 a. m.	29.92	5	2 p. m.	28.99
Missouri	Beloit	29.20	21	9 p. m.	29.63	5	2 p. m.	28.60
	Milwaukee, [Winkler]	28.30	19	7 a. m.	29.71	25	7 a. m.	28.82
	Superior	29.28	19	7 a. m.	29.77	5	9 p. m.	28.58
Iowa	Dubuque	29.30	19	7 a. m.	29.79	5	2 p. m.	28.58
	Muscatine	29.48	19	7 a. m.	29.93	5	7 a. m.	28.94
	Quasqueton (b)	29.07	19	7 a. m.	29.50	5	9 p. m.	28.59
West Indies	Up Park Camp, Jamaica	29.74	27	9½ a. m.	29.89	19	3½ p. m.	29.64

a Observations taken morning, 3 p. m., and evening.  
 b Incomplete.

c Not corrected for temperature.  
 d See notes on tables of thermometer for this month.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Horton .....	29.53	15	2 p. m.	30.18	26	2 p. m.	28.56
Montreal .....	29.81	12	9 p. m.	30.38	10	7 a. m.	28.71
St. Martin .....	29.80	12	9 p. m.	30.32	10	7 a. m.	28.69
Toronto .....	29.70			30.20			28.46
Maine .....		15	7 a. m.	30.19	10	7 a. m.	28.62
Carmel .....	29.65	15	7 a. m.	30.36	26	7 a. m.	29.15
Gardiner .....	29.82	14	2 p. m.	30.84	10	7 a. m.	28.81
Portland .....	29.84	14	2 p. m.	30.74	26	7 a. m.	29.19
Steuben .....	30.02	13	7 a. m.	30.17	9	9 p. m.	28.53
New Hampshire .. Concord .....	29.65	13	7 a. m.	30.34	9	9 p. m.	28.91
Manchester .....	29.93	27	7 a. m.	30.21	9	9 p. m.	28.56
Vermont .....	29.65	12	9 p. m.	30.38	9	9 p. m.	28.64
Massachusetts .. Amherst .....	29.82	13	7 a. m.	30.54	9	9 p. m.	29.11
Nantucket .....	29.98	13	7 a. m.	30.47	9	9 p. m.	28.89
New Bedford .....	29.91	15	7 a. m.	30.55	9	9 p. m.	28.92
Newburyport .....	30.01	13	7 a. m.	30.37	9	9 p. m.	28.76
North Attleboro' .....	29.83	13	7 a. m.	29.31	9	9 p. m.	27.76
Princeton .....	28.80	14	2 p. m.	30.50	10	7 a. m.	29.13
Southwick .....	30.00	13	7 a. m.	30.60	9	9 p. m.	29.72
Westfield .....	30.19	12	9 p. m.	29.80	9	9 p. m.	28.20
Williamstown .....	29.26	14	2 p. m.	30.24	10	7 a. m.	28.65
Worcester .....	29.47	13	7 a. m.	30.33	10	Sunrise.	28.94
Rhode Island .. Providence (b) .....	29.80	14	Sunrise.	29.35	9	9 p. m.	27.95
Connecticut .. Pomfret .....	28.90	13	7 a. m.	29.83	9	1 p. m.	28.28
New York .....		12	7 a. m.	29.94	10	7 a. m.	28.33
Buffalo (b) .....	29.33	12	9 p. m.	30.18	9	9 p. m.	28.56
Canton .....	29.37	12	9 p. m.	30.49	9	9 p. m.	29.08
Madrid (c) .....	29.66	12	9 p. m.	29.85	9	2 p. m.	28.24
New York city .....	30.01	12	9 p. m.	29.29	9	2 p. m.	27.89
Oswego .....	29.29	6	9 p. m.	29.74	9	Sunset.	28.18
Ovid .....	28.84	12	7 a. m.	30.28	9	9 p. m.	28.68
Penn Yan .....	29.22	12	2 p. m.	29.96	9	9 p. m.	28.35
Sag Harbor .....	29.77	14	2 p. m.	30.40	9	9 p. m.	28.89
Spencertown .....	29.44	12	9 p. m.	30.54	9	9 p. m.	29.10
New Jersey .....		14	10 a. m.	30.65	9	9 p. m.	29.12
Bloomfield (b) .....	29.90	12	9 p. m.				
Burlington (f) .....	30.04	27	2 p. m.				
Lambertville .....	30.11	14	10 a. m.				
Newark .....	30.04						
Pennsylvania .. Dickinson College .....	29.25	27	2 p. m.	29.75	2	2 p. m.	28.16
Gettysburg .....	29.49	27	7 a. m.	30.06	9	2 p. m.	28.47
Harrisburg .....	29.81	27	7 a. m.	30.35	9	2 p. m.	28.83
Lima .....	29.91	27	7 a. m.	30.48	9	9 p. m.	28.92
Morrisville .....	30.14	27	7 a. m.	30.65	9	9 p. m.	29.20
Norristown .....	30.03	27	7 a. m.	30.55	10	7 a. m.	29.27
Philadelphia .....	29.92	12	2 p. m.	30.44	9	9 p. m.	28.98
Pittsburg, [Oakland Station] .....	28.94	27	7 a. m.	29.53	9	2 p. m.	27.94
Pittsburg, [Marine Hospital] (h) .....	28.99	27	9 a. m.	29.55	9	3 p. m.	28.05
Pottsville .....	29.26	27	7 a. m.	29.81	9	2 p. m.	28.22
Maryland .....		27	8 a. m.	30.68	9	2 p. m.	29.07
Annapolis (b) .....	30.10	27	7 a. m.	30.35	9	2 p. m.	28.90
Chestertown .....	29.84	27	7 a. m.	30.35	9	2 p. m.	28.61
Frederick .....	29.67	27	7 a. m.	30.74	9	2 p. m.	29.07
Dist. of Columbia .. Washington .....	30.11	27	7 a. m.	30.68	9	2 p. m.	29.15
Virginia .....	30.09	27	7 a. m.	30.07	9	2 p. m.	28.83
North Carolina .. Chapel Hill .....	29.52	27	7 a. m.	30.57	9	2 p. m.	29.45
South Carolina .. All Saints .....	30.07	27	2 p. m.	30.47	9	2 p. m.	29.33
Camden .....	29.97	27	7 a. m.	30.71	9	2 p. m.	29.71
Charleston .....				30.60	9	2 p. m.	29.63
Georgia .....		27	7 a. m.	29.90	9	2 p. m.	29.04
Savannah .....	30.12	27	7 a. m.	29.70			29.00
Sparta .....	29.49	27	7 a. m.				
The Rock (i) .....	29.45						

a Same height at 2 p. m. on the 14th.

b See notes on thermometer for this month.

c Irregular; no observations before the 9th day.

d Same height at 7 a. m. on the 14th.

e Same height at 9 p. m. on the 14th.

f Not corrected for temperature.

g Same height at 9 and 9 p. m. on the 27th.

h Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 29.01; maximum, 29.55; minimum, 28.06.

i Observations taken in the morning, 3 p. m., and evening.



## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1855.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Florida	Cedar Keys	29.93	12	7 a. m.	30.30	9	2 p. m.	29.63
	Jacksonville	30.20	27	2 p. m.	30.58	9	2 p. m.	29.81
	Key West	29.75	12	2 p. m.	29.96	3	7 a. m.	29.60
	Warrington	30.10	12	2 p. m.	30.48	1	9 p. m.	29.79
Alabama	Auburn	29.40			29.77			29.02
Mississippi	Oxford	29.63	26	2 p. m.	30.41	8	9 p. m.	29.13
Louisiana	New Orleans	30.27	26	9 p. m.	30.66	22	2 p. m.	29.93
Texas	New Wied	29.04	26	7 a. m.	29.55	22	9 p. m.	28.64
Tennessee	Glenwood	29.62	27	7 a. m.	30.02	9	7 a. m.	29.04
Kentucky	Millersburg	29.23	20	2 p. m.	29.54	9	7 a. m.	28.33
	Springdale	29.46	27	7 a. m.	29.98	9	7 a. m.	28.58
Ohio	Cincinnati, [Lea]				30.15			28.38
	Cincinnati, [Hurt]	29.32	12	7 a. m.	29.84	22	2 p. m.	28.53
	Germantown	29.31	22	7 a. m.	29.86	28	2 p. m.	28.32
	Granville	28.97	26	9 p. m.	29.45	9	7 a. m.	27.99
	Hillsborough	28.88	27	7 a. m.	29.41	9	7 a. m.	27.91
	Oberlin	29.10	27	7 a. m.	29.70	9	7 a. m.	28.02
	Perrysburg	29.38	12	7 a. m.	29.93	9	1 p. m.	28.34
	Urbana	28.76	27	7 a. m.	29.16	9	7 a. m.	27.75
	Zanesville	29.18	27	7 a. m.	29.74	9	7 a. m.	28.24
Michigan	Ann Arbor, [Winchell] (a)	29.00	12	7 a. m.	29.49	9	2 p. m.	27.96
	Battle Creek	29.06	27	7 a. m.	29.62	9	2 p. m.	28.01
	Detroit	29.51	27	2 p. m.	30.04	9	2 p. m.	28.41
Indiana	Milton	29.06	27	7 a. m.	29.51	9	7 a. m.	28.08
	New Harmony	29.71	26	9 p. m.	30.22	8	9 p. m.	28.91
Illinois	Manchester (b)	28.82	24	7 a. m.	c 29.31	8	9 p. m.	27.91
	Upper Alton	29.48	27	7 a. m.	29.97	8	9 p. m.	28.66
Missouri	St. Louis	29.52	26	9 p. m.	29.99	8	9 p. m.	28.60
Wisconsin	Beloit	29.19	24	7 a. m.	29.69	9	7 a. m.	28.29
	Milwaukee, [Winkler]	29.28	24	7 a. m.	29.77	9	7 a. m.	28.25
	Superior	29.34	24	7 a. m.	29.85	1	2 p. m.	28.60
Iowa	Dubuque	29.35	27	7 a. m.	29.94	8	9 p. m.	28.25
	Muscatine	29.53			30.04			28.56
	Quasqueton	29.10	26	9 p. m.	29.61	8	9 p. m.	27.98
West Indies	Up Park Camp, Jamaica	29.80	1	9½ a. m.	29.92	26	3½ p. m.	29.72

a Incomplete.

b See notes on thermometer for this month.

c Same height at 7 a. m. on the 27th.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) -----	28.90	29.86	-----	29.38	-----	53	5	50.00	-----	9	24	12.00	-----
St. Martins -----	15.10	23.19	17.71	18.67	7	38	7	36.67	14	—16	14	—11.00	5.7
Toronto -----				25.95	-----	49			-----	— 5.4			7.9
MAINE—													
Carmel -----	16.89	26.52	21.52	21.64	22	49	29	40.00	14	—10	14	— 3.33	5.3
Fryeburg (b) -----										—12	14	— 3.50	5.7
Gardiner -----	21.94	29.29	24.19	25.14	22	49	22	42.00	11	—10	14	4.00	6.9
Oldtown (c) -----	20.43	27.05	24.05	23.84	22	47	22	40.00	14	— 4	14	3.00	2.9
Perry -----	24.35	29.19	27.16	26.90	22	d 46	7	42.67	15	— 1	14	6.33	5.7
Steuben -----	21.00	26.06	25.58	24.21	22	47	22	43.00	11	1	14	9.33	7.1
NEW HAMPSHIRE—													
Concord -----	20.13	29.13	23.94	24.40	22	48	22	40.00	2	2	14	8.00	5.8
Exeter -----	20.87	30.19	24.26	25.11	22	47	29	40.67	14	2	1	14.33	5.9
Great Falls -----	21.13	32.25	24.06	25.81	7	d 46	29	41.00	14	0	14	3.33	6.4
Londonderry -----	20.87	30.84	24.61	25.44	22	48	7	39.33	14	1	14	9.00	6.1
Manchester -----	21.00	31.54	27.48	26.67	22	51	22	44.33	1	4	14	9.00	6.5
Salmon Falls -----	24.11	32.40	26.02	27.51	22	46	29	41.33	14	5	14	5.50	6.4
VERMONT—													
Brandon -----	22.91	29.67	24.30	25.63	29	50	29	43.00	14	0	14	1.50	6.8
Burlington -----	23.03	29.33	22.87	25.08	7	49	7	43.33	14	— 6	14	0.67	3.7
Castleton -----	23.00	32.41	24.45	26.62	29	56	29	46.00	14	— 2	14	1.33	8.1
Montpelier (e) -----	19.90	29.70	26.50	25.37									
St. Johnsbury -----	19.94	27.16	23.94	23.68	22	50	29	45.00	24	— 4	14	— 2.33	-----
MASSACHUSETTS—													
Amherst -----	24.76	31.63	26.77	27.72	22	51	29	41.33	11	11	14	11.90	6.4
Boston -----	26.68	36.42	29.68	30.93	7	56	7	45.67	14	10	14	14.33	-----
Mendon -----	23.45	31.52	29.37	28.11	7	55	7	45.67	14	10	14	12.67	6.5
Nantucket -----	35.85	39.48	36.61	37.31	7	53	7	49.50	14	18	14	31.33	6.4
New Bedford -----	28.53	36.50	31.08	32.04	7	54	7	49.00	14	10	14	14.80	7.5
Newburyport -----	28.81	33.78	30.80	31.13	7	52	22	47.67	14	7	14	11.50	8.3
North Attleboro' -----	25.83	34.14	28.56	29.51	22	55	7	46.20	15	10	14	13.00	6.2
Princeton -----	23.17	27.67	23.39	24.74	7	f 48	7	44.50	14	5	14	6.67	6.8
Richmond -----	25.35	30.55	26.42	27.44	7	48	7	43.33	14	6	14	8.00	7.8
Southwick -----													7.6
Springfield -----	25.00	33.10	26.69	28.26	22	52	29	42.33	14	8	14	9.33	6.1
Westfield -----	24.84	30.35	26.42	27.20	22	47	22	38.67	14	10	14	10.67	-----
Williamstown -----	23.19	29.48	25.10	25.92	7	52	7	43.20	14	7	14	8.23	7.3
Worcester -----	24.55	31.23	27.10	27.63	-----	53	7, 22, 29	41.33	-----	11	14	12.33	6.1
RHODE ISLAND—													
Providence (g) -----	26.50	35.00	28.40	29.97	7	54	7	44.33	14	10	14	12.67	6.9
CONNECTICUT—													
Pomfret -----	25.16	32.00	26.68	27.95	7	54	7	47.33	14	8	14	10.00	6.1
Saybrook -----	29.68	34.39	30.32	31.46	22	49	7	45.33	14	15	14	15.33	4.9
NEW YORK—													
Angelica -----	20.84	30.90	24.32	25.35	7	50	5	40.00	14	h 0	23	10.50	6.3
Baldwinsville -----	25.19	29.26	25.25	26.57	7	47	7	42.00	14	2	14	6.67	7.8
Beverly -----	27.52	33.06	29.45	30.01	22	50	7	42.00	14	13	14	14.67	6.5
Canton -----	20.13	27.35	22.55	23.34	7	52	7	48.00	14	—16	14	— 6.67	7.4
Fishkill -----	27.38	39.58	31.06	32.67	-----	49	-----	-----	-----	11	-----	-----	-----
Gouverneur -----	21.90	28.06	24.03	24.66	7	52	7	46.33	14	—20	14	— 8.67	8.4
Lodi -----	24.23	29.45	24.16	25.95	4	i 46	4	39.33	14	4	14	9.33	7.8
Lowville (j) -----	22.32	29.87	23.45	25.21	7	50	7	42.33	14	— 8	14	— 1.00	7.0
New York city -----	29.45	34.40	30.71	31.52	22	52	7	42.10	14	15	14	16.90	6.2
Oswego (k) -----	26.00	31.42	23.77	27.06	7	49	4	45.00	14	4	14	7.33	-----
Penn Yan (l) -----	25.48	31.74	26.81	28.01	7	49	4	42.67	14	5	14	12.00	7.7

a Observations taken at 9 a. m. and 9 p. m.

b Incomplete. Coldest days only given.

c Hours of observation not uniform.

d Same temperature on the 29th.

e Observations taken at sunrise, noon, and sunset.

f Same temperature on the 23d.

g Observations taken at sunrise, 1 p. m., and 10 p. m.

h Same temperature on the 25th.

i Same temperature on the 7th.

j Observations taken at 7 a. m., noon, and 9 p. m.

k Observations taken at 6 a. m., noon, and 6 p. m.

l Observations taken at sunrise, 2 p. m., and sunset.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°			
Sag Harbor .....	31.06	39.55	32.81	34.47	7	59	7	52.00	14	13	14	16.00	6.0
Smithville .....	23.71	29.71	24.19	25.87	7	51	6	43.67	14	— 8	14	3.33	6.9
Spencertown .....	24.87	30.77	25.55	27.06	22	51	7	41.33	14	5	14	9.33	6.4
Wampsville .....	24.94	32.55	25.71	27.73	4	50	7	42.00	25	1	14	9.33	7.7
NEW JERSEY—													
Bloomfield .....	29.37	35.72	30.60	31.90	22	53	7	44.16	14	14	14	16.17	6.3
Burlington .....	30.71	37.71	31.77	33.40	7	65	7	48.33	30	16	14	21.33	7.8
Lambertville .....	27.84	37.51	30.42	31.92	7	59	7	46.50	25	9	14	17.00	3.8
Newark (a) .....				32.46		49	18	43.62	?	3	14	18.00	---
PENNSYLVANIA—													
Bedford .....	25.89	34.54	27.59	29.34	12	55	12	43.80	23	9	30	16.33	6.1
Easton (b) .....	22.68	32.84	29.32	28.28	?	44	13	37.00	?	4	14	14.67	6.3
							18						
Gettysburg .....	27.03	34.35	28.74	30.04	7	55	7	49.67	31	9	31	19.00	6.3
Harrisburg .....	29.44	34.38	31.59	31.80	4	43	4	41.00	31	19	14	23.33	6.6
Lima .....	30.25	36.13	31.01	32.46	7	61	7	50.40	25	12	14	20.60	6.2
Morrisville .....	28.87	36.52	30.26	31.88	7	61	7	49.00	25	12	26	21.00	5.3
Moss Grove .....	23.64	30.90	26.87	27.14	6	58	6	49.33	23	2 c	23	9.33	6.3
Norristown .....	29.50	35.53	30.62	31.88	13	46	13	40.10	25	14	25	22.00	6.0
Paradise .....				16.00									
Philadelphia .....	32.00	37.10	33.90	34.33	7	62	7	52.33	25	17	14	21.33	6.3
Pittsburg, [O. S.] .....	27.61	35.77	30.23	31.20	16	57	16	50.00	23	8	23	14.33	---
Pittsburg, [M. H.] (d) .....	34.55	35.06	34.81	34.81	7	54	6	49.50	24	19	31	19.50	---
Pocopson .....	29.50	37.00	30.90	32.47	7	61	7	49.00	25	9	25	20.67	6.5
Pottsville .....	25.77	33.00	28.19	28.99	7	55	7	46.67	14	11	14	15.33	6.6
Randolph .....	23.19	30.42	25.00	26.20	3	54	6	46.00	23	00	24	10.33	7.2
West Haverford .....	30.16	37.19		33.67	7	62	7	53.00	25	14	14	21.00	6.0
MARYLAND—													
Bladensburg (e) .....	31.03	40.29	35.17	35.50	7	60	17	41.50	23	18 f	31	23.83	6.4
Frederick .....	29.96	37.18	33.03	33.39	7	56	7	48.23	31	17	31	21.93	6.3
Sykesville .....	28.48	38.68	30.78	32.65	7	58	7	52.33	31	13	27	20.00	5.6
DISTRICT OF COLUMBIA—													
Washington .....	31.85	39.65	33.73	35.08	---	57	7	51.00	---	20	25	26.00	---
VIRGINIA—													
Alexandria .....	31.13	39.83	33.86	34.94	---	58	7	50.67	---	18	31	23.67	6.0
Ashland .....	30.35	42.42	34.26	35.68	21	66	6	59.00	27	10	30	17.00	5.8
Crichton's Store (g) .....	39.30	46.30	43.79	43.13	7	67	21	59.00	31	26	31	31.33	5.7
Lewisburg .....	33.03	43.10	36.52	37.55	12	60	7	50.67	27	16 f	30	22.33	6.7
Montcalm (h) .....	37.18	45.60	42.77	41.85	7	58	7	53.00	2	30	2	36.67	8.0
Smithfield .....				40.22	7	66	20	54.00	30	19	14	26.25	---
Winchester .....	29.25	41.32	32.03	34.20	4	58	4	48.67	31	14	30	21.67	4.7
NORTH CAROLINA—													
Chapel Hill .....	35.26	49.52	40.58	41.79	7	70	7	58.67	27	19	27	28.00	5.1
											30		
Thornbury .....	35.06	49.70	39.93	41.56	7	69	21	60.13	15	22	31	29.60	4.9
SOUTH CAROLINA—													
All Saints .....	43.55	56.00	47.55	49.03	7	71	21	66.67	27	26	27	35.33	4.3
Camden .....	37.64	54.90	43.71	45.42	7	70	21	60.33	27	18	27	29.67	5.4
											30		
											31		
Charleston .....	46.22	56.96	50.19	51.12	---	69	7	---	---	28	31	---	---
GEORGIA—													
La Grange (i) .....	39.06	53.74	50.81	47.87	7	73	7	64.33	30	15	30	25.00	5.9
Savannah .....	44.78	58.14	49.97	50.96	7	69	13	62.20	27	26	30	35.90	4.6
Sparta .....	39.23	54.61	45.16	46.33	7	74	7	63.67	27	20 j	22	27.67	5.2
The Rock (k) .....				45.55				65.00				23.00	---
Whitemarsh Island .....	44.00	56.97	48.30	49.76	13	69	13	61.67	27	25	31	35.33	4.0

a Observations taken at 7 a. m. and 5 p. m.

b Observations taken at 6½ a. m., 12 m., and 5 p. m. No observation from the 2d to the 7th, inclusive.

c Same temperature on the 24th and 25th.

d Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m. 32.54, max. 54, min. 14.

f Incomplete.

f Same temperature on the 31st.

g Observations taken at 9 a. m., noon, and 4 p. m.

h For the first 11 days of the month only.

i Observations taken at sunrise, noon, and sunset.

j Same temperature on the 30th.

k Observations taken morning, 3 p. m., and evening.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—	°	°	°	°		°		°		°			
Cedar Keys .....	53.26	61.23	57.84	57.44	8	74	21	66.00	23	a 36	31	40.67	3.8
Jacksonville .....	50.32	62.67	52.94	55.31	7	74	21	66.33	23	b 33	31	37.00	4.3
Key West .....	64.10	69.64	-----	66.87	13	c 76	21	73.00	23	52	23	56.50	3.3
Knox Hill (d) .....	42.11	58.35	46.71	49.06	21	73	25	62.67	27	26	29	33.33	3.6
Warrington .....	50.16	61.10	58.58	56.61	9	76	9	67.33	31	28	30	27.33	2.8
ALABAMA—													
Auburn .....	41.84	56.00	46.55	48.13	8	78	8	64.00	30	17	30	26.67	3.9
Greene Springs .....	40.42	56.31	46.16	47.63	20	73	20	63.67	30	16	29	25.33	4.1
Tuscaloosa .....	41.60	55.07	46.21	47.63	20	70	6	65.00	30	18	30	26.07	4.0
MISSISSIPPI—													
Columbus .....	-----	-----	-----	48.18	?	72	-----	-----	?	16	-----	-----	-----
Garlandville .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3.7
Oxford .....	38.42	49.55	43.26	43.74	2	67	5	62.70	30	11	30	17.00	5.1
LOUISIANA—													
New Orleans .....	50.34	60.29	54.39	55.01	6	73	6	68.33	31	29	30	34.83	4.5
TEXAS—													
Austin .....	40.74	60.13	47.26	49.38	20	81	2	64.33	31	16	30	26.67	4.7
New Wied .....	44.90	62.10	48.94	51.98	20	83	20	65.33	21	20	30	30.67	5.3
TENNESSEE—													
Glenwood .....	35.00	45.32	38.69	39.67	5	66	6	64.40	30	11	30	16.00	6.1
Knoxville .....	34.50	45.68	38.52	39.57	6	64	5	57.10	27	13	29	21.33	4.8
KENTUCKY—													
Ballardsville .....	30.64	38.26	33.52	34.14	5	64	6	61.33	31	8	30	13.00	6.5
Danville .....	36.52	46.97	39.81	41.10	6	69	5	63.00	31	13	30	19.00	5.5
Millersburg .....	31.06	39.50	35.23	35.26	6	61	6	58.00	14	10	30	15.00	6.3
Springdale .....	30.42	41.16	37.39	36.32	6	65	5	62.83	14	10	29	16.00	7.2
OHIO—													
Arcola .....	27.03	33.45	29.65	30.04	6	54	5	48.67	24	6	23	13.33	7.7
Cincinnati (e) .....	32.03	40.81	35.42	36.09	2, 3	64	6	60.67	31	13	30	18.33	-----
Cincinnati, [Hurt] (f) .....	26.66	40.06	34.10	33.61	5	66	5	58.00	14	5	22	15.33	5.9
Gallipolis .....	30.71	43.58	35.50	36.60	5	64	6	58.67	27	7	30	17.00	-----
Germantown .....	26.15	35.37	29.30	30.27	6	61	5	59.90	23	5	22	10.40	7.3
Granville .....	28.48	35.48	32.06	32.01	6	62	6	57.33	27	7	22	13.67	6.7
Hillsborough .....	27.48	36.45	30.84	31.59	5	61	6	56.83	31	5	30	11.50	6.3
Jackson, [Crookham] .....	28.61	41.16	31.45	33.74	5	65	5	58.67	27	3	30	13.33	7.2
Marietta .....	28.94	39.52	32.45	33.64	5	62	5	56.33	14	10	23	15.67	6.0
Mount Vernon .....	25.13	36.32	31.03	30.83	6	58	5	54.67	24	4	24	11.00	6.5
Newark (d) .....	19.12	31.94	22.76	24.61	17	49	20	36.00	23	5	22	15.00	7.0
New Lisbon .....	26.81	32.55	27.90	29.09	-----	60	12	48.00	-----	4	24	11.00	6.2
Norwalk .....	24.47	33.40	24.66	28.84	6	61	6	58.00	23	— 2	23	7.00	6.0
Oberlin .....	25.70	33.52	29.03	29.42	6	58	6	55.67	24	4	23	11.00	5.9
Perrysburg (g) .....	26.48	35.39	29.68	30.52	6	69	5	63.33	23	0	23	8.33	-----
Richmond .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.6
Urbana .....	23.97	36.55	29.71	30.68	5	61	5	57.33	24	— 6	24	9.33	7.4
Zanesville .....	27.06	37.42	30.42	31.63	2	h 64	6	50.67	14	8	30	15.00	7.1
MICHIGAN—													
Ann Arbor, [Woodruff] .....	22.00	30.00	25.10	25.70	6	60	5	56.00	22	i— 1	23	4.67	8.1
Ann Arbor, [Winchell] .....	22.15	27.95	24.34	24.81	6	59	6	56.00	22	— 2	23	5.30	7.6
Battle Creek .....	22.39	31.58	23.55	25.84	7	60	7	52.67	22	0	23	6.33	7.8
Cooper .....	24.16	29.64	25.16	26.32	3	60	3	54.67	22	2	23	8.33	7.2
Detroit .....	25.81	31.29	27.84	28.31	6	58	6	56.00	23	4	23	8.67	8.1
Flint .....	20.70	30.30	23.10	24.70	6	58	6	52.67	13	1	-----	-----	-----
Grand Rapids .....	22.81	31.58	25.84	26.74	3	61	2	53.33	13	5	13	12.33	6.7
Monroe, [Perkins] .....	22.52	29.68	25.94	26.05	6	56	6	50.67	23	-- 4	23	6.67	7.2
St. James .....	20.00	29.26	22.70	23.99	3	53	3	50.33	13	1	13	4.67	8.5
INDIANA—													
Madison .....	30.60	38.21	33.32	34.04	6	61	6	59.50	31	10	30	14.16	6.7
Milton .....	27.77	35.03	32.05	31.62	6	59	6	57.50	23	0	22	8.16	5.7
New Harmony .....	30.61	40.29	34.63	35.18	5	65	2	57.33	22	9	22	16.33	6.2

a Same temperature on the 27th and 31st.

b Same temperature on the 27th.

c Same temperature on the 21st and 28th.

d For the last 15 days of the month only.

e Observations taken at 6 a. m., 1 p. m., and 9 p. m.

f Observations taken at 7 a. m., noon, and 9 p. m.

g Observations taken at 7 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 3d.

i Same temperature on the 23d.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—	°	°	°	°		°		°		°			
Athens .....	22.97	35.55	26.58	28.37	2	66	2	59.67	23	—11	22	3.33	5.2
Augusta .....	22.00	33.09	25.80	26.96	2	65	2	60.00	23	—13	22	2.00	5.5
Manchester .....	24.64	34.35	28.10	29.03	1	68	2	59.00	22	—4 <sup>a</sup>	22	5.00	6.0
Ottawa .....	21.81	29.32	24.16	25.10	2	62	2	55.67	23	—8	22	1.33	2.3
Upper Alton .....	27.16	36.89	30.95	31.67	2	65	2	59.67	22	0	22	10.00	1.7
MISSOURI—													
Hannibal .....													6.1
St. Louis .....	29.34	38.78	33.34	33.82	2	65	6	47.67	22	3	22	11.80	5.7
WISCONSIN—													
Beloit .....	18.41	27.93	21.58	22.64	2	57	2	51.67	23	—11	23	—2.33	4.6
Cresco .....	14.68	20.64	16.14	17.15	2	55	2	39.00	22	—14	13	—9.33	8.1
Janesville .....	15.82	26.38	18.58	20.26	2	56	2	50.33	23	—14	13	—6.00	6.9
Milwaukee .....	19.42	27.00	21.32	22.58	2	55	2	51.33	23	—10	23	—3.00	5.4
Platteville .....	18.26	30.26	21.00	23.17	2	62	2	57.67	13	—12	13	—8.67	6.1
IOWA—													
Dubuque .....	21.29	27.96	23.40	24.22	2	60	2	57.00	22	—6	13	—2.67	6.6
Fairfield .....				21.00		71				—8			
Fort Madison (b) .....	21.32	32.65	26.87	26.95	2	66	2	61.00	23	—10	22	2.67	5.1
Keokuk .....	22.77	34.83	24.87	27.49	2	66	2	60.67	22	—6	22	4.67	5.5
Muscatine .....	20.16	29.97	22.58	24.24	2	64	2	59.33	23	—23	22	—4.67	3.8
Pella .....	15.35	28.19	18.77	20.77	2	61	2	57.67	22	—8	21	1.00	---
Poultney .....	16.32	27.80	21.45	21.86	2	58	2	55.67	13	—11	13	—6.33	6.4
Quasqueton .....	17.71	25.17	21.07	21.32	2	60	2	57.00	22	—8	22	—0.3	6.0
MINNESOTA—													
St. Joseph's .....	—3.52	3.39	2.39	0.75	14	32	16	20.33	13	—34	4	—19.00	5.7
CALIFORNIA—													
Sacramento, [Logan] .....				43.71		62				27			---
Sacramento, [Hatch] (c) .....				44.74			25	53.25			6	34.26	---
MEXICO—													
Mirador (d) .....				58.43				64.98				49.23	---
EASTERN CONTINENT—													
Mosul, Mesopotamia .....				45.13		55				36			---

<sup>a</sup> Same temperature on the 23d.<sup>b</sup> Observations taken at 6 a. m., noon, and 7 p. m.<sup>c</sup> Observations taken at sunrise, noon, sunset, and 10 p. m.<sup>d</sup> Hours of observation not given.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	□	°	°		°		□		□		°	
Hamilton (a) -----	18.86	-----	19.43	19.14	-----	38	14	38.00	-----	—15	6	—10.00	-----
St. Martins -----	3.68	17.53	9.23	10.15	16	38	16	34.53	7	—34	6	—25.23	5.3
Toronto -----	-----	-----	-----	15.41	-----	39	-----	-----	6	—25.4	6	—14.38	7.1
MAINE—													
Carmel -----	7.46	19.76	10.68	12.63	17	41	17	35.33	7	—24	7	—12.67	5.6
Gardiner -----	14.57	23.89	18.45	18.97	18	41	19	36.33	7	—18	6	—11.00	6.5
Oldtown -----	9.82	20.90	13.75	14.52	17	42	17	35.00	6	—18	6	—16.00	1.9
Perry -----	14.32	22.18	17.14	17.88	18	38	17	34.67	7	—15	6	—8.00	5.2
Steuben -----	13.29	20.79	16.29	16.79	17	b 37	17	35.33	7	—19	6	—9.33	7.2
NEW HAMPSHIRE—													
Concord -----	12.35	25.21	17.21	18.26	22	40	15	35.33	7	—24	6	—11.33	4.9
Exeter -----	12.32	23.11	15.94	17.12	15	38	15	35.33	7	—20	6	—11.33	5.2
Great Falls -----	12.93	27.46	15.83	18.74	13	c 42	16	37.33	7	—24	6	—11.67	5.4
Londonderry -----	13.03	23.14	16.89	17.69	16	40	16	36.00	7	—23	6	—14.00	5.0
Manchester -----	11.85	27.32	20.59	19.92	17	42	16	37.33	7	—22	6	—15.33	5.8
Salmon Falls -----	17.55	27.13	18.87	21.18	13	42	16	38.50	6	—10	6	—7.00	5.4
VERMONT—													
Brandon -----	12.98	23.47	16.15	17.53	18	41	15	36.33	7	—22	6	—17.83	5.8
Burlington -----	11.28	22.93	15.61	16.61	15	44	15	38.33	6	—24	6	—19.00	3.5
Castleton -----	12.64	28.78	16.79	19.40	18	57	18	39.67	7	—22	6	—14.00	7.1
Montpelier (d) -----	10.10	23.50	18.00	17.20	-----	-----	-----	-----	7	—27	6	—14.33	-----
MASSACHUSETTS—													
Amherst -----	15.53	24.49	19.61	19.88	15	42	15	38.33	7	—16	6	—8.00	5.3
Boston (e) -----	19.23	29.89	22.57	23.91	13	52	15	40.67	6	—7	6	1.67	4.2
Mendon -----	15.64	23.29	18.50	19.14	22	39	15	36.00	7	—17	6	—10.33	5.5
Nantucket -----	27.93	31.96	27.71	29.20	15	44	15	42.50	6	4	6	8.33	6.0
New Bedford -----	19.36	28.82	22.43	23.54	22	42	15	39.17	6	—14	6	—7.83	5.4
Newburyport -----	17.54	25.63	19.55	20.91	1	42	15	38.70	7	—13	6	—6.00	8.9
North Attleboro' -----	16.30	26.38	19.83	20.84	15	42	15	40.43	7	—15	6	—9.00	4.7
Princeton -----	14.18	20.26	16.93	17.12	15	36	16	34.33	7	—17	7	—5.57	5.4
Southwick -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7.8
Springfield -----	15.03	27.57	19.00	20.53	21	f 42	15	36.33	7	—19	6	—6.00	5.2
Taunton -----	19.96	26.14	22.25	22.78	16	46	16	44.00	7	—12	6	—6.67	3.0
Westfield -----	15.29	23.04	18.79	19.04	15	38	15	35.67	7	—15	6	—7.33	-----
West Stockbridge -----	13.93	27.75	16.86	19.51	14	45	15	38.67	7	—17	6	—13.67	6.4
Williamstown (g) -----	14.52	20.77	16.50	17.26	15	40	15	37.17	7	—18	6	—14.17	7.2
Wood's Hole -----	22.68	28.71	25.57	25.65	15	43	15	40.33	6	—7	6	—2.33	5.5
Worcester -----	15.36	23.57	18.68	19.20	16	39	16	37.00	7	—16	6	—10.33	4.0
RHODE ISLAND—													
Providence (h) -----	18.60	27.30	20.50	22.13	15	42	15	40.00	7	—15	6	—8.00	4.4
CONNECTICUT—													
Pomfret -----	16.07	24.41	18.46	19.65	15	i 39	15	37.00	7	—16	6	—9.00	4.7
NEW YORK—													
Angelica -----	9.86	22.61	14.54	15.67	13	42	14	38.17	6	—28	6	—18.67	7.3
Baldwinsville -----	12.68	20.93	16.79	16.80	14	36	14	33.67	6	—22 j	6	—16.67	7.8
Beverly -----	18.29	25.81	21.68	21.93	22	39	15	37.00	7	—12	6	—4.67	5.9
Canton -----	6.50	19.21	11.54	12.42	14	37	14	34.33	7	—40	6	—27.00	7.6
Fishkill -----	17.60	29.82	23.50	23.64	-----	46	-----	-----	-----	—15	-----	-----	-----
Gouverneur -----	6.43	19.54	15.84	13.94	14	40	14	35.67	6	—44	5	—26.00	8.8
Lodi -----	12.11	20.93	14.57	15.87	14	41	14	37.00	6	—22	6	—18.33	8.1
Lowville (k) -----	8.96	22.03	14.71	15.23	16	43	15	35.67	6	—38	6	—26.00	6.9
New York city -----	20.87	27.27	23.35	23.83	22	41	15	37.41	6	—8	3	—4.73	-----
Oswego -----	12.96	22.61	17.53	17.70	13	l 36	14	33.33	7	—22	6	—14.00	-----
Penn Yan (m) -----	12.93	25.71	18.43	19.02	14	45	14	39.33	6	—19	6	—14.00	7.8

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 18th.

c Same temperature on the 16th, 18th, 21st, and 22d.

d Observations taken at sunrise, noon, and sunset.

e Observations taken at 6 a. m., 2 p. m., and 10 p. m.

f Same temperature on the 22d.

g Observations taken at 7½ a. m., 2 p. m., and 9 p. m.

h Observations taken at sunrise, 1 p. m., and 10 p. m.

i Same temperature on the 16th.

j Same temperature on the 7th.

k Observations taken at 7 a. m., noon, and 9 p. m.

l Same temperature on the 15th.

m Observations taken at sunrise, 2 p. m., and sunset.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Sag Harbor.....	21.32	30.71	23.93	25.32	13	46	15	40.33	6	— 6	6	— 0.33	4.9
Smithville.....	7.53	20.25	13.35	13.71	14	42	14	38.00	6	—38	6	—26.67	7.2
Spencertown.....	14.14	21.32	17.25	17.57	15	44	15	41.33	7	—19	6	—13.33	5.8
Wampsville.....	12.34	24.59	15.93	17.62	14	41	14	36.00	6	—27	6	—21.00	8.3
NEW JERSEY—													
Bloomfield.....	19.48	28.79	22.80	23.69	22	43	16	37.17	6	— 9	6	— 2.67	4.8
Burlington.....	20.61	30.71	25.64	25.65	13	<sup>a</sup> 48	14	47.00	7	— 2	7	3.67	7.7
Lambertville.....	20.32	31.29	23.53	25.05	22	45	14	38.17	7	— 5	6	1.67	4.7
Newark (b).....				25.92		46.5	16	37.87		— 8	7	2.25	
PENNSYLVANIA—													
Bedford.....	16.92	26.25	19.96	21.04	14	55	14	38.67	6	— 3 <sup>c</sup>	7	8.00	7.5
Easton.....	18.71	29.29	20.60	22.87	22	48	14	37.67	6	—13	6	— 5.00	5.7
Gettysburg.....	17.71	28.64	21.57	22.64	22	46	14	38.33	6	— 5	7	1.33	6.0
Harrisburg.....	22.21	29.14	25.88	25.74	22	43	14	39.33	7	— 1	7	1.33	6.3
Lima.....	20.80	29.17	24.58	24.85	14	45	14	42.03	7	— 1	6	3.63	5.9
Morrisville.....	20.21	30.94	23.71	24.95	22	46	14	40.00	7	— 4	6	3.33	3.9
Norristown.....	22.13	28.18	24.89	25.07	22	44	14	40.67	7	— 2	6	3.33	6.4
Paradise.....				18.00									
Philadelphia.....	23.10	30.00	26.90	26.67	14	46.5	14	43.33	7	— 1	6	4.50	5.9
Pittsburg, [Oakland Station].....	15.96	24.68	19.89	20.18	15	52	15	36.67	6	— 9	6	3.33	
Pittsburg, [Marine Hosp.] (d).....	23.48	24.89	25.14	24.50	13	40	13	37.67	27	10	27	13.00	
Pocopson.....	20.38	30.04	24.83	25.08	13	44	14	41.33	7	— 2	6,7	4.33	6.7
Pottsville.....	19.88	26.33	21.14	22.45	22	41	14	37.33	7	— 6	6	— 4.00	6.5
Randolph.....	10.75	20.68	13.25	14.89	13	<sup>a</sup> 38	14	35.00	6	—22	6	—11.33	8.3
West Haverford (e).....	21.32	30.50		25.91	22	48	14	44.50	7	— 4	7	— 2.00	5.6
MARYLAND—													
Bladensburg (e).....	22.08	33.92	25.45	27.15	22	50	22	36.33	11	3	7	7.50	5.1
Frederick.....	22.52	30.62	26.03	26.39	22	46	14	41.10	7	4	7	5.43	6.0
Sykesville.....	19.46	32.00	23.43	24.96	22	52	14	43.33	7	— 2	7	2.33	5.4
DISTRICT OF COLUMBIA—													
Washington.....	24.66	32.29	23.92	26.96	14	53	22	38.50	7	4	7	6.50	
VIRGINIA—													
Alexandria.....	22.18	31.70	26.18	26.69	14	53	14	46.00	7	6	10	14.00	5.1
Lewisburg.....	25.17	36.14	28.93	30.08	22	53	13	40.67	27	12 <sup>f</sup>	27	17.00	6.7
Smithfield.....				30.73	14	65	22	42.25	19	10	10	16.50	
Winchester.....	21.82	33.79	24.68	26.76	22	52	14	42.67	7	6	7	8.33	4.7
NORTH CAROLINA—													
Chapel Hill.....	28.79	45.54	34.86	36.40	14	65	14	53.00	27	18 <sup>f</sup>	28	25.00	5.9
Thornbury.....	28.26	43.63	33.23	35.04		66	14	54.67		16	27	24.20	4.0
SOUTH CAROLINA—													
All Saints.....	38.71	51.57	43.10	44.46	8	71	8	62.67	1	26	27	30.33	3.2
Camden.....	31.46	52.30	39.71	41.16	7	69	7	54.33	1	16	27	28.00	4.7
Charleston.....	41.17	53.14	46.67	46.99		68	8			28	27		
GEORGIA—													
Savannah.....	40.10	54.70	46.90	47.23	8	74	8	66.97	27	27	27	32.73	4.1
Sparta.....	34.38	51.46	40.61	42.15	8	68	8	60.67	27	18	27	26.00	5.0
The Rock (g).....				40.57				63.00				24.00	
Whitemarsh Island.....	40.07	53.68	46.04	46.60	8	75	8	66.33	27	28	27	32.33	3.6
FLORIDA—													
Cedar Keys.....	48.39	55.25	52.75	52.13	8	64	8	62.00	27	32	28	40.00	3.3
Jacksonville.....	45.71	60.03	49.57	51.77	8	73	8	69.00	1	30	1, 27	40.67	2.5
Key West.....	62.14	68.75		65.44	8	<sup>h</sup> 78	19	75.00	27	54	1	59.00	4.5
Knox Hill.....	41.43	56.82	46.85	48.37	7	72	23	61.33	27	25	26	32.33	4.1
Warrington (i).....	44.29	56.11	52.68	51.03	8	<sup>j</sup> 72	23	64.67	26	<sup>k</sup> 27	26	35.67	3.1

<sup>a</sup> Same temperature on the 14th.<sup>b</sup> Observations taken at 7 a. m. and 5 p. m.<sup>c</sup> Same temperature on the 7th.<sup>d</sup> Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m. 21.96, max. 32, min. 9.<sup>e</sup> Incomplete.<sup>f</sup> Same temperature on the 28th.<sup>g</sup> Observations taken morning, 3 p. m., and evening.<sup>h</sup> Same temperature on the 13th, 14th, and 19th.<sup>i</sup> Observations taken at sunrise, noon, and sunset.<sup>j</sup> Same temperature on the 23d.<sup>k</sup> Same temperature on the 27th.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ALABAMA—	°	°	°	°		°		°		°			
Auburn.....	35.64	51.64	43.32	43.53	8	70	8	60.67	26	20 <sup>a</sup>	26	25.67	3.2
Greene Springs.....	35.25	52.83	42.22	43.43	7	b 68	7	61.67	26	20	26	27.00	3.2
Tuscaloosa.....	34.69	50.75	40.20	41.88	5	c 66	7	60.33	26	19	27	25.93	3.2
MISSISSIPPI—													
Columbus.....				42.64	?	77			?	15			
Garlandville (d).....	40.43	56.14	44.46	47.01	26?	76?	7	65.00	2	26	25	31.33	4.2
Oxford.....	31.77	46.02	39.18	38.99	5	e 66	5	57.83	28	10	27	18.67	3.2
LOUISIANA—													
New Orleans.....	44.20	54.68	48.89	49.26	5	f 70	7	63.33	27	g 29.5	26	34.67	4.2
TEXAS—													
Austin.....	37.89	59.07	46.85	47.94	5	83	7	64.67	26	20 <sup>a</sup>	26	28.67	4.8
New Wied.....	42.82	60.46	48.50	50.59	5	87	5	68.00	26	22	26	29.67	5.6
TENNESSEE—													
Glenwood.....	28.14	40.50	34.42	34.35	7	62	7	58.50	26	8	26	15.77	5.4
Knoxville.....	30.51	42.83	36.05	36.46	7	62	7	54.67	27	12	26	18.33	5.6
KENTUCKY—													
Ballardsville.....	23.00	31.64	27.75	27.46	12	54	12	47.00	26	2	26	10.67	6.6
Danville.....	30.00	41.21	35.32	35.51	7	69	7	58.67	26	11 <sup>a</sup>	26	18.67	5.0
Millersburg.....	24.00	34.18	28.89	29.02	12	58	12	46.67	26 <sup>a</sup>	5	26	12.67	6.3
Springdale.....	22.59	35.53	31.35	29.82	12	57	12	48.17	26	3	26	14.00	6.3
OHIO—													
Cincinnati (h).....	25.68	33.04	30.68	29.80	12	52	12	46.00	26	7	26	14.00	5.7
Cincinnati, [Hurt] (i).....	22.68	32.28	28.68	27.88	12	52	12	45.67	26	4	26	12.33	6.4
Gallipolis.....	22.89	37.89	26.68	29.15	13	57	13	48.33	26	7	26	14.67	---
Germantown.....	17.82	27.95	21.87	22.55	12	46.2	12	41.67	26	— 0.6	26	5.90	7.0
Granville.....	18.39	26.68	23.39	22.82	22	47	13	42.33	26	3	26	7.26	7.3
Hillsborough.....	18.38	28.18	24.18	23.58	12	j 49	12	41.00	26	2	26	8.83	6.4
Jackson, [Crookham].....	20.18	31.89	24.61	25.56	22	53	13	44.33	26	5	26	13.67	7.1
Madison.....	16.89	24.60	16.78	19.42	13	k 38	13	36.33	24	— 8	6	0.00	7.7
Marietta.....	19.00	29.90	24.43	24.44	22	46	13	42.67	26	5	26	12.33	7.7
Mount Vernon.....	15.53	27.57	20.78	21.29	22	44	13	40.67	24	0	6	7.33	6.5
Newark (l).....	18.36	30.48	25.00	24.61	22	48	13	41.33	24	4	3	12.25	7.1
New Lisbon.....	14.68	22.54	17.82	18.35	---	39	14	33.67	---	5	3, 26	8.67	7.6
Oberlin.....	15.26	27.85	18.00	20.37	13	44	13	42.00	24	—10	5	2.43	7.2
Perrysburg (d).....	16.82	30.61	20.96	22.80	12	48	13	44.33	6	— 7	5	3.67	---
Richmond.....													7.5
Urbana.....	14.61	30.93	20.18	21.91	22	52	13	41.67	28	— 5	26	3.33	7.3
Zanesville.....	18.36	26.89	23.04	22.76	22	48	14	42.00	26	4	26	9.33	8.0
MICHIGAN—													
Ann Arbor, [Winchell].....	11.31	20.09	14.38	15.26	13	38	13	36.47	5	—14	6	— 6.07	7.1
Ann Arbor, [Woodruff].....	11.07	22.04	15.43	16.18	13	38	13	36.67	24	—24	5	— 5.67	6.1
Battle Creek.....	12.61	28.11	16.04	18.92	12	k 43	13	40.33	5	— 9	5	— 2.00	7.1
Cooper.....	17.86	23.03	19.28	20.06	13	m 40	13	38.67	5	0	6, 7	7.03	8.0
Detroit.....	13.82	23.39	16.82	18.01	13	40	13	38.00	6	—14	5	— 7.00	7.6
Flint.....	8.40	22.70	13.80	14.97	14	38	14	36.33	7	—31			---
Grand Rapids.....	12.00	25.54	16.36	17.97	21	40	13	37.67	5	— 8	6	— 0.67	6.3
Monroe.....	13.25	22.21	18.57	18.01	13	j 38	13	34.33	6	—10	5	— 1.33	7.9
St. James.....	7.71	21.55	11.07	13.44	21	41	12	31.00	5	—16	5	— 9.83	5.6
INDIANA—													
Madison.....	25.89	33.11	29.37	29.46	12	51	12	46.00	26	7	26	13.67	7.3
Milton.....	18.52	29.00	23.07	23.53	12	45	12	40.50	26	— 1	26	7.33	5.8
New Harmony.....	23.89	37.00	28.64	29.84	12	58	12	50.33	26	5	26	13.33	5.0
ILLINOIS—													
Athens.....	15.84	30.84	20.55	22.41	21	51	12	43.67	26	— 5	25	2.33	5.0
Augusta.....	15.35	27.82	20.11	21.09	21	50	12	42.33	26	—10	25	— 1.67	5.1

<sup>a</sup> Same temperature on the 27th.  
<sup>b</sup> Same temperature on the 8th and 23d.  
<sup>c</sup> Same temperature on the 8th.  
<sup>d</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.  
<sup>e</sup> Same temperature on the 6th.  
<sup>f</sup> Same temperature on the 7th and 8th.  
<sup>g</sup> Same temperature on the 28th.

<sup>h</sup> Observations taken at 6 a. m., 1 p. m., and 9 p. m.  
<sup>i</sup> Observations taken at 7 a. m., noon, and 9 p. m.  
<sup>j</sup> Same temperature on the 22d.  
<sup>k</sup> Same temperature on the 14th.  
<sup>l</sup> Incomplete.  
<sup>m</sup> Same temperature on the 21st.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—Continued.	°	°	°	°		°		°		°		°	
Manchester (a).....	18. 43	28. 37	23. 29	23. 36	21	46	12	44. 00	26	— 3	25	3. 67	5. 6
Ottawa.....	13. 17	26. 89	16. 03	18. 70	21	44	12	39. 33	5	— 7	25	2. 67	2. 7
Upper Alton.....	21. 39	34. 18	27. 84	27. 80	11	53	12	47. 67	26	2	25	9. 33	3. 2
MISSOURI—													
Hannibal.....													4. 5
St. Louis.....	24. 77	35. 20	29. 64	29. 87	6	65	6	47. 00	26	5	25	7. 33	4. 6
WISCONSIN—													
Beloit.....	8. 00	22. 00	11. 93	13. 98	12	37	12	35. 00	5	—14	25	— 3. 33	3. 4
Ceresco.....	1. 40	17. 23	7. 51	8. 71	20	b 34	12	24. 67	5	—14 c	23	— 8. 67	5. 9
											26		
Janesville.....	7. 29	20. 39	10. 36	12. 68	21	40	12	35. 33	5	—19	8	— 3. 00	4. 9
Milwaukee.....	8. 61	21. 32	13. 57	14. 50	13	b 36	12	33. 00	25	—10	25	— 2. 33	4. 5
							13						
Platteville.....	8. 46	24. 61	13. 61	15. 56	21	40	12	34. 67	25	—14	25	— 6. 00	4. 5
IOWA—													
Dubuque.....	13. 43	24. 15	18. 67	18. 75	20	39	12	35. 33	25	— 8	25	— 0. 67	5. 0
Fairfield.....				23. 00		52				— 5			
Fort Madison (d).....	14. 57	27. 64	21. 25	21. 15	21	48	12	42. 67	26	—11	25	— 0. 67	5. 0
Muscatine.....	11. 61	32. 86	15. 07	19. 85	12	40	12	36. 33	25	—11	25	— 3. 00	2. 2
Pella.....	10. 53	26. 18	10. 46	15. 72	11	e 48	10	31. 33	23	—10	25	— 3. 67	
Poultney.....	10. 15	21. 11	11. 85	14. 37	10	42	12	32. 00	25	—12	25	— 7. 33	5. 5
Quasqueton.....	9. 14	23. 52	13. 14	15. 27	10	42	12	32. 17	25	—11	25	— 4. 27	5. 3
MINNESOTA—													
Lac qui Parle.....	5. 14	14. 93	9. 14	9. 74	19	38	19	28. 00	24	—19	23	—13. 33	4. 4
St. Joseph's.....	0. 79	15. 21	2. 68	5. 70	19	46	15	30. 67	22	—25	22	—16. 67	5. 5
CALIFORNIA—													
Sacramento, [Logan].....				52. 50		70				32			
Sacramento, [Hatch] (f).....				52. 82			15	58. 00			20	45. 25	
MEXICO—													
Mirador (g).....				61. 74				72. 85				50. 56	
EASTERN CONTINENT—													
Mosul, Mesopotamia.....				52. 60		65				39			

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 21st.

c Same temperature on the 24th and 26th.

d Observations taken at 6 a. m., noon, and 7 p. m.

e Same temperature on the 10th.

f Observations taken at sunrise, noon, sunset, and 10 p. m.

g Hours of observation not given.

## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.	LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'a temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Hamilton (a).....	31.2		33.0	32.10		47	31	46.5		13	24	17.0	
St. Martin.....	17.1	32.4	22.8	24.10	31	52.1	5	41.5	10	0	10	10.7	4.5
Toronto (b).....				28.46		49.4				— 2.9			6.7
MAINE—													
Carmel.....	21.2	34.9	22.8	26.30	31	55	31	39.7	1	0	14	14.7	4.4
Fryeburg.....													4.2
Gardiner.....	25.4	36.8	28.6	30.27	31	52	31	43.67	1	8	1	20.0	5.7
Oldtown.....	18.4	31.8	25.8	25.33	31	52	31	38.3	1	8 c	22	16.3	2.5
Perry.....	22.7	34.9	26.4	28.00	31	46	31	37.3	1	14 d	14	15.7	5.2
Steuben.....	24.6	32.6	27.5	28.23	30	48	31	38.7	14	11	14	12.7	6.3
NEW HAMPSHIRE—													
Concord.....	24.2	37.2	29.0	30.13	31	53	31	42.3	1	0	1	16.0	4.1
Exeter.....	25.7	37.2	27.9	30.27	31	54	31	42.0	1	7	1	18.0	4.5
Great Falls.....	24.5	38.0	27.9	30.13	31	55	31	42.5	1	5	1	19.0	5.1
Londonderry.....	25.2	37.3	29.2	30.57	31	58	31	46.0	1	9	1	21.0	4.3
Manchester.....	24.6	40.5	31.9	32.33	31	59	31	47.0	1	4	1	20.0	5.6
Salmon Falls.....	28.0	38.7	29.5	32.07	31	60	31	43.7	24	17.5	14	23.3	4.8
VERMONT—													
Brandon.....	23.3	33.5	26.6	27.80	31	63	31	46.7	1	0	10	14.0	5.6
Burlington.....	22.9	35.0	27.3	28.40	31	51	31	43.7	1	— 4	10	12.7	2.9
Castleton.....	24.9	38.9	28.5	30.37	31	59	31	45.7	1	0	10	13.3	6.4
Montpelier (e).....	18.2	35.2	28.7	27.37									
St. Johnsbury.....	22.3	34.0	27.3	27.87	30	52	31	42.3	1	— 1	1	10.3	3.0
MASSACHUSETTS—													
Amherst.....	27.4	37.2	30.0	31.53	31	57.8	31	44.2	1	7.8	1	19.0	4.8
Boston (b).....	28.3	41.4	32.4	34.03	30	54	31	50.3	1	13	1	24.7	4.0
Mendon.....	26.6	35.0	30.1	30.57	30	46	5	40.7	1	11	1	20.7	5.3
Nantucket.....	35.0	39.0	35.2	36.40	31	52	31	45.8	1	26	1	29.8	5.3
New Bedford.....	29.7	40.4	31.3	33.80	31	58	31	44.8	1	12	1	23.0	5.9
Newburyport.....	29.6	38.4	31.4	33.13	31	61.7	31	48.6	1	14	1	23.5	4.8
North Attleboro'.....	28.2	39.0	30.4	32.53	31	60	31	45.1	1	11.1	1	22.6	4.9
Princeton.....	25.0	32.5	27.0	28.17	31	54	31	44.2	1	10	1	17.4	5.3
Richmond.....	23.0	34.3	28.2	28.50	5	50	5	42.7	10	10	10	14.0	5.9
Southwick.....													4.8
Springfield.....	27.7	40.1	31.2	33.00	31	63	31	47.0	1	8	1	20.7	4.2
Westfield.....	27.3	36.9	30.4	31.53	31	60	31	43.3	1	9	1	18.7	
Williamstown.....	24.8	33.8	27.7	28.77	31	53.5	31	42.5	1	3.5	1	14.2	6.5
Wood's Hole.....	31.9	38.8	34.5	35.07	31	55	31	47.7	1	17	1	24.0	5.5
Worcester.....	28.0	38.3	31.5	32.60	31	64	31	53.3	1	11	1	21.7	4.0
RHODE ISLAND—													
Providence (f).....	27.5	39.4	30.8	32.57	30	57	30	45.3	1	13	1	23.0	4.8
CONNECTICUT—													
New London.....	31.7	42.5	32.9	35.70	31	57	31	46.7	1	16	1	24.7	5.1
Pomfret.....	27.0	36.8	29.2	31.00	31	57	31	44.3	1	11	1	19.7	4.8
Saybrook (g).....	30.3	38.9	31.7	33.63	30	54	30	43.3	24	19	25	27.0	5.4
NEW YORK—													
Angelica.....	23.0	36.4	26.0	28.47	31	54	5	43.0	1	— 8	1	9.0	5.5
Baldwinsville.....	25.2	33.7	28.4	29.10	31	48	5	43.0	10	10	10	13.3	6.7
Beverly.....	29.6	38.8	33.4	33.93	31	59	31	47.3	1	13	1	20.0	5.4
Canton.....	20.9	32.1	25.8	26.27	31	50	31	46.0	10	0	10	6.7	6.1
Fishkill.....	30.00	40.96	37.51	36.16		66				14			
Gouverneur.....	23.5	31.8	27.1	27.47	31	50	5	42.0	1	0 h	1	6.0	7.4
Lodi.....	25.6	34.9	27.0	29.17	5, 31	57 i	31	47.3	1	10	10	13.0	7.2
Lowville (j).....	21.8	34.3	26.5	27.53	31	56	31	43.7	1	5 k	16	8.7	6.3
New York city.....	31.9	40.0	34.8	35.57	30	56	30	47.9	1	17	1	23.8	5.5
Oswego.....	26.2	35.7	28.6	30.17	31	56	5	44.0	10	10	10	13.7	
Penn Yan (l).....	27.26	35.58	29.45	30.76	5	53	5	44.33	10	14	10	17.33	7.3

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 5 a. m., 3 p. m., and 10 p. m.

c Same temperature on the 26th.

d Same temperature on the 15th and 25th.

e Observations taken at sunrise, noon, and sunset.

f Observations taken at sunrise, 1 p. m., and 10 p. m.

g For the last 23 days of the month only.

h Same temperature on the 8th and 10th.

i Same temperature on the 31st.

j Observations taken at sunrise, noon, and 9 p. m.

k Same temperature on the 10th.

l Observations taken at sunrise, 2 p. m., and sunset.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK--Continued.	°	°	°	°		°		°		°		°	
Sag Harbor.....	30.3	42.7	33.7	35.57	31	60	31	48.3	1	10	1	22.3	5.2
Smithville.....	25.2	31.9	28.7	28.60	5	50 <i>a</i>	5, 31	45.0	1	10 <i>b</i>	24	16.0	6.6
Spencertown.....	24.9	33.4	27.6	28.63	31	57	31	43.7	1	5	1	13.7	4.7
Wampsville.....	26.2	37.1	28.0	30.43	14	56	14	45.0	1	5	10	11.7	7.3
NEW JERSEY--													
Bloomfield.....	30.5	41.6	34.3	35.47	5	58.5	5, 6	46.5	1	15.5	1	24.2	4.7
Burlington.....	33.5	43.6	38.4	38.50	31	62	31	51.3	1	18	1	23.7	5.3
Lambertville.....	30.88	44.25	34.26	36.46	31	68	31	50.0	1	12	1	21.67	4.4
Newark.....				36.73		61.75	8	52.4		14.25	1	27.0	
PENNSYLVANIA--													
Bedford.....	29.1	41.3	33.6	34.67	16	59	6	46.3	1	8	1	18.5	6.1
Easton.....	30.23	43.68	33.0	35.64	31	68	31	53.0	1	10	1	24.33	5.5
Gettysburg.....	30.0	42.2	33.9	35.37	31	64	6, 31	48.0	1	10	1	21.3	5.3
Harrisburg.....	33.2	42.6	37.6	37.80	31	60	31	50.3	1	18	1	27.7	5.2
Lima.....	31.9	42.5	35.3	36.57	31	61	6	49.1	1	16	1	18.9	6.1
Morrisville.....	30.5	43.5	34.5	36.17	31	64	31	50.0	1	14	1	23.3	4.4
Moss Grove.....	24.6	35.3	28.7	29.53	31	52	14	44.3	1	0	2	17.33	6.1
Norristown.....	32.9	42.7	35.9	37.17	31	62	31	50.0	1	15	1	20.8	5.1
Paradise.....				24.00									
Philadelphia.....	33.6	43.6	39.2	38.80	31	64	31	52.8	1	16	1	25.0	6.4
Pittsburg, [Oakland Station]	28.1	38.7	33.3	33.37	6	56	5	48.7	1	5	1	19.3	
Pittsburg, [Marine Hosp.] ( <i>c</i> )	35.6	40.9	37.6	38.03	17	61	17	50.5	1	15	1	23.0	
Pocopson.....	32.1	42.7	35.7	36.83	6	61.5	6	51.2	1	15.5	1	22.7	6.1
Pottsville.....	28.6	39.6	29.8	32.67	31	65	31	43.0	1	9	1	17.9	5.9
Randolph.....	24.8	36.6	27.6	29.67	17	54 <i>a</i>	31	43.0	1	0	1	14.3	7.2
West Haverford.....	31.5	43.3		37.40	31	66	31	53.0	1	14	1	22.0	5.9
MARYLAND--													
Bladensburg ( <i>d</i> ).....	34.0	48.6	38.1	40.23	6	69	?	?	1	14	?	?	3.9
Frederick.....	33.2	44.2	37.7	38.37	6	60	6	51.3	1	15	1	25.6	6.0
Sykesville.....	32.5	45.6	36.7	38.27	6	65	6	51.7	1	10	1	24.7	5.0
DISTRICT OF COLUMBIA--													
Washington.....	37.56	46.87	40.29	41.57	6	64	6	56.0	1	22	21 28	33.0	
VIRGINIA--													
Alexandria.....	33.6	45.5	38.4	39.17	6	64	6	55.3	1	17	1	25.0	6.0
Ashland.....	33.6	47.1	36.9	39.20	17	66	17	54.0	1	8	1	22.0	4.5
Crichton's Store ( <i>e</i> ).....	42.1	51.6	51.8	48.50	6	68	6	63.7	1	28	22	33.0	5.5
Lewisburg.....	34.8	49.3	40.7	41.60	17	66	12	55.0	1	16	28	25.3	6.5
Smithfield.....				43.63	8	66	5	59.35	1	16	1	25.75	
Winchester.....	34.1	48.3	37.7	40.03	31	68	6	55.7	1	16	1	24.7	4.8
NORTH CAROLINA--													
Chapel Hill.....	39.2	55.7	45.6	46.83	12	75	6	63.6	1	19	1	30.0	4.6
Thornbury.....	38.8	53.5	43.4	45.23	6	71	6	63.0	1	21.3	1	29.5	5.2
SOUTH CAROLINA--													
All Saints.....	46.1	60.1	51.8	52.67	16	81	17	72.7	2	25	1	33.0	3.1
Camden.....	43.6	62.0	51.2	52.27	17	85	17	72.6	2	17	1	31.3	5.5
Charleston.....	48.7	61.7	54.3	54.90		77	17			28	1		
GEORGIA--													
Savannah.....	48.9	65.1	55.1	56.37	15	84	15	72.7	1	28.2	1	36.9	3.7
Sparta.....	42.4	63.2	51.8	52.47	16	82	16	73.0	1	19	1	31.0	4.5
The Rock.....				51.07				72.0				26.0	
Whitemarsh Island.....	48.0	62.6	53.2	54.60	15	80	15	69.3	2	30 <i>f</i>	1	36.3	3.6
FLORIDA--													
Cedar Keys.....	56.1	63.6	60.0	59.90	17	74 <i>g</i>	18	71.3	1	35	1	42.7	3.8
Jacksonville.....	55.2	69.3	57.0	60.50	16	86	15	76.3	1	33	1	39.3	3.1
Key West.....	66.7	72.3		69.50	17	82 <i>g</i>	17	78.0	2	48	2	52.0	4.2
Knox Hill.....	51.7	65.9	56.0	57.87	12	82 <i>h</i>	15	76.0	1	28	1	37.0	6.5
Warrington.....	51.9	64.0	60.1	58.67	17	78	17	73.3	1	29	1	40.7	3.9

*a* Same temperature on the 31st.*b* Same temperature on the 8th and 9th.*c* Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 34.8.*d* Observations incomplete.*e* Observations taken at 9 a. m., noon, and 5 p. m. Irregular.*f* Same temperature on the 29th.*g* Same temperature on the 18th.*h* Same temperature on the 13th, 14th, and 15th.

## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST WIND.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ALABAMA—	°	°	°	°		°		°		°		°	
Auburn.....	46.2	63.6	54.6	54.80	14	82	16	73.7	1	23	1	34.7	3.3
Greene Springs.....	47.1	66.6	55.2	56.30	16	87	16	77.3	2	23	1	33.7	3.5
Tuscaloosa.....	44.7	62.2	51.8	52.90	16	83.5	16	76.0	1	24.3	1	32.7	4.2
MISSISSIPPI—													
Columbus.....				53.89		82				21.5			
Garlandville.....	47.8	69.1	55.4	57.43	16	87	16	78.0	2	25	1	38.3	4.3
Oxford.....	42.7	58.0	48.6	49.77	16	78.5	11	69.7	1	23	1	30.3	4.0
LOUISIANA—													
New Orleans.....	52.1	64.8	58.0	58.30	16	82	16	75.0	1	31	1	36.3	5.1
TEXAS—													
Austin.....	45.4	70.5	54.5	56.80		98	8	77.0		24	21	40.0	4.9
New Wied.....	51.6	72.6	55.2	59.80	8	79	8	80.3	1	30	21	39.7	6.3
TENNESSEE—													
Friendship.....													3.4
Glenwood.....	37.1	51.4	43.5	44.00	12	74.5	12	67.2	1	17	1	27.0	4.7
Knoxville.....	37.6	53.4	45.0	45.33		73.5	12	67.5		18	28	26.7	4.3
Lebanon.....	39.8	50.2	46.7	45.57		72	12	65.3		21.5	1	30.5	4.0
KENTUCKY—													
Ballardsville.....	34.0	42.8	38.4	38.40	11	58	11	52.7	1	14	28	24.7	4.9
Danville.....	38.8	51.2	42.7	44.23	11	70	11	63.3	1	17	1	28.0	4.0
Millersburg.....	33.7	45.0	38.0	38.90	13	60	13	54.0	1	11	1	22.3	5.0
Springdale.....	31.7	45.7	40.9	39.43	31	60	11	55.5	1	10	21	26.5	5.6
OHIO—													
Berea.....	25.6	34.9	30.1	30.20	31	51	31	44.3	1	— 8	1	10.7	5.6
Cincinnati (b).....	35.9	46.2	39.0	40.37	31	63	13	50.7	1	18	28	28.0	3.5
Gallipolis.....	35.6	47.4	37.9	40.30	31	65	17	53.3	1	16	1	24.7	
Germantown.....	29.5	40.1	32.6	34.07	31	56.3	14	39.0	1	7.7	20	33.6	6.1
Granville.....	30.9	40.7	35.2	35.60	13	59	5	48.0	1	9	20	21.7	6.0
Hillsborough.....	30.8	40.8	34.7	35.43	13	57.5	13	47.3	1	11	20	22.2	5.2
Jackson, [Crookam].....	34.1	46.6	36.5	39.07	31	64	13	51.3	1	9	1	24.3	6.2
Marietta.....	29.9	43.6	36.0	36.50	17	58.5	15	48.3	1	4	1	20.0	4.8
Mount Vernon.....	28.5	40.7	32.5	33.90	14	53	5	46.7	1	5	1	19.7	5.3
Newark (d).....	30.2	42.8	34.6	35.87	14	60.5	13	46.5	1	7	1	19.0	6.0
New Lisbon.....	27.6	36.8	31.6	32.00		55	14	42.3		1	1	12.3	5.3
Oberlin (e).....	28.4	39.1	32.5	33.33	5	54	5	51.0	1	— 2	1	8.0	4.9
Perrysburg (f).....	31.6	41.4	32.9	35.30	30	59	5	48.3	1	2	1	19.0	
Richmond.....													5.6
Urbana.....	27.0	40.9	32.0	33.30	13	59	5, 13	46.3	1	— 1	1	14.7	5.9
Zanesville.....	30.3	42.7	34.4	35.80	31	58	15	49.3	1	12	20	22.7	6.4
MICHIGAN—													
Ann Arbor, [Winchell].....	24.4	33.6	28.9	28.97	31	51	5	42.3	22	5	24	16.0	5.8
Ann Arbor, [Woodruff].....	24.1	35.5	29.8	29.80	31	54	31	44.0	1	3	1	16.3	6.4
Battle Creek.....	26.1	39.9	28.2	31.40	5	58	3	47.0	1	— 5	1	12.3	5.2
Cooper.....	28.1	34.9	30.4	31.13	31	52	5, 31	42.7	22	14	24	16.7	5.5
Detroit.....	27.1	35.9	31.1	31.37	31	54	31	46.0	1	4	1	17.7	8.2
Flint.....	24.1	39.5	30.4	31.33		55	5	46.67		— 1			
Grand Rapids.....	23.8	34.9	28.7	29.13	2	48.5	5	41.7	22	0	1, 20	19.0	5.0
Monroe.....													5.4
St. James.....	20.4	33.9	24.2	26.17	29	49	30	35.8	21	4	9	16.0	5.7
Saugatuck.....	30.2	39.2	31.4	33.60	31	48	5, 30	42.7	1	7	1	21.7	6.4
INDIANA—													
Madison.....	34.2	42.9	38.1	38.40	11	54	11	51.0	1	18	1	28.0	6.2
Milton.....	28.8	38.9	33.1	33.60	7	54	5	47.2	1	8	20	19.7	4.9
New Harmony.....	33.5	45.8	37.3	38.87	11	63	11	59.0	1	11	1	23.3	5.2
ILLINOIS—													
Athens.....	28.6	43.6	33.5	35.23	5	68	5	56.0	1	2	20	15.7	5.2
Augusta.....	27.2	40.9	33.2	33.77	8	65	8	53.0	1	— 1	20	12.3	4.7
Manchester (f).....	30.1	40.9	34.6	35.20	5	68	5	54.7	1	8	20	14.7	5.0

a Same temperature on the 12th.

b Observations taken at 6 a. m., 1 p. m., and 9 p. m.

c Same temperature on the 31st.

d No observations on the 1st at 9 p. m.

e No observation on the 1st at noon.

f Observations taken at 7 a. m., 1 p. m., and 9 p. m.

g Same temperature on the 5th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—Continued.	D	C	O	O		O		O		O		□	
Ottawa .....	27.0	40.2	30.9	32.70	8	59	5, 8	45.0	1	— 1	20	12.7	4.8
Upper Alton .....	30.9	44.9	36.9	37.57	5	68	5	58.0	1	12 a	20	17.0	3.5
MISSOURI—													
Hannibal .....													4.7
St. Louis .....	33.6	45.5	39.1	39.40	5	70.5	5	60.8	20	15	20	20.0	4.6
WISCONSIN—													
Beloit .....	21.8	35.8	26.9	28.17	8	54 b	8	41.7	21	— 1	20	8.3	3.2
Ceresco .....	20.5	34.4	21.6	25.50	23	48	5	37.3	1	— 2	21	6.0	3.3
Janesville .....	19.81	34.58	25.16	26.52	31	50	31	38.67	21	— 6	20	6.67	5.6
Milwaukee .....	23.3	33.7	26.9	27.97	23	47 b	5	40.3	21	0	21	9.0	4.7
Platteville .....	23.9	36.2	28.2	29.43	6	50 c	23	43.0	21	— 9	21	6.7	5.0
							31						
Iowa—													
Dubuque .....	26.8	37.0	30.2	31.33	8	60	8	45.0	20	5	20	11.3	4.6
Fairfield .....				35.00		64				4			
Fort Madison (d) .....	26.6	40.5	34.5	33.87	8	62	8	51.6	20	5	20	11.3	4.7
Muscatine .....	24.4	38.0	28.5	30.30	8	63	8	46.0	20	0	20	5.7	3.9
Pella .....	22.8	38.5	27.0	29.43	8	60	8	46.3	20	1	20	8.7	
Poultney .....	22.0	34.5	27.2	27.90	8	52	8	41.3	20	2	20	5.7	5.7
Quasqueton .....	22.2	36.2	26.8	28.40	8	55	8	42.5	18	— 6	20	2.3	4.9
MINNESOTA TERRITORY—													
Lac qui Parle .....	20.1	32.7	24.1	25.63	4	52	4	40.2	20	— 5	19	5.0	3.5
CALIFORNIA—													
Sacramento, [Logan] .....				54.82		76				41			
Sacramento, [Hatch] (e) .....				56.62			24	64.1			16	45.5	
San Francisco (f) .....	51.8	67.0	53.7	57.58									
MEXICO—													
Mirador (g) .....				64.09				75.49				53.73	
EASTERN CONTINENT—													
Mosul, Mesopotamia .....				55.77		75				43			
WESTERN AFRICA—													
Nengeneng .....	77.84	82.74	80.47	80.35	18	88 h	28	83.33	23	74	22	76.00	

a Same temperature on the 20th.

b Same temperature on the 31st.

c Same temperature on the 23d.

d Observations taken at 6 a. m., noon, and 7 p. m.

e Observations taken at sunrise, noon, sunset, and 10 p. m.

f Observations taken at sunrise, 9 a. m., noon, and 10 p. m.

Mean at 9 a. m., 57.81.

g Hours of observation not given.

h Same temperature on the 28th.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) -----	45.8		45.16	45.48		65	24	60.33		22	2	24.0	
St. Martin -----	32.2	47.6	37.6	39.13	17	71.6	24	57.3	2	5.7	2	15.1	4.7
Toronto -----				42.43		69.4				10.7			5.1
MAINE—													
Carmel (b) -----	33.5	46.8	34.7	38.33	24	70	24	58.3	2	10	2	15.5	5.2
Fryeburg -----													5.0
Gardiner -----	38.3	48.6	39.9	42.27	24	69.5	24	56.8	2	18	2	22.0	5.8
Oldtown -----	30.7	44.2	34.6	36.50	24	62	24	51.3	2	10	2	13.7	3.3
							25						
Perry (d) -----	32.0	45.1	36.1	37.73	18	62	18	49.7	2	19	2	21.3	5.5
Steuben -----	35.2	40.3	35.7	37.07	16	59	16	46.3	2	17	2	19.0	6.1
NEW HAMPSHIRE—													
Concord -----	37.3	49.8	40.2	42.43	24	72	24	60.0	2	18	2	24.3	4.8
Exeter -----	35.3	49.5	37.6	40.80	24	72	24	57.7	2	18	2	24.0	4.8
Great Falls -----	36.80	50.63	38.87	42.10	24	75	24	60.0	2	14.5	2	19.0	4.6
Londonderry -----	37.6	51.2	42.0	43.60	19	78	24	61.0	2	16	2	21.3	5.2
Manchester (e) -----	34.8	49.1	42.2	42.03	16	64	22	53.3	2	15	2	24.3	5.8
VERMONT—													
Brandon -----	36.9	50.4	40.8	42.70	23	69	24	60.3	2	12.5	2	18.0	5.2
Burlington -----	39.7	50.6	40.6	43.63	24	76	24	65.0	2	9	2	17.0	3.1
Craftsbury -----	33.00	44.43	35.17	37.53	24	67	24	58.0	2	3	2	9.0	5.6
Montpelier (f) -----	29.20	46.50	40.00	38.57									
St. Johnsbury -----	34.70	47.14	38.70	40.18		70	24	56.33		12	2	17.0	3.4
MASSACHUSETTS—													
Amherst -----	38.3	51.3	41.9	43.83	25	76	25	62.0	2	17	2	22.3	5.0
Boston (g) -----	38.53	52.53	42.83	44.63	18	72	18	60.3	2	18	2	24.0	4.4
Mendon -----	40.1	51.4	41.4	44.30	19	71	24	57.3	2	17	2	22.0	5.8
Nantucket -----	43.3	49.0	42.0	44.77	19	63	19	53.2	2	28	2	31.5	5.0
New Bedford -----	40.6	51.3	41.6	44.50		76	19	60.3		20.5	2	27.2	6.5
Newburyport -----	38.4	50.7	41.7	43.60	24	77	24	61.4	2	17.6	2	23.0	5.2
North Attleboro' -----	40.4	50.8	41.2	44.13	19	72	18	58.3	2	18.5	2	23.5	4.9
Princeton -----	36.2	46.6	38.7	40.50		67.2	24	55.7		13.5	2	17.8	5.8
Richmond -----	34.9	48.7	40.2	41.27	18	72	18	56.7	2	10	2	16.7	5.8
Southwick -----													5.2
Springfield -----	38.5	54.0	42.8	45.10	25	80	25	63.3	2	16	2	22.3	4.5
Westfield -----	37.23	50.70	42.67	43.53	26	76	25	60.67	2	16	2	22.0	
Williamstown -----	37.2	48.7	41.7	42.53	19	67	19	57.2	2	13	2	18.7	6.2
Wood's Hole -----	41.2	49.5	43.5	44.73	18	63	19	56.67	2	21	2	27.3	5.5
Worcester -----	38.9	50.2	41.3	43.47	24	67	18	58.7	2	20	2	24.0	
RHODE ISLAND—													
Providence (h) -----	38.7	52.5	41.0	44.07	19	76	18	58.0	2	18	2	25.0	5.3
CONNECTICUT—													
New London -----	43.8	54.0	43.3	47.03	19	80	19	62.0	2	24	2	29.3	4.6
Pomfret -----	38.2	50.1	39.9	42.73	25	77	25	59.3	2	16	2	22.0	5.0
Saybrook (i) -----	39.1	48.4	40.9	42.80	25	64	25	54.0	2	19	2	27.7	4.6
NEW YORK—													
Angelica -----	38.13	52.79	39.30	43.41	18	82	25	66.0	1	14	2	21.33	3.8
Baldwinsville -----	38.4	47.6	43.2	43.07	24	70	24	63.3	2	15	2	20.0	5.4
Beverly -----	41.4	52.3	44.4	46.03	25	77	25	67.3	2	21	2	29.7	4.7
Canton -----	37.5	49.7	40.8	42.67	24	72	24	63.0	2	10	2	18.0	5.7
Fishkill -----	42.13	55.70	50.96	49.63		81				4			
Gouverneur -----	38.1	51.1	41.6	43.60	18	70	17	62.0	2	10	2	18.7	5.9
Lodi -----	42.2	51.1	41.8	45.03	18	78	24	66.3	2	12	2	19.7	5.7
Lowville (j) -----	33.1	47.4	36.5	39.00	24	70	24	57.3	2	9	2	16.3	5.1
New York city -----	43.7	52.4	46.1	47.40	25	79	25	68.1	2	27	2	32.7	4.9
Penn Yan (k) -----	36.4	53.6	45.2	45.07	18	79	18	68.3	2	15	2	21.3	5.7
Sag Harbor -----	41.6	54.9	43.6	46.70	25	85	25	64.3	2	24	2	30.7	4.6

a Observations taken at 9 a. m. and 9 p. m.

b No observations on the 2d at 9 p. m.

c Same temperature on the 25th.

d Observations taken at sunrise, 2 p. m., and 9 p. m.

e Observations very irregular from the 17th to the 26th.

f Observations taken at sunrise, noon, and sunset.

g Observations taken at 6 a. m., 2 p. m., and 10 p. m.

h Observations taken at 6 a. m., 1 p. m., and 10 p. m.

i Observations taken at 7 a. m., 2 p. m., and 11 p. m.

j Observations taken at sunrise, noon, and 9 p. m.

k Observations taken at sunrise, 2 p. m., and sunset.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Smithville .....	39.0	49.2	40.1	42.77	24	70	24	64.0	2	14	2	19.7	4.9
Spencertown .....	39.8	49.2	39.6	42.87	24	72	25	60.3	1	a 20	2	24.0	4.9
Wampsville .....	40.23	53.20	40.53	44.65	24	78	24	65.0	2	a 16	2	22.0	5.7
NEW JERSEY—													
Bloomfield .....	41.4	54.2	44.1	46.57	25	82	25	68.0	2	23.5	2	31.8	4.2
Burlington .....	44.2	59.8	49.4	51.13	25	83	25	69.3	2	24	2	32.7	3.8
Lambertville .....	42.93	60.23	46.24	49.80	19	85	19	69.33	2	22	2	34.0	5.1
Newark .....				48.95	25	85	25	71.4	2	21	2	33.4	----
PENNSYLVANIA—													
Bedford .....	43.9	61.2	49.2	51.43	19	86	19	74.0	2	20	2	25.7	4.1
Easton .....	42.63	59.97	46.53	49.71	19	86	19	68.33	2	22	2	29.33	4.5
Gettysburg .....	45.5	61.9	49.3	52.23	19	89	19	77.0	2	24	2	31.0	3.7
Harrisburg .....	46.8	60.3	53.7	53.60	19	83	19	72.0	2	a 28	2	34.7	4.3
Lima .....	45.2	58.0	48.0	50.40	19	85	19	72.6	2	b 26	3	32.6	5.1
Morrisville .....	42.5	57.6	47.1	49.07	19	c 82	19	67.7	2	26	2	34.7	3.3
Mossgrove .....	41.62	55.20	45.58	47.47	18	84	18	72.0	3	12	2	17.33	3.7
Norristown .....	44.9	55.8	48.4	49.70	25	82	25	69.7	3	30	1	34.7	4.5
Paradise .....				37.00									
Philadelphia .....	47.0	59.6	52.1	52.90	25	86	25	74.0	2	26	2	34.0	5.9
Pittsburg, [O. S.] .....	44.47	61.23	47.73	51.14	25	83	18	72.0	2	a 19	2	24.0	----
Pittsburg, [M. H.] (d) .....	48.1	58.5	54.1	52.42	18	83	25	69.5	1	31	2	32.5	----
Pocopson .....	44.4	60.2	49.0	51.20	19	86	19	72.7	2	* 26.5	2	33.3	5.4
Pottsville .....	39.5	56.8	44.1	46.80	19	85.5	19	69.2	1	e 25	2	29.7	5.5
Randolph .....	42.7	57.8	44.3	48.27	18	88	18	74.0	1	e 16	2	20.3	4.5
West Haverford (f) .....	44.4	59.0	-----	51.7	19	85	19	71.0	2	23	2	30.5	4.3
MARYLAND—													
Bladensburg (g) .....	50.3	66.2	50.0	55.50	19	94	19	79.9	4	28	2	38.0	3.6
Frederick .....	47.7	63.2	52.5	54.47	25	88.5	19	76.2	2	27.8	2	34.9	5.2
Sykesville .....	48.3	63.5	50.1	53.97	19	87	19	77.3	2	28	2	34.3	3.9
DISTRICT OF COLUMBIA—													
Washington (h) .....	48.4	63.9	54.9	55.73	----	97	25	77.6	----	30	2, 3	38.3	4.5
VIRGINIA—													
Alexandria .....	47.8	62.7	54.1	54.87	19	91	19	77.7	4	27	3	36.0	4.1
Ashland .....	48.2	69.3	55.1	57.53	18	94	18	77.0	3	28	2	36.0	2.1
Crichton's Store .....	56.3	70.9	71.7	66.30	20	93	19	85.0	3	40	3	46.7	4.6
Lewisburg .....	46.5	69.1	52.7	56.10	18	92	18	70.3	2	29	2	38.3	4.5
Smithfield .....				59.51	19	92	19	78.5	2	22	3	40.5	----
Winchester .....	50.6	67.0	53.6	57.07	19	90	19	79.3	2	28	2	34.7	4.7
NORTH CAROLINA—													
Chapel Hill .....	55.4	75.7	61.0	64.03	19	102	19	84.0	4	37	3	40.0	3.6
Thornbury .....	51.9	72.3	57.0	60.40	19	97	19	76.6	12	34	2	38.8	4.7
						26							
SOUTH CAROLINA—													
All Saints .....	58.93	69.63	62.17	63.58	20	86	20	81.0	12	39	12	49.67	2.9
Camden .....	57.6	74.9	65.1	65.87	19	97	19	86.7	3	42	3	48.0	5.6
Charleston .....	60.6	72.7	62.8	65.37	----	91	20	----	----	46	1	----	----
GEORGIA—													
Savannah .....	60.5	76.6	64.5	67.20	19	99.5	20	85.9	1	47	12	55.9	3.2
Sparta .....	55.8	78.5	64.5	66.27	18	98	18	82.7	8	39	3	49.0	4.1
The Rock (i) .....				62.70				76.0				48.0	----
Whitemarsh Island .....	61.1	73.1	62.8	65.67	20	93	20	81.0	1	48	7	54.0	2.9
FLORIDA—													
Cedar Keys .....	66.2	73.0	69.0	69.40	25	81	28	75.0	1	j 56	1	59.0	1.8
Jacksonville .....	67.13	77.26	66.53	70.31	18	k 89	19	80.67	7	53	7	58.33	2.6
						20							
Key West .....	71.0	78.6	-----	74.80	11	84	6	79.5	1	l 63	11	65.5	5.0

a Same temperature on the 3d.

b Same temperature on the 3d and 4th.

c Same temperature on the 25th.

d Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 49.8.

e Same temperature on the 2d.

f No observations at 9 p. m. Observations after the 13th taken at Philadelphia.

g Incomplete.

h No observations on face of the sky for the first ten days of the month.

i Observations taken morning, 3 p. m., and evening.

j Same temperature on the 8th.

k Same temperature on the 19th and 20th.

l Same temperature on the 2d and 8th.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	°	°	°	°		°		□		°		°	
Knox Hill (a)-----	62.90	81.40	66.90	70.40	20	b 91	20	79.7	1	45	1	55.33	4.2
Warrington (c)-----	64.3	74.1	70.8	69.73	22	d 80	29	76.7	2	50	1, 2	61.3	2.4
ALABAMA—													
Auburn-----	61.4	79.5	68.6	69.83	---	96	19	83.0	---	47	7	53.7	2.2
Greene Springs (e)-----	67.4	80.9	69.4	72.57	18	96	17	82.7	1	f 48	7	55.0	2.2
MISSISSIPPI—													
Columbus-----				69.07	?	90	---	---	?	45	---	---	---
Garlandville (g)-----	63.5	84.4	71.8	73.23	19	98	19	84.0	1	h 45	1	59.0	4.3
Oxford-----	63.3	75.8	65.7	68.27	17	86	18	80.7	1	46	1	50.5	3.2
LOUISIANA—													
New Orleans-----	63.3	78.8	69.7	70.60	22	i 85	22	77.8	1	44.5	1	57.2	3.0
TEXAS—													
Austin-----	62.1	84.0	67.3	71.13	19	j 92	27	77.7	1	f 40	1	53.3	5.1
							28						
							29						
New Wied-----	66.6	84.6	68.8	73.33	19	94	19	81.3	7	32	1	55.3	4.5
TENNESSEE—													
Friendship (k)-----	63.1	81.1	66.2	70.13	18	91	19	80.7	27	i 52	15	62.7	3.3
Glenwood-----	57.8	71.1	60.3	63.07	18	90	19	80.3	7	36.3	2	43.2	5.7
Knoxville-----	54.2	70.9	59.3	61.47	18	92	18	78.8	7	36	7	43.0	4.3
KENTUCKY—													
Danville-----	56.4	70.9	59.1	62.13	19	l 89	18	79.3	2	33	2	43.3	3.0
Millersburg-----	50.7	66.8	59.5	59.00	18	m 84	18	79.7	2	26	2	35.3	3.7
OHIO—													
Cincinnati (n)-----	51.13	68.97	59.30	59.80	18	92	18	79.7	2	27	2	38.0	2.6
Gallipolis-----	53.30	70.15	54.23	59.23	19	91.5	19	78.0	2	29	2	34.33	---
Germantown-----	49.3	65.9	53.4	56.20	18	90.9	18	77.1	2	21.4	2	29.7	4.9
Granville-----	49.5	64.4	53.5	55.80	18	86	18	77.0	2	22	2	32.3	3.5
Hillsborough-----	49.6	64.0	54.3	55.97	18	87	18	77.5	2	22	2	31.3	3.3
Jackson, [Crookam]-----	49.7	69.7	52.5	57.30	18	94	19	76.7	3	27	2	33.3	5.5
Jackson, [Gilmor]-----	49.9	69.4	54.1	57.80	25	93	19	78.3	2	30	2	35.7	---
Jackson, [Wood] (o)-----	52.2	72.2	58.2	60.87	25	93	19	78.3	11	p 32	11	43.0	3.8
Marietta-----	44.9	65.5	51.5	53.97	18	m 87	18	72.3	3	20	2	30.0	3.1
Mount Vernon-----	48.7	67.2	50.1	55.33	18	90	24	75.0	2	20	2	27.7	2.9
Newark-----	47.9	62.8	51.5	54.07	18	88	18	76.7	2	22	2	28.3	3.7
New Lisbon-----	44.53	57.57	47.03	49.71	---	81	18	71.0	---	18	2	27.33	2.9
Oberlin (q)-----	48.7	60.4	48.5	52.53	18	86	18	75.3	2	19	2	19.0	3.2
Perrysburg (r)-----	53.7	64.8	53.3	57.27	18	89	18	82.0	1	26	1	31.3	---
Richmond-----													3.2
Savannah (s)-----	55.5	66.8	55.0	59.10	18	93	18	85.7	11	30	6	36.0	4.3
Unionville-----	47.9	56.7	46.5	50.37	18	85	18	77.7	1	t 26	2	27.7	4.5
Urbana-----	47.83	65.77	52.00	55.20	25	90	25	79.0	2	29	2	28.0	3.8
Zanesville-----	47.7	65.4	53.9	55.67	25	90	25	76.7	2	24	2	35.0	5.3
MICHIGAN—													
Ann Arbor, [Winchell]-----	42.7	57.5	47.0	49.07	18	84	18	72.6	2	13	2	23.2	4.3
Ann Arbor, [Woodruff]-----	42.3	59.7	49.6	50.53	18	85	18	74.0	2	17	1	24.6	4.0
Battle Creek-----	44.7	62.0	47.5	51.40	18	86	18	72.7	2	16	1, 2	25.0	3.4
Cooper-----	49.0	60.0	48.7	52.57	24	84	18	72.0	1	22	1	28.7	3.3
Detroit-----	44.3	57.1	47.6	49.67	18	84	18	73.0	2	18	2	25.0	7.7
Flint-----	43.0	60.0	46.6	49.87	18	87	---	---	2	14	---	---	---
Grand Rapids-----	41.3	56.9	46.8	48.33	18	u 78	18	74.0	2	16	1	24.7	3.8
Monroe-----													4.7
St. James-----	37.86	48.81	36.80	41.16	29	73	29	61.67	1	15.5	1	21.16	4.7
Saugatuck-----	46.2	57.3	47.2	50.23	17	81	17	72.3	1	21	1	27.3	4.1

a Observations omitted from the 10th to the 16th.

b Same temperature on the 21st.

c Observations taken at sunrise, noon, and sunset.

d Same temperature on the 27th, 29th, and 30th.

e Incomplete.

f Same temperature on the 7th.

g Observations taken at 7 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 8th.

i Same temperature on the 28th.

j Same temperature on the 29th.

k No observations for the first 13 days.

l Same temperature on the 25th.

m Same temperature on the 19th.

n Observations taken at 6 a. m., 1 p. m., and 9 p. m.

o No observations before the 6th.

p Same temperature on the 12th.

q Only one observation on the 2d, which was at 7 a. m.

r Observations taken at 7 a. m., 1 p. m., and 9 p. m.

s No observations before the 5th.

t Same temperature on the 2d.

u Same temperature on the 24th.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—	○	○	○	○		○		○		○			
Madison .....	50.4	65.5	55.3	57.07		89	18	75.7		29	2	35.8	4.8
Milton .....	47.9	63.4	52.0	54.4	25	85.5	18	78.5	2	22	2	30.5	2.5
New Harmony .....	52.73	68.73	57.60	59.69	18	a 89	18	80.33	2	31	2	36.00	4.7
ILLINOIS—													
Athens .....	51.5	72.1	57.3	60.30	17	b 92	17	81.7	1	28	1, 2	36.0	4.4
Augusta .....	49.2	68.1	57.2	58.17	17	c 90	17	79.7	2	28	1	36.0	3.7
Manchester (d) .....	50.6	70.8	56.6	59.33	25	94	18	80.7	2	30	2	36.7	3.8
Ottawa .....	47.8	67.0	50.6	55.13	18	91	17	78.7	1	23	1	31.3	4.5
Upper Alton .....	51.7	69.0	59.8	60.17	25	89	25	81.3	7	28	2	38.7	3.1
MISSOURI—													
Hannibal .....													4.8
St. Louis .....	55.72	70.13	60.80	62.22	25	93	25	82.20	2	32	2	40.33	4.3
WISCONSIN—													
Beloit .....	42.5	61.8	47.0	50.43	17	86	17	74.0	2	21	1	26.3	2.0
Ceresco .....	45.4	57.5	43.7	48.87	24	85	17	72.0	2	18	1	21.3	5.2
Janesville .....	40.5	62.8	45.9	49.73	17	87	17	73.0	2	14	1	24.3	3.9
Milwaukee .....	44.3	54.2	41.6	46.70	24	84	18	68.3	1	20	1	24.3	2.7
Platteville .....	46.5	65.0	54.5	55.33	24	88	17	76.7	2	23	1	29.3	3.8
IOWA—													
Dubuque .....	49.1	63.8	53.4	55.43	17	92	17	77.3	2	28	1	32.3	3.7
Fairfield .....				61.00		93				24			
Fort Madison (e) .....	46.5	66.8	58.8	57.37	18	90	25	80.3	10	24	2	35.0	4.0
Muscatine .....	45.8	65.9	51.2	54.30	17	87	17	77.3	10	24	10	32.7	3.3
						25							
Pella .....	46.5	67.0	52.0	55.17	17	92	24	84.0	10	26	1	32.0	---
Poultney .....	44.5	63.2	48.1	51.93	17	92	17	78.3	1	24	1	28.0	4.3
Quasqueton .....	46.1	63.9	52.4	54.13	17	92.3	17	77.7	1	24	1	28.7	3.9
MINNESOTA TERRITORY—													
Lac qui Parle .....	45.8	61.3	48.6	51.90	17	90	17	74.0	9	23	9	28.0	3.2
MEXICO—													
Mirador (f) .....				67.01				73.8				59.0	---
EASTERN CONTINENT—													
Mosul, Mesopotamia .....				63.12		77				48			---

a Same temperature on the 25th.

b Same temperature on the 19th.

c Same temperature on the 18th.

d Observations taken at 7 a. m., 1 p. m., and 9 p. m.

e Observations taken at 6 a. m., noon, and 7 p. m.

f Hours of observation not given.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
BRITISH AMERICA—	°	°	°	°		□		°		°		°	
Hamilton (a) .....	58.0		55.9	56.95	31	73	31	72.5	7	37	8	39.5	---
St. Martin .....	46.9	67.2	52.0	55.37	31	89	31	74.9	10	32	7	42.9	2.0
Toronto .....				53.07		77.5				33			4.6
MAINE—													
Carmel (b) .....	47.3	64.4	47.2	52.97	31	86	31	70.0	20	35	20	38.3	5.3
Fryeburg .....													4.3
Gardiner .....	51.0	61.3	50.9	54.40	31	79	31	68.0	10	41	1, 21	43.0	6.1
Oldtown .....	42.8	57.3	44.6	48.23	31	74	31	61.3	12	33	1	39.7	---
Perry (c) .....	39.8	52.7	43.7	45.40	31	68	25	56.3	10	33	1	37.0	7.0
Steuben .....	43.5	52.7	45.8	47.33	31	73	31	62.0	1	33 d	1	35.3	6.7
NEW HAMPSHIRE—													
Concord .....	50.2	64.5	52.4	55.70	31	80	15	68.3	1	40 e	9	43.7	3.2
Exeter .....	47.1	60.6	48.5	52.07	31	80	31	68.7	11	36	8	41.3	4.5
Great Falls .....	49.23	64.24	49.73	54.40	31	81	31	69.3	9	38.5	9	42.8	4.7
Manchester .....	48.96	66.67	54.52	56.72	31	81	31	70.33	3	38	10	44.67	5.3
VERMONT—													
Brandon .....	49.0	64.0	53.9	55.63	24	82	31	71.7	7	37	9	44.3	3.5
Burlington .....	51.3	65.8	54.8	57.30	31	85	31	74.3	7	40	7	46.0	2.1
Craftsbury .....	44.81	60.26	49.39	51.49	31	80	31	69.0	7	32	7	39.0	4.2
Montpelier (f) .....	39.50	61.70	52.70	51.30									---
St. Johnsbury .....	51.04	62.48	51.93	55.15	31	83	31	71.33	7	40 g	21	46.33	1.9
MASSACHUSETTS—													
Amherst .....	50.2	66.0	53.7	56.63	16	81	16	70.3	9	38.2	9	40.8	4.1
Boston (h) .....	47.87	64.29	52.61	54.92	16	82	16	73.5	3	36	3	44.0	3.5
Mendon .....	51.1	62.0	51.2	54.77	31	76	31	68.1	2	36	9	40.0	3.8
Nantucket .....	51.2	57.0	48.7	52.30	30	67.5	30	61.7	8	39.5	10	42.8	4.6
New Bedford .....	50.9	60.8	49.6	53.77	25	73	25	63.7	9	37	9	39.0	7.1
Newburyport .....	50.3	62.0	51.9	54.73	31	82	16	71.7	3	40.1	2	41.9	5.5
North Attleboro' .....	50.7	62.8	49.3	54.27	16	77.7	16	67.8	9	36.3	9	39.0	4.4
Princeton .....	47.9	60.2	50.5	52.87	24	77	16	66.2	9	35	9	36.8	5.1
Richmond .....	46.5	65.5	55.5	55.83	24	82	15	71.0	4	28	4	34.3	4.9
Southwick (i) .....													4.8
Springfield .....	50.8	66.9	55.5	57.73	16	82	16	71.3	9	38	9	40.7	3.1
Westfield .....	45.50	65.65	53.48	54.88	16	82	31	67.3	9	37	10	47.0	---
Williamstown (j) .....	48.89	61.08	52.70	54.22	24	80	31	71.33	10	36.5	10	44.70	4.0
Worcester .....	51.0	63.4	51.2	55.20	24	79	16	70.3	23	35	9	39.2	3.6
RHODE ISLAND—													
Providence (k) .....	49.2	63.5	50.3	54.33	16	78	16	68.3	9	35	9	33.0	4.8
CONNECTICUT—													
New London .....	54.6	65.4	52.3	57.43	14	79 l	25	68.00	9	36	9	41.3	4.4
Pomfret .....	49.7	62.7	50.3	54.23	16	78	16	68.7	9	35	9	38.3	4.7
Saybrook (m) .....	51.1	61.3	50.6	54.33	25	74	25	68.0	9	38	9	40.7	4.1
NEW YORK—													
Angelica .....	49.68	63.94	49.39	54.34	30	86	31	72.00	8	32	8	36.67	2.5
Baldwinsville .....	48.8	60.3	53.5	54.20	31	76	31	70.7	8	38	8	38.7	3.3
Beverly .....	52.7	63.6	57.1	57.80	14	74 n	16	72.0	9	38	9	38.7	4.5
Canton .....	51.4	68.5	55.0	58.30	31	88	31	77.3	7	36	7	41.3	3.9
Fishkill .....	53.29	70.22	65.45	63.32		83				40			---
Gouverneur .....	53.6	65.3	56.7	58.53	31	80	31	72.7	2	40 e	9	44.7	3.4
Lodi .....	51.9	62.7	52.6	55.73	30	79 o	31	72.0	8	34	8	36.3	4.4
Lowville (p) .....	44.06	64.94	51.26	53.42	30	84 o	31	66.0	10	30	9	38.25	3.7
Madrid (q) .....	59.55	70.85	59.05	63.15	29	78.8	31	69.8	26	51	27	59.5	2.9
New York city .....	55.6	65.4	57.0	59.33	16	81	16	74.0	7	38.2	9	39.4	4.1

a Observations taken at 9 a. m. and 9 p. m.

b No observations before the 15th.

c Observations taken at sunrise, 2 p. m. and 9 p. m.

d Same temperature on the 3d.

e Same temperature on the 10th.

f Observations taken at sunrise, noon, and sunset.

g Same temperature on the 8th, 10th, and 21st.

h Observations taken at 6 a. m., 3 p. m., and 10 p. m.

i Observations irregular, only 3 at 9 p. m.

j Hours of observation variable.

k Observations taken at 6 a. m., 1 p. m., and 10 p. m.

l Same temperature on the 25th and 30th.

m Observations taken at 7 a. m., 2 p. m., and 11 p. m. None on the 25th at 11 p. m.

n Same temperature on the 16th and 24th.

o Same temperature on the 31st.

p Observations taken at sunrise, noon, and 9 p. m.

q Incomplete.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
New York—Continued.	□	○	□	○		○		□		○		□	
Oswego.....	49.0	61.6	51.6	54.07	30	83	31	68.0	7	37	8	40.3	---
Penn Yan(a).....	44.5	63.2	54.4	51.03	30	81	31	67.10	7	33	8	36.67	5.2
Sag Harbor.....	52.7	67.3	52.2	57.40	15	85	15	69.7	9	37	9	39.7	4.1
Smithville.....	48.5	63.7	50.8	54.33	30	84 b	31	74.7	10	32	9	41.7	3.1
Spencertown.....	50.6	63.1	47.6	53.77	16	84	31	69.0	11	32	9	37.0	3.6
Wampsville.....	50.22	67.58	51.26	56.35	30	86 b	31	75.3	9	37	8	41.0	3.7
New Jersey—													
Bloomfield.....	53.0	69.1	55.6	59.23	16	85.5	16	73.3	9	39	9	40.0	3.6
Burlington.....	55.0	70.1	59.9	61.67	16	85	16	77.7	9	40 c	9	43.0	2.8
Lambertville.....	54.68	71.42	56.36	60.82	16	92	16	77.67	10	31	9	41.00	6.0
Newark (d).....				59.09	---	83	16	74.5	---	32.75	9	43.0	---
Pennsylvania—													
Bedford.....	54.1	71.6	60.3	62.0	24	85	24	73.3	10	35	8	40.0	3.9
Easton.....	53.71	72.45	59.52	61.89	24	88	24	73.67	9	39	8	44.0	3.9
Gettysburg.....	57.9	73.8	59.8	63.83	15	88 e	24	76.3	8	40 f	8	43.3	4.0
Harrisburg.....	57.5	72.9	64.4	64.93	24	87	24	78.0	9	44	8	48.7	4.0
Lima.....	56.0	68.0	57.5	60.50	15	83.2	16	75.3	9	41	9	44.6	4.9
Meadville.....	52.6	67.5	55.2	58.43	23	86	30	75.0	7	34	8	37.0	3.6
Morrisville.....	53.9	68.6	56.6	59.70	14	83 g	16	73.3	9	38	9	40.7	2.9
Moss Grove.....	54.23	66.03	53.23	57.83	23	87	30	72.0	8	32	8	55.7	3.8
Norristown.....	52.1	66.9	56.9	58.63	---	83.5	16	72.0	---	40	9	43.3	4.9
Paradise.....				67.00									
Philadelphia.....	57.8	71.1	62.4	63.77	15	87	16	77.5	9	42	9	45.3	6.0
Pittsburg, [O. S.].....	54.52	66.39	56.65	59.19	23	81	23	71.3	8	36	7	44.0	---
Pittsburg, [M. H.] (h).....	51.7	68.0	63.3	61.45	23	80	24	71.5	10	38	8	48.2	---
Pocopson.....	55.6	71.5	58.9	62.00	14	86 i	16	78.0	9	42 j	9	45.2	5.2
Pottsville.....	50.06	69.80	53.22	57.69	14	85 e	24	73.0	9	36	8, 9	41.0	4.4
Randolph.....	53.1	68.2	53.3	58.20	30	86	30	73.7	7	32 k	8	33.7	4.3
West Haverford (l).....	53.6	69.9	---	61.75	14	84 g	16	75.5	9	42	9	42.5	3.5
Maryland—													
Bladensburg (m).....	57.8	75.9	57.2	63.63	24	89	24	81.5	10	44	9	49.2	3.7
Frederick.....	59.0	72.8	61.7	64.50	16	87.2	16	78.2	8	45 n	9	47.9	3.8
Sykesville.....	54.8	73.5	59.5	63.93	14	85 o	16	77.7	8	43 f	9	47.0	3.4
District of Columbia—													
Washington.....	57.2	72.3	63.2	64.23	14	85 e	24	76.7	9	43	9	48.2	4.2
Virginia—													
Alexandria.....	58.8	71.7	61.8	64.10	16	85	16	77.7	8	44	9	48.0	3.6
Ashland.....	57.1	75.2	61.6	64.63	22	90	24	77.3	8	41	8	44.7	3.9
Crichton's Store (p).....	64.1	77.8	76.0	72.63	14	90	1	83.7	4	52	4	58.7	4.7
Lewisburg.....	57.0	76.8	59.2	64.33	23	92	24	77.0	9	40	8	44.3	6.2
Smithfield.....				63.58	1	86	24	76.75	8	41	8	50.5	---
Winchester.....	60.7	74.2	61.6	65.50	24	90	24	76.7	10	45	8	48.7	4.5
North Carolina—													
Chapel Hill.....	60.3	77.3	65.6	67.73	24	91	24	78.6	9	45	9	54.0	5.3
South Carolina—													
All Saints.....	66.9	75.6	69.3	70.60	25	83	23	78.0	9	53 c	9, 10	57.7	4.1
Camden.....	66.0	79.7	69.1	71.60	22	93	22	83.3	11	52	9	59.7	5.6
Charleston.....	68.9	79.3	80.0	76.07	---	90	23	---	---	55	10	---	---
Georgia—													
Savannah.....	68.7	82.6	70.9	74.07	22	95.1	23	85.8	9	58	9, 10	63.7	3.7
Sparta.....	61.3	85.2	68.5	71.67	23	100	23	86.3	9	47 g	9	56.0	3.7
The Rock (r).....				69.79	---	---	---	82.00	---	---	---	56.00	---
Whitemarsh Island.....	70.2	79.1	71.0	73.43	22	90	23	83.0	5	60 s	10	62.7	3.4

a Observations taken at sunrise, 2 p. m., and sunset.

b Same temperature on the 31st.

c Same temperature on the 10th.

d Observations taken at 7 a. m., and 5 p. m.

e Same temperature on the 24th.

f Same temperature on the 9th.

g Same temperature on the 15th.

h Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean

at 9 a. m., 59.8.

i Same temperature on the 16th.

j Same temperature on the 11th.

k Same temperature on the 8th.

l Observations until 9th taken at Philadelphia.

m Observations incomplete. None on 9th and 24th at 9 p. m.

n Same temperature on the 10th.

o Same temperature on the 16th and 24th

p Observations taken at 7 a. m., noon, and 6 p. m. Incomplete.

q Same temperature on the 10th and 11th.

r Observations taken morning, 3 p. m., and evening.

s Same temperature on the 9th and 10th.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—	°	°	°	°		°		°		°		°	
Cedar Keys (a).....	72.3	78.1	74.4	74.93	27	84	27	82.5	12	60	11	68.3	3.2
Jacksonville.....	72.48	83.54	73.35	76.46	23	101	23	91.0	12	61	10	65.7	3.1
Key West.....	73.3	82.2	77.75	77.75	23	88	29	83.5	12	71	16	70.5	4.1
Knox Hill.....	70.0	83.9	71.6	75.17	24	98	23	83.3	10	57	9	59.7	5.1
Warrington (d).....	72.1	78.2	77.1	75.80	28	84	29	81.0	10	50	10	67.7	2.9
ALABAMA—													
Auburn (f).....	68.9	84.3	72.3	75.17	26	99	26	92.5	52	9	61.3	3.2	
Greene Springs.....	73.1	91.1	76.5	80.23	103	26	93.0	53	9	63.7	3.2		
MISSISSIPPI—													
Columbus.....				75.42	94.5			48					
Garlandville.....	75.2	92.0	78.9	82.03	29	107	23	94.3	56	9	62.7	4.5	
Oxford.....	74.6	80.7	70.0	75.10	22	92	22	86.3	8	51	9	58.0	4.1
LOUISIANA—													
New Orleans.....	70.9	83.7	75.8	76.80	28	93.5	28	84.0	10	53	10	67.5	2.9
TEXAS—													
Austin.....	68.6	87.0	76.1	77.23	2	92	24	83.0	3	60	10	68.0	6.3
New Wied.....	75.4	93.4	75.6	81.47	19	103	25	88.3	10	63	8	71.7	5.0
TENNESSEE—													
Friendship.....	63.6	77.6	65.5	68.90	22	98	22	83.0	9	42	8	50.0	3.5
Glenwood.....	58.9	75.1	64.2	66.07	22	92.5	22	82.8	9	42.5	8	59.3	5.2
Knoxville.....	61.6	76.2	64.6	67.47	23	90	23	81.3	9	44.5	8	50.7	3.9
KENTUCKY—													
Millersburg.....	61.9	73.3	66.8	67.33	22	86	22	80.7	8	36	8	41.3	4.3
Springdale.....	53.05	75.66	54.40	65.10	22	95.5	23	81.5	8	34	8	46.0	4.6
OHIO—													
Cincinnati (j).....	57.1	75.0	64.3	65.47	22	91	23	79.0	8	37	8	44.7	3.5
Cleveland (k).....	55.1	63.9	55.8	58.27	30	86	30	76.3	7	36	8	37.7	—
Gallipolis.....	59.5	76.03	66.0	67.18	1	88	1	78.0	8	44	8	49.7	—
Germanstown.....	57.5	72.5	57.5	62.50	22	90.3	23	74.3	8	37.6	8	42.8	—
Granville.....	54.6	71.3	58.4	61.43	23	86	22	75.7	8	37	8	40.7	4.8
Hillsborough.....	56.3	70.9	59.6	62.27	22	88	23	73.7	8	34.5	8	40.7	3.4
Jackson, [Gilmore].....	58.8	77.4	62.5	66.23	22	93	23	81.3	10	36	8	45.0	4.8
Jackson, [Crookham].....	58.4	76.7	60.9	65.33	2	88	21	80.0	8	40	8	43.7	6.1
Marietta.....	55.5	75.0	58.3	62.93	24	85	24	73.7	10	38	8	46.0	3.9
Newark.....													4.8
New Lisbon.....	55.16	67.77	56.71	59.88		80	23	71.67		33	7	51.0	3.2
Oberlin.....	55.0	68.3	54.6	59.30	30	90	23	76.3	7	36	8	38.0	3.3
Perrysburg (p).....	60.8	70.2	58.7	63.23	14	84	23	76.7	7	35	7	41.7	—
Richmond.....													3.7
Savannah.....	56.3	69.9	55.0	60.40	29	94	29	77.0	8	34	8	37.0	3.9
Unionville.....	55.8	62.5	51.4	57.57	30	82	30	73.3	7	34	8	37.3	4.3
Urbana.....	58.4	74.5	59.3	64.07	22	91	29	79.7	8	33	8	40.0	4.9
MICHIGAN—													
Ann Arbor, [Winchell].....	55.0	70.3	53.8	59.70	30	83.2	23	72.4	7	33	7	35.7	3.6
Ann Arbor, [Woodruff].....	51.4	69.2	57.2	59.27	23	85	23	75.3	7	33	7	36.7	3.6
Battle Creek.....	55.1	71.9	55.7	60.90	22	94	22	77.3	7	33	7	38.3	2.8
Cooper.....	59.1	70.3	56.9	62.10	22	92	22	80.0	8	33	7	38.7	2.2
Detroit.....	53.7	66.6	54.3	58.20	23	82	30	73.7	7	32	7	36.3	4.5
Flint.....	53.3	71.3	54.6	59.73	23	84			7	30			—
Grand Rapids.....	51.3	68.5	55.9	58.57	22	92	22	77.0	8	35	7	38.0	3.0
St. James.....	50.4	60.9	47.1	52.80	19	75	15	59.67	2	35	2	39.67	4.1
Saugatuck.....	58.4	66.8	56.7	60.63	30	85	30	76.7	7	41	7	43.7	3.6

a No observations after the 27th. None on the 27th at 9 p. m.

b Same temperature on the 29th.

c Same temperature on the 13th, 14th, and 17th.

d Observations taken at sunrise, noon, and sunset.

e Same temperature on the 31st.

f No observations on the 26th at 9 p. m.

g Same temperature on the 29th.

h Same temperature on the 4th, 13th, 20th, and 26th.

i Same temperature on the 6th and 10th.

j Observations taken at 6 a. m., 1 p. m., and 9 p. m.

k Sever 1 of the morning observations taken at sunrise.

l Same temperature on the 8th.

m Same temperature on the 10th.

n Same temperature on the 11th.

o Same temperature on the 24th and 25th.

p Observations taken at 7 a. m., 1 p. m., and 9 p. m.

q Same temperature on the 30th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
INDIANA—	°	°	°	°		°		°		°			
Madison .....	58.2	72.5	62.6	64.43	22	89	23	79.0	8	39.5	8	44.7	4.8
Milton .....	56.8	71.9	58.7	62.47	22	93.5	22	79.2	8	38	8	42.2	3.5
New Harmony .....	60.97	75.32	63.55	66.61	22	91	22	85.3	9	42	8	49.3	4.9
ILLINOIS—													
Athens .....	59.0	74.2	61.5	64.90	22	96	22	85.0	8	a 38	8	46.0	4.7
Augusta .....	57.0	70.7	60.8	62.83	22	93	22	84.0	8	38	8	48.0	4.8
Manchester (b) .....	59.2	74.2	60.0	64.47	22	94	22	84.3	8	36	8	46.7	5.8
Ottawa .....	59.7	73.3	56.5	63.17	22	96	22	84.7	7	36	8	44.3	4.8
Upper Alton .....	59.1	72.4	63.3	64.93	21	88	22	80.0	8	33	8	47.3	4.5
MISSOURI—													
Hannibal .....													5.3
St Louis .....	62.37	73.55	64.37	66.76	22	92	22	84.02	8	45	8	51.02	5.4
WISCONSIN—													
Beloit .....	51.8	73.2	55.1	60.03	22	93	22	81.0	8	34	8	39.0	2.8
Ceresco .....	58.8	68.8	52.1	59.90	22	90	22	73.0	7	c 32	7	38.0	5.3
Janesville .....	54.9	73.5	54.8	61.07	22	95	22	82.7	8	34	8	38.7	4.1
Madison .....	55.2	67.9	61.3	61.47	22	87	22	79.7	8	36	8	47.7	3.8
Milwaukee .....	50.8	61.1	49.1	53.67	15	82	15	71.0	8	35	7	38.0	4.0
Platteville .....	57.6	75.8	63.7	65.70	22	98	22	83.7	9	34	8	48.0	4.0
Iowa—													
Dubuque .....	57.7	72.7	61.3	63.90	22	99	22	81.0	8	39	8	48.0	4.3
Fairfield .....				68.00		96				31			
Fort Madison (d) .....	56.7	72.5	65.0	64.73	22	96	22	88.7	8	36	8	47.0	4.5
Muscatine .....	53.7	70.1	57.5	60.43	21	86	21	75.7	8	27	9	42.7	3.1
Pella .....	53.6	72.4	57.4	61.13	21	91	21	74.3	8	28	8	42.7	---
Poultney .....	56.6	73.1	54.0	61.23	21	e 90	22	78.0	7	34	7	44.7	4.6
Quasqueton .....	54.6	72.2	56.5	61.10	21	88	21	75.8	7	34	8	46.0	4.6
MINNESOTA—													
Lac qui Parle .....	56.5	70.3	55.8	60.87	21	83	21	70.7	8	40	8, 23	48.7	3.5
MEXICO—													
Mirador (f) .....				71.19				75.87				67.23	---
EASTERN CONTINENT—													
Mosul, Mesopotamia .....				76.10		98				55			---
WESTERN AFRICA—													
Nèngènèngè .....	77.68	83.58	81.06	80.77	5	88	6	84.00	15	73	29	77.00	---

a Same temperature on the 9th.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Same temperature on the 8th.

d Observations taken at 6 a. m., noon, and 7 p. m.

e Same temperature on the 22d.

f Hours of observation not given.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
	°	°	°	°		°		°		°		°	
BRITISH AMERICA—													
Hamilton (a) .....	63.03		62.23	62.63		83	30	85.00		51	3	51.50	
Red River Settlement.....	65.13	76.63	65.53	69.10	15	92	13	78.00	10	48	5	59.00	3.5
St. Martin .....	57.54	70.04	59.36	62.31	30	94	30	84.76	17	43	12	47.30	5.1
Toronto .....				59.93		91.5				36.2			6.5
MAINE—													
Carmel .....	57.15	72.28	54.77	61.40	30	92	29	78.00	19	40	9	50.67	5.8
Fryeburg .....													5.3
Gardiner .....	63.70	71.68	60.37	65.25	29	91	29	79.67	12	51	20	56.33	6.7
Oldtown (b).....	51.10	63.14	51.74	55.33	16	74	2	62.33	6	41	9	49.67	2.5
Perry .....	51.03	64.73	54.37	56.71	29	82	29	70.67	13	c 44	17	49.00	5.3
South Thomaston.....	70.84	72.23	71.24	71.44	29	101	30	93.00	10	65	1	66.13	3.7
Steuben .....	57.83	63.83	58.83	60.16	29	87	29	77.00	19	47	8	51.67	5.8
NEW HAMPSHIRE—													
Concord .....	60.23	71.00	60.97	64.07	30	93	30	83.67	12	49	12	54.00	4.7
Exeter .....	56.37	70.10	57.93	61.47	29	88	30	77.00	18	45	12	53.00	4.8
Great Falls .....	59.07	72.07	59.70	63.61	29	91	29	82.00	13	46	5	53.67	5.4
Londonderry .....	58.43	72.83	60.20	63.82	30	94	30	87.00	18	47	7	51.67	5.5
Manchester .....	61.33	74.00	64.06	66.46	30	96	30	86.33	12	49	12	56.67	6.4
VERMONT—													
Brandon .....	61.20	66.37	60.60	62.72	30	90	30	83.16	5	49	8	51.00	5.4
Burlington .....	60.97	71.70	61.00	64.56	30	92	30	84.60	8	49	5, 8, 12	54.67	3.6
Craftsbury .....	53.40	61.87	54.53	56.60	29	d 82	30	76.00	8	41	8	44.00	6.0
Montpelier (e) .....	50.30	68.20	57.90	58.80	30	94	30	77.33					
St. Johnsbury .....	58.83	68.73	58.40	61.99	30	91	30	82.33	8	f 45	13	52.00	4.0
MASSACHUSETTS—													
Amherst .....	60.65	71.55	62.31	64.84	30	92	30	84.67	12	48	12	53.67	3.9
Boston (g) .....	59.37	74.67	63.73	65.92	30	k 92	29	82.33	13	44	13	53.33	6.5
Mendon .....	62.50	70.87	62.10	65.16	30	92	30	84.33	8	52	8	56.00	5.5
Nantucket .....	63.38	68.32	59.53	63.74	29	d 84	30	76.00	13	53	8	59.00	2.8
New Bedford.....	63.10	69.10	61.28	64.49	30	87	29	80.67	13	50	13	55.16	6.2
Newburyport .....	63.11	70.31	62.15	65.19	29	92	30	82.86	7	51	7	56.00	7.1
North Attleboro' .....	62.61	71.41	60.55	64.86	30	92	30	81.90	13	49	13	56.26	4.9
Princeton .....	57.90	66.90	58.30	61.03	29	85	30	78.20	13	45	5	49.33	5.9
Southwick .....													6.0
Springfield .....	62.26	73.54	64.13	66.64	30	92	30	86.33	13	49	12	55.33	5.1
Westfield .....	56.97	70.70	61.47	63.05	30	93	30	83.33	6	45	13	52.00	
Williamstown .....	55.44	69.02	61.99	62.15	30	87	30	81.50	9	44	9	53.33	6.3
Worcester .....	61.67	71.03	62.60	65.10	30	91	30	85.33	12	49	12	55.00	4.8
RHODE ISLAND—													
Providence (i) .....	61.7	72.0	62.1	65.27	30	95	30	81.67	13	48	13	57.33	5.2
CONNECTICUT—													
New London .....	64.27	73.40	62.37	66.68	30	93	30	84.00	5	j 54	13	59.33	5.3
Pomfret .....	60.79	69.34	61.43	63.85	30	88	30	81.33	12	48	12	53.67	5.5
Saybrook .....	60.97	68.17	62.17	63.77	26	83	29	75.33	13	51	12	56.33	5.0
NEW YORK—													
Angelica .....	57.27	68.33	56.83	60.81	30	93	30	79.00	13	40	4	45.37	6.3
Baldwinsville .....	56.50	66.50	60.73	61.24	30	89	30	81.00	12	44	12	47.33	6.6
Beverly .....	63.00	70.04	64.80	65.95	30	89	30	83.00	5	k 53	5	56.33	5.5
Canton .....	60.07	68.67	61.17	63.30	30	91	30	81.67	11	49	12	50.67	6.4
Fishkill .....	60.10	74.00	69.93	68.01		95				52			
Gouverneur .....	59.90	69.53	59.30	62.91	30	88	30	80.00	12	42	12	47.33	7.1
Lodi .....	60.50	68.73	59.50	62.91	30	89	30	83.33	4	l 46	12	48.67	7.1
Lowville .....	52.47	69.60	57.10	59.72	30	89	30	77.33	11	m 38	12	46.00	5.3
Madrid .....	60.81	70.48	57.22	62.84	30	89	29	79.67	9	46	11	52.76	5.5
New York city .....	66.23	72.92	66.05	68.40	30	90	29	84.54	12	55	19	57.63	5.3
Oswego .....	55.60	64.07	58.47	59.38	30	92	30	80.67	7	36	7	47.00	

a Observations taken at 9 a. m. and 9 p. m.

b For the first 19 days of the month only.

c Same temperature on the 15th, 19th, and 20th.

d Same temperature on the 30th.

e Observations taken at sunrise, noon, and sunset.

f Same temperature on the 13th.

g Observations taken at sunrise, 3 p. m., and 10 p. m.

k Same temperature on the 29th.

l Observations taken at 6 a. m., 1 p. m., and 10 p. m.

j Same temperature on the 13th and 14th.

k Same temperature on the 13th and 13th.

l Same temperature on the 11th and 12th.

m Same temperature on the 12th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°			
Penn Yan (a).....	54.13	70.07	60.33	61.51	30	90	30	77.67	12	40	12	49.33	7.5
Sag Harbor .....	63.20	75.57	62.67	67.15	30	94	30	85.00	13	54	13	60.33	5.1
Smithville .....	54.60	64.70	55.87	58.39	30	84	27	72.33	12	b 43	12	47.00	5.8
Spencertown .....	60.50	69.33	62.23	64.02	30	95	30	82.00	4	c 49	4, 12	51.33	5.0
Wampsville .....	61.00	73.52	59.72	64.75	29	94	29	84.00	4	45	12	52.33	7.0
NEW JERSEY—													
Bloomfield .....	62.57	74.83	64.00	67.13	30	97	30	83.33	13	51	13	57.83	4.9
Burlington .....	66.23	76.30	68.87	70.50	29	93	29	86.93	13	d 55	19	60.00	7.2
Lambertville .....	65.37	77.33	63.75	68.82	29	99½	29	86.50	12	55	12	57.75	4.1
Newark (e) .....								85.38			13	59.50	
PENNSYLVANIA—													
Bedford .....	60.17	74.45	63.31	65.98	30	93	29	83.00	13	45	13	52.33	5.5
Easton .....	63.60	77.90	65.80	69.10	30	102	30	86.67	13	53	19	58.00	5.8
Gettysburg .....	63.20	74.40	65.03	67.54	29	f 94	29	86.00	4	52	4, 12	58.00	5.5
Harrisburg .....	66.73	77.11	70.79	71.54	30	97	29	89.33	4	57	4	62.00	5.0
Lima .....	66.18	75.16	64.86	68.73	30	92	30	86.20	12	51	4, 19	58.20	5.8
Meadville .....	58.87	70.31	60.63	63.27	29	90	29	81.00	4	43	3	48.66	6.4
Morrisville .....	63.03	75.07	64.03	67.38	30	92	30	81.33	12	54	12	60.00	4.3
Moss Grove .....	59.61	69.68	56.91	62.07	29	92	29	80.67	4	40	12	48.33	6.4
Norristown .....	62.79	73.74	66.13	67.55	29	92	30	83.60	5	54	19	57.03	5.4
Paradise .....				72.00									
Philadelphia .....	67.70	76.60	71.30	71.87	29	94	30	88.67	12	58	19	60.00	6.6
Pittsburg, [O. S.] .....	61.50	68.67	60.63	63.60	29	91	30	82.67	12	43	12	47.67	
Pittsburg, [M. H.] (g) .....	60.80	70.07	65.53	65.47	30	90	29	84.00	4	46	4	53.34	
Pocopson .....	65.77	76.84	66.45	69.69	30	96	30	87.00	13	55	4	60.67	6.6
Pottsville .....	61.28	73.73	63.22	66.08	30	96	30	85.90	5	41	4	53.83	6.5
Randolph .....	59.63	70.63	58.07	62.78	30	93	29	84.33	11	h 43	12	48.00	6.2
West Haverford .....	62.67	76.97		69.82	30	94	30	87.00	5	52	19	57.00	5.6
DELAWARE—													
Newark (i) .....	64.21	75.84	66.50	68.85	29	92	22	65.67	4	52	5	60.67	4.6
MARYLAND—													
Bladensburg (i).....	66.36	79.72	64.82	70.30	30	98	24	79.00	12	55	18	52.67	6.1
Chestertown (j) .....	72.15	81.75	71.95	75.28	29	93	29	85.00	12	56	12	60.00	
Frederick .....	68.32	76.88	67.17	70.79	30	95	29	89.00	18	56	4	61.07	5.6
Sykesville .....	65.50	75.23	65.60	68.78	29	91	29	87.67	4	k 55	18	56.67	5.2
DISTRICT OF COLUMBIA—													
Washington .....	66.43	77.42	69.78	71.21	30	95	29	86.67	4	55	4	59.00	5.3
VIRGINIA—													
Alexandria .....	67.45	77.33	68.33	71.04	29	94	29	87.33	4	55	4	58.33	5.5
Ashland .....	63.97	76.37	65.27	68.54	29	93	29	82.33	3	49	3	51.33	3.9
Crichton's Store (l) .....	71.55	81.88	80.24	77.89	30	99	30	91.67	4	56	4	63.34	4.6
Lewisburg .....	63.23	75.50	62.73	67.15	28	91	28	77.67	4	44	4	51.33	5.8
Smithfield .....				73.74	30	93.5	29	85.75	3	50.5	13	60.50	
Winchester .....	67.17	77.67	66.33	70.46	29	94	29	86.00	3	52	4	59.33	5.4
NORTH CAROLINA—													
Chapel Hill .....	68.13	83.30	70.90	74.11	30	99	30	86.67	4	53	4	59.67	5.2
SOUTH CAROLINA—													
All Saints .....	72.97	75.33	74.90	74.40	16	m 83	23	80.00	4	61	4	64.00	3.9
Camden .....	72.03	82.96	71.87	75.62	18	92	30	83.67	3	60	4	64.67	5.0
Charleston .....	73.43	81.73	74.20	76.45		90	20			60	4		
GEORGIA—													
Savannah .....	73.30	84.40	74.60	77.43	18	93	24	82.46	4	63	4	70.06	4.1
Sparta .....	65.83	85.47	71.40	74.23	5	n 92	30	81.67	4	50	3	60.67	4.5
The Rock (o) .....				71.87				78.00				61.00	
Whitemarsh Island .....	74.20	81.87	74.50	76.86	18	p 88	24	81.67	4	66	4	69.00	3.7

a Observations taken at sunrise, 9 p. m., and sunset.

b Same temperature on the 18th.

c Same temperature on the 5th and 12th.

d Same temperature on the 14th.

e Observations taken at 7 a. m. and 6 p. m.

f Same temperature on the 30th.

g Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 64.97. Maximum 81, minimum 50.

h Same temperature on the 12th.

i Incomplete.

j For the last 22 days of the month only.

k Same temperature on the 14th and 18th.

l Observations taken at 7 a. m., noon, and 6 p. m.

m Same temperature on the 29th and 30th.

n Same temperature on the 16th, 17th, 19th, 28th, and 30th.

o Observations taken morning, 3 p. m., and evening.

p Same temperature on the 22d.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
FLORIDA—	□	□	□	□		□		□		□		□	
Cedar Keys (a).....	78.50	84.63	79.13	80.75	22	b 86	23	83.33	15	71	15	77.00	3.4
Jacksonville.....	76.85	82.75	75.50	78.37	18	89	7	82.67	4	c 68	3, 4	72.67	4.2
							18						
							21						
Key West.....	79.07	86.77	-----	82.92	8	93	8	86.50	3	d 77	4	78.00	5.3
Knox Hill.....	73.00	81.72	74.27	76.33	23	89	23	81.33	5	62	3	67.67	6.0
Warrington (e).....	75.93	81.00	80.17	79.03	6	f 84	24	82.67	3	66	8	73.33	3.4
ALABAMA—													
Auburn.....	70.11	83.90	74.60	76.20	28	g 93	28	84.33	1	h 59	3	64.00	3.9
Greene Springs.....	75.24	89.43	75.82	80.16	15	98	27	86.35	3	60	3	66.33	2.4
MISSISSIPPI—													
Columbus.....	-----	-----	-----	75.41	?	89	-----	-----	?	56	-----	-----	-----
Oxford.....	70.73	79.43	70.97	73.71	17	87	17	81.00	2	58	7	63.00	3.9
LOUISIANA—													
New Orleans.....	73.57	84.10	77.84	78.50	22	i 89	27	80.83	3	65	3	72.50	4.1
TEXAS—													
Austin.....	72.17	85.57	76.67	78.14	13	c 92	29	83.33	7	j 63	7	69.00	4.8
New Wied.....	77.47	91.33	74.70	81.17	4	k 97	29	87.33	7	60	7	65.67	5.7
TENNESSEE—													
Friendship.....	66.33	83.00	68.14	72.49	18	l 93	21	80.00	4	52	4	56.00	3.4
Glenwood.....	64.25	76.86	68.02	69.71	16	89	29	79.97	4	49	4	55.57	4.8
Knoxville.....	66.22	77.47	68.25	70.65	29	89.5	28	80.33	4	54	3	58.67	4.6
KENTUCKY—													
Danville.....	71.19	79.85	69.31	73.45	29	92	29	83.00	5	58	5	60.00	3.2
Millersburg.....	65.73	74.50	68.70	69.64	29	88	29	82.67	2	m 48	3	54.67	4.5
Springdale.....	58.35	80.12	69.20	69.22	17	l 94	17	81.67	3	40	2	53.50	4.7
OHIO—													
Cincinnati (n).....	61.83	76.33	67.97	68.71	29	90	29	82.00	3	44	2	51.67	5.0
Cleveland.....	63.57	64.33	61.70	64.55	29	92	30	84.53	3	46	2, 4	52.00	6.4
Gallipolis.....	66.37	76.15	70.10	70.87	28	o 90	28	82.67	13	52	2, 13	60.67	---
							29						
Germantown.....	64.17	74.30	63.05	67.17	28	91	29	84.49	28	46	2	49.10	6.3
Granville.....	62.61	74.44	64.00	67.02	28	p 91	29	81.67	13	45	3	51.33	5.3
Hillsborough.....	61.43	72.20	62.72	65.45	28	88	29	79.83	3	45	3	52.33	5.1
Jackson, [Crookham].....	66.83	77.20	64.17	69.40	29	96	28	84.00	3	48	3	53.00	6.5
Jackson, [Gilmer].....	68.00	78.97	64.72	70.56	29	97	28	84.00	13	44	14	58.33	5.5
Oberlin.....	63.33	71.70	60.90	65.31	29	93	29	84.67	3	43	4	52.33	5.2
Perrysburg (q).....	66.87	73.60	64.47	68.31	28	o 92	29	88.00	3	46	3	51.00	---
Richmond.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.6
Savannah.....	62.50	72.00	60.47	64.99	30	97	29	86.00	13	43	3	47.00	6.3
Unionville.....	63.13	68.90	59.57	63.87	28	92	30	82.33	3	r 46	3	51.33	6.3
Urbana.....	62.86	75.37	62.60	66.94	28	p 94	29	83.67	2	m 44	2	48.33	5.9
Zanesville.....	60.60	74.67	63.37	66.21	29	98	29	82.67	4	s 45	3	48.00	5.8
MICHIGAN—													
Ann Arbor, [Woodruff].....	58.07	70.06	61.07	63.07	28	91	28	81.33	4	40	3	44.67	5.6
Ann Arbor, [Winchell].....	59.99	68.46	67.83	65.43	28	90	29	81.03	3	39	3	44.07	5.5
Battle Creek.....	59.70	78.83	59.90	66.14	29	95	29	86.00	2	41	3	48.33	4.3
Cooper.....	61.72	69.93	58.90	63.52	28	90	29	82.67	4	46	4	51.33	4.6
Detroit.....	64.37	69.67	60.17	64.74	28	92	28	83.33	3	44	3	46.00	7.8
							29						
Flint.....	59.50	72.40	58.00	63.30	29	93	29	83.67	3	42	-----	-----	---
Grand Rapids.....	56.07	70.07	59.40	61.85	28	89	29	81.33	3	40	2	42.00	4.8
Monroe.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.9
St. James.....	57.27	67.56	52.28	59.04	30	90	30	82.33	2	36	2	40.33	4.8
Saugatuck.....	63.26	70.33	60.43	64.67	28	92	29	83.33	3	42	2	47.00	5.1

a For the last 16 days of the month only.

b Same temperature on the 23d, 25th, and 30th.

c Same temperature on the 14th.

d Same temperature on the 4th and 5th.

e Observations taken at sunrise, noon, and sunset.

f Same temperature on the 12th, 17th, 18th, 19th, 21st, 23d, 24th, 25th, and 27th.

g Same temperature on the 30th.

h Same temperature on the 4th.

i Same temperature on the 23d and 28th.

j Same temperature on the 8th.

k Same temperature on the 25th.

l Same temperature on the 26th.

m Same temperature on the 3d.

n Observations taken at 6 a. m., 1 p. m., and 9 p. m.

o Same temperature on the 29th and 30th.

p Same temperature on the 29th.

q Observations taken at 7 a. m., 1 p. m., and 9 p. m.

r Same temperature on the 11th.

s Same temperature on the 13th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp	Date	Temp.	Date	Mean temp.	
INDIANA—	○	□	□	○		□		○		□		○	
Madison .....	61.91	72.45	65.25	66.54	29	88	29	79.33	3	46	2	50.67	5.7
Milton .....	62.85	74.05	63.57	66.82	29	90.5	29	82.67	2	44	2	46.17	4.3
New Harmony .....	70.13	78.73	68.60	72.49	27	a 93	29	85.67	2	54	2	56.33	4.3
ILLINOIS—													
Athens .....	65.30	78.53	66.00	69.94	28	94	28	84.67	3	43	2	52.33	3.4
Augusta .....	63.60	76.57	67.83	69.33	16	b 90	28	82.67	2	49	1, 3	54.33	3.4
Manchester (c) .....	66.18	78.02	66.00	70.07	28	93	28	85.83	2	47	2	51.50	4.6
Ottawa .....	66.67	75.13	66.63	69.48	16	94	29	88.33	1	44	2	50.67	5.3
Upper Alton .....	67.20	76.79	67.10	70.36	17	92	17	82.67	3	50	2	55.33	2.9
MISSOURI—													
St Louis .....	67.68	78.50	68.78	71.65	17	d 95	28	85.83	2	52	2	55.50	4.2
WISCONSIN—													
Beloit .....	61.93	72.20	61.43	65.19	28	92	28	80.33	3	41	3	48.33	3.4
Janesville .....	60.67	74.03	60.87	65.19	28	88	28	81.33	2	40	2	44.00	4.8
					29		29						
Milwaukee, [Winkler] .....	57.30	66.90	54.93	59.71	28	90	29	81.00	1	37	2	42.67	4.6
Platteville .....	60.00	80.00	62.00	67.33		96				44			4.3
Superior .....	59.74	64.11	59.63	61.16	29	87	29	75.33	5	40	11	47.33	4.1
IOWA—													
Dubuque .....	63.41	75.66	65.07	68.05	28	e 91	28	83.33	4	45	3	53.00	4.5
							29						
Fairfield .....				69		93				45			
Fort Madison (f) .....	66.83	78.57	71.23	72.21	16	95	28	88.00	2	48	1	55.67	3.4
Muscatine .....	63.34	75.63	64.03	67.67	16	91	16	84.33	4	35	2	50.33	3.1
Pella .....	60.50	79.17	62.23	67.30	27	96	27	79.67	1	g 48	1	51.33	
Poultney .....	63.17	77.57	60.53	67.09	29	94	28	82.67	3	40	2	46.33	5.9
Quasqueton .....	61.55	78.24	63.24	67.68	16	92	16	88.36	2	44	2	50.26	4.5
MEXICO—													
Mirador (h) .....				70.36				73.24				66.87	
MINNESOTA—													
Lac qui Parle .....	62.17	74.84	63.07	66.69	26	d 92	26	83.00	1	41	1	46.00	
EASTERN CONTINENT—							28						
Mosul, Mesopotamia .....				89.72		106				74			
WESTERN AFRICA —													
Nèngenènge .....	76.30	81.20	79.60	79.03	i 8	85	10	82.00	2	72	26	76.33	

a Same temperature on the 28th and 29th.

b Same temperature on the 17th and 28th.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Same temperature on the 28th.

e Same temperature on the 29th.

f Observations taken at 6 a. m., noon, and 7 p. m.

g Same temperature on the 2d and 3d.

h Hours of observations not given.

i Same temperature on the 10th.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	□	■	°		■		°		□		°	
Red River Settlement.....	66.68	73.00	67.58	69.09	24	92 <sup>a</sup>	24	78.33	2	56 <sup>b</sup>	7	62.00	4.2
St. Martin.....	67.51	81.29	67.57	72.12	1	92	1	82.00	8	52	7	59.80	4.0
Toronto.....				67.95		92.8	19	79.45		49.2			5.9
MAINE—													
Carmel.....	65.33	83.92	61.73	70.33	1	96	2	80.00	21	46	8	59.00	5.5
Fryeburg.....													5.2
Gardiner.....	69.90	78.77	69.29	72.65	19	93	19	80.33	8	57	8	61.33	6.7
Oldtown (c).....	63.00	77.00	65.20	68.40	18	84	18	75.67	22	51	22	60.00	1.3
Perry.....	56.68	68.84	61.10	62.21	19	82	19	71.33	2	50 <sup>d</sup>	9	59.00	5.0
Steuben.....	64.35	71.74	62.48	66.19	19	84	19	76.00	9	53	7	64.67	6.4
NEW HAMPSHIRE—													
Concord.....	68.80	78.90	68.93	72.21	1	93	1	84.33	9	58	22	63.67	4.3
Exeter.....	64.35	75.58	65.68	68.54	17	90 <sup>e</sup>	17	79.67	22	56	22	60.33	5.0
Manchester.....	69.25	82.79	71.77	74.60	26	96	1	87.00	22	58	21	64.33	5.7
VERMONT—													
Brandon.....	67.01	77.10	68.00	70.70	1	89 <sup>e</sup>	1	82.34	8	53	8	59.83	5.2
Burlington.....	69.43	79.87	68.49	72.46	17	92	1	82.33	5	57	8	64.67	2.6
Craftsbury.....	62.74	73.39	64.54	66.89	16	82 <sup>f</sup>	17	74.00	5	52	8, 21	58.00	5.5
Montpelier (g).....	59.10	76.00	65.60	66.90	17	86							
St. Johnsbury.....	69.00	76.66	67.13	70.93	19	88	2	73.67	8	55	8	62.00	2.9
MASSACHUSETTS—													
Amherst.....	67.39	78.08	68.20	71.22	19	92	1	81.67	21	57	22	58.33	5.8
Boston (h).....	67.87	79.89	71.13	72.96	2	90 <sup>e</sup>	19	86.67	10	56	22	63.67	3.0
Mendon.....	70.16	77.68	69.71	72.52	19	92	1	87.00	10	55	21	63.00	6.3
Nantucket.....	69.40	75.18	66.47	70.35	18	86	18	78.33	10	58	21	61.33	5.6
New Bedford.....	69.08	75.07	67.74	70.63	1	89	19	80.17	5	59	21	62.67	5.9
Newburyport.....	68.12	78.55	67.21	70.96	19	95	17	82.90	5	59	21	62.20	6.8
North Attleboro'.....	69.19	79.97	66.74	71.97	19	93	19	84.33	9	56	21	60.00	5.4
Princeton.....	65.76	74.50	69.02	69.76	2	91	1	79.00	21	55	21	57.33	6.4
Richmond.....	64.29	80.94	70.45	71.89	17	94	17	84.00	21	52	21	58.67	5.9
Southwick.....													6.3
Springfield.....	70.00	79.45	72.68	74.04	19	93	1	84.33	5	56 <sup>i</sup>	21	61.67	5.1
Westfield.....	64.96	77.25	68.28	70.16	19	93	19	82.00	9	52	21	59.67	
Williamstown (j).....	65.86	76.49	67.81	70.05	18	86	25	74.00	9	54	21	60.00	6.7
Worcester.....	69.68	77.21	69.97	72.29	1	91.5	1	85.00	21	56	21	60.00	4.3
RHODE ISLAND—													
Providence (k).....	69.4	80.4	69.0	72.93	10	95	19	84.67	8	60	21	63.33	5.6
CONNECTICUT—													
New London.....	69.71	78.48	69.19	72.46	19	89	19	81.00	21	60	21	63.33	6.2
Pomfret.....	67.73	75.87	67.41	70.34	19	88	19	82.00	8	57 <sup>i</sup>	5	69.67	6.2
Saybrook.....	69.35	79.16	69.68	72.73	27	88 <sup>l</sup>	18	78.67	8	62 <sup>m</sup>	21	62.33	5.7
NEW YORK—													
Angelica.....	66.19	78.97	65.58	70.25	18	92	19	81.00	8	48	5	56.00	
Baldwinsville.....	65.45	73.97	68.52	69.31	1	87	19	79.33	5	54	7, 21	59.00	5.5
Beverly.....	69.90	77.13	71.20	72.74	19	88	1	80.67	8	60	21	61.67	5.9
Canton (e).....	68.04	79.04	70.26	72.45	1	91	1	80.33	8	57	7	62.00	5.1
Fishkill.....	71.64	81.96	79.96	77.85		94				59			
Flushing.....				76.45		96				60			
Gouverneur.....	70.52	79.97	67.26	72.58	1	90 <sup>n</sup>	1	83.33	21	50	21	60.00	6.8
Lodi.....	69.03	76.61	69.19	71.61	19	90	19	83.33	7	57	7	62.33	6.1
Lowville.....	60.58	78.35	65.37	68.10	1	90 <sup>o</sup>	1	75.75	8	44	7	54.25	5.6
New York city.....	73.17	79.32	72.94	75.14	19	93	19	87.40	21	59	21	60.40	6.5
Oswego.....	65.84	75.10	68.55	69.83	19	91	19	81.33	7	56	7	58.33	
Penn Yan (p).....	61.74	76.90	68.90	69.18	19	90 <sup>q</sup>	19	81.33	5	48	21	59.00	6.4

a Same temperature on the 25th.

b Same temperature on the 13th.

c Incomplete.

d Same temperature on the 9th, 16th, and 30th.

e Same temperature on the 19th.

f Same temperature on the 17th and 18th.

g Observations taken at sunrise, noon, and sunset.

h Observations taken at sunrise, 2 p. m., and 10 p. m.

i Same temperature on the 21st.

j Observations taken at 6½ a. m., 2 p. m., and 9 p. m.

k Observations taken at 6 a. m., 1 p. m., and 10 p. m.

l Same temperature on the 30th.

m Same temperature on the 9th and 21st.

n Same temperature on the 15th and 17th.

o Same temperature on the 17th.

p Observations taken at sunrise, 2 p. m., and sunset.

q Same temperature on the 16th and 18th.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°			
Sag Harbor.....	70.58	82.00	69.94	74.17	19	96	19	85.00	9	58	9	66.33	6.1
Smithville.....	65.58	77.68	66.29	69.85	1	94	17	79.33	7	52	7	59.67	4.8
Spencertown.....	67.90	76.42	69.19	71.17	1	92	1	84.67	21	56	21	59.33	4.7
Wampsville.....	67.81	81.29	67.74	72.28	1	92	19	81.00	9	54	8	61.00	6.2
NEW JERSEY—													
Bloomfield.....	71.60	82.47	71.56	75.21	19	96	19	86.50	9	59	21	63.66	5.9
Burlington.....	72.81	82.65	74.71	76.72	19	94	19	87.33	22	58	22	63.67	7.1
Lambertville.....	73.43	88.74	71.95	78.04	30	97.5	19	87.67	9	50.5	21	61.08	4.6
Newark (a).....				74.75	---	94.25	19	85.62	---	54.75	21	60.75	---
PENNSYLVANIA—													
Bedford.....	69.77	84.12	72.02	75.30	17	92	19	82.33	9	58	7	65.67	5.8
Easton.....	70.77	85.87	74.52	77.05	19	96	19	85.33	22	56	21	62.00	5.0
Gettysburg.....	70.89	82.45	82.26	78.53	19	94	19	84.33	22	58	22	61.33	5.2
Harrisburg.....	74.74	84.07	78.35	79.05	17	95 b	18	89.00	22	59	22	64.00	4.5
							19						
Lima.....	74.09	82.35	72.54	76.33	19	93	19	84.00	22	58	22	62.23	5.5
Morrisville.....	70.00	81.48	71.00	74.16	19	94	19	83.67	22	57	7	64.67	4.1
Moss Grove.....	68.50	79.31	65.71	71.17	17	90	18	81.33	7	54	21	60.67	5.7
Norristown.....	72.80	81.53	72.86	75.73	19	91	19	83.67	9	60	21	62.00	6.0
Paradise.....				80.00									
Philadelphia.....	76.60	83.70	78.90	79.73	19	95	19	88.00	12	60	22	64.17	6.0
Pittsburg, [Oakland Station]	69.97	79.39	70.74	73.37	19	91	17	80.00	7	60	7	66.00	---
							19						
Pittsburg, [Marine Hosp.] (c)	69.26	78.58	75.65	74.11	19	90	19	82.00	8	55	8	65.75	---
Pocopson.....	74.45	85.52	74.47	78.15	19	98	19	86.00	22	61	22	64.33	5.8
Pottsville.....	73.23	84.15	69.15	75.51	17	98	17	88.00	8	52	21	60.90	5.9
West Haverford.....	70.06	85.09		77.57	30	95	20	85.50	22	56	22	60.00	5.1
MARYLAND—													
Bladensburg (d).....	68.33	86.23	72.70	75.75	19	102	19	86.17	8	62	8	67.00	4.0
Chestertown.....	75.91	83.82	73.90	77.88	20	93	18	87.33	8	61	22	64.67	5.6
Frederick.....	75.50	84.86	75.02	78.46	18	93.5	18	87.33	22	59	22	63.00	4.7
Sykesville.....	73.45	81.94	72.74	76.04	20	91	20	85.67	22	59	21	64.67	4.4
DISTRICT OF COLUMBIA—													
Washington.....	74.47	85.47	76.98	78.97	19	95	19	86.33	7	65 f	7	67.67	4.4
VIRGINIA—													
Alexandria.....	73.98	83.92	75.55	77.82	19	95	19	86.33	7	62	7	64.33	4.6
Ashland.....	71.42	84.32	72.81	76.18	17	93	19	83.67	8	58	8	65.33	4.1
Crichton's Store (g).....	78.67	90.15	84.85	84.56	20	99	18	90.33	7	68	7	71.33	4.4
Lewisburg.....	70.35	82.71	70.81	74.62	27	91	19	79.00	8	60	8	65.33	6.8
Smithfield.....				79.55	20	96	19	84.25	7	65	8	69.25	---
NORTH CAROLINA—													
Chapel Hill.....	74.77	89.84	76.00	80.20	20	99	19	86.67	7	67	7	71.33	5.3
SOUTH CAROLINA—													
All Saints.....	78.68	82.84	79.19	80.24	27	89	27	83.33	8	73	8	76.00	3.4
Camden.....	77.84	88.10	78.71	81.55	28	94	20	85.33	6	71	5	75.00	5.6
							29						
Charleston.....	77.38	87.58	80.35	81.77	---	92	30	---	---	73	5	---	---
GEORGIA—													
Savannah.....	77.30	89.50	79.40	82.07	28	94	13	84.33	12	73	5	76.00	3.8
Sparta.....	71.45	88.58	75.71	78.58	1	96 h	22	83.00	8	68	3	70.67	6.0
The Rock (i).....				76.20				80.00				72.00	---
Whitemarsh Island.....	80.16	86.32	79.32	81.93	11	90 j	22	84.33	4	74	5	77.33	3.3
FLORIDA—													
Cedar Keys.....	76.71	83.90	79.00	80.54	16	91	13	83.33	5	76	4	76.33	4.8
							14						
							16						
Jacksonville.....	80.19	85.10	78.68	81.32	13	91	12	84.67	5	74	5	75.67	3.7

a Observations taken at 7 a. m. and 6 p. m.

b Same temperature on the 19th.

c Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 72.94.

d Incomplete.

e Same temperature on the 20th.

f Same temperature on the 9th.

g Observations taken at 7 a. m., noon, and 9 p. m.

h Same temperature on the 14th.

i Observations taken morning, 3 p. m., and evening.

j Same temperature on the 28th.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp	
FLORIDA—Continued.	°	°	°	°		°		°		°		°	
Key West	78.71	84.06	81.38	81.38	3	a 88	13	84.50	21	72	21	73.50	5.8
Knox Hill	76.07	83.54	75.37	78.33	8	b 88	16	81.33	11	c 71	2	73.00	6.5
Warrington (d)	77.45	82.74	82.00	80.73	10	88	17	83.67	7	72	24	77.00	4.5
ALABAMA—													
Greene Springs (e)	78.90	91.89	80.46	83.75	22	98	11	86.00	4	74	6	78.33	3.4
MISSISSIPPI—													
Columbus				80.82	?	92			?	73			
Oxford	74.84	86.06	76.81	79.24	12	f 91	17	84.00	2	66	6	71.00	3.1
LOUISIANA—													
New Orleans	75.97	82.97	78.31	79.08	12	90	12	83.67	1	g 74	27	76.00	4.3
TEXAS—													
Austin	72.74	88.77	78.83	80.11	23	94	31	83.00	4	h 68	16	74.00	4.8
New Wied	78.45	94.52	77.94	83.64	5	i 99	7	87.67	1	j 72	16	77.33	5.9
TENNESSEE—													
Friendship	71.48	89.16	73.87	78.17	17	94	17	82.67	2	63	5	71.00	3.5
Glenwood	71.96	83.44	75.06	76.82	17	k 90	17	82.33	7	g 64	6	68.03	3.7
KENTUCKY—													
Danville	76.52	85.03	75.03	78.86	18	94	17	85.00	6	68	6	69.33	3.0
Springdale	67.18	87.76	76.94	77.29	17	97	17	83.33	5	55	6	68.00	4.4
OHIO—													
Arcola	70.68	76.61	69.22	72.17	19	90	19	82.00	7	56	21	62.00	5.5
Cincinnati (d)	71.52	86.52	76.74	78.26	19	95	19	85.67	8	64	6	69.00	3.7
Cleveland	70.90	78.03	70.29	73.07	17	91	19	84.67	5	59	21	64.67	5.7
Gallipolis	74.68	83.71	76.65	78.35	20	94	18	84.33	8	64	8	70.33	
Germantown	71.94	82.22	71.44	75.20	19	93.4	19	84.58	4	61	9	67.32	5.3
Granville	70.43	80.71	70.36	73.83	17	m 91	18	87.67	7	56	9	66.67	5.7
Hillsborough	69.58	80.98	71.13	73.90	18	m 90	18	81.00	8	59	6	65.00	3.1
Jackson, [Crookham]	75.13	83.97	71.03	76.71	14	n 94	20	82.00	5	60	8	64.33	6.1
Jackson, [Gilmor]	75.16	86.81	73.58	78.52	18	o 96	18	86.00	7	62	6, 9	70.00	4.9
Oberlin	71.90	82.20	68.80	74.30	17	94	19	82.67	8	58	21	63.67	3.9
Perrysburg (p)	76.10	81.19	73.03	76.77	16	q 94	17	87.33	20	60	21	65.33	
Richmond													5.1
Savannah	72.26	83.42	69.39	75.02	14	95	16	85.67	8	57	21	64.33	5.4
Urbana	71.33	83.13	70.87	75.11	18	m 95	19	84.67	5	c 62	6	66.33	5.5
Zanesville	69.19	84.35	71.42	74.99	17	m 95	19	82.67	7	g 58	9	65.33	5.7
MICHIGAN—													
Ann Arbor, [Woodruff]	64.66	78.78	69.13	70.86	16	91	16	82.00	7	57	7	64.00	5.3
Ann Arbor, [Winchell]	68.25	77.03	66.44	70.57	16	90.5	16	81.40	2	57	20	61.60	5.1
Battle Creek	70.84	81.45	68.55	73.61	16	96	16	87.33	21	56	21	63.67	3.9
Cooper	70.87	76.06	67.97	71.63	16	90	19	80.00	4	56	20	61.33	4.0
Detroit	70.65	79.32	69.26	73.08	16	91	16	84.33	7	r 60	20	62.67	5.0
Flint	68.80	81.10	67.30	72.40		92				55			
Grand Rapids	66.16	78.13	68.10	70.80	16	93	16	84.67	20	51	20	58.67	4.4
Monroe													6.2
St. James	67.88	72.80	62.37	67.68	16	89	16	78.67	6	50	3	56.00	4.6
Saugatuck	71.00	81.13	69.64	73.92	16	k 93	16	87.00	4	59	2, 4	65.00	4.6
INDIANA—													
Milton	71.77	82.76	72.71	75.75	18	94	18	85.33	7	63	21	68.50	3.8
New Harmony	77.06	85.42	76.42	79.63	19	95	19	87.67	2	s 69	6	71.67	5.0
ILLINOIS—													
Athens	75.41	86.09	75.41	78.97	19	101	18	89.33	21	65	21	70.00	4.6
Angusta	69.90	83.58	73.38	75.62	19	95	16	83.67	4	62	21	67.67	3.9

a Same temperature on the 13th.

b Same temperature on the 10th, 12th, and 19th.

c Same temperature on the 7th.

d Observations taken at sunrise, noon, and sunset.

e Observations omitted from the 14th to the 37th of the month.

f Same temperature on the 13th, 14th, and 31st.

g Same temperature on the 8th.

h Same temperature on the 10th.

i Same temperature on the 6th, 7th, 11th, and 21st.

Same temperature on the 2d.

k Same temperature on the 18th.

l Observations taken at 6 a. m., 1 p. m., and 9 p. m.

m Same temperature on the 19th.

n Same temperature on the 15th and 17th.

o Same temperature on the 23d.

p Observations taken at 7 a. m., 1 p. m., and 9 p. m.

q Same temperature on the 17th.

r Same temperature on the 20th and 21st.

s Same temperature on the 4th.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—Continued.	°	°	°	°		°		°		°		°	
Manchester (a).....	71.75	85.40	72.35	76.50	18	96	16	83.67	1	62	21	68.67	4.6
Ottawa (b).....	71.38	82.41	70.38	74.72	18	c 95	18	86.33	20	58	20	62.67	4.5
Upper Alton.....	72.22	84.36	70.55	75.71	19	93	18	83.00	2	60	1	70.00	3.0
MISSOURI—													
St. Louis.....	74.76	87.00	77.10	79.65	16	c 96	16	86.67	2	69	1	74.00	4.3
WISCONSIN—													
Beloit.....	66.58	81.93	68.31	72.27	18	98	18	87.00	2	54	20	60.90	2.9
Janesville.....	67.35	82.35	67.97	72.56	16	92	18	83.33	20	56	20	59.33	4.7
									21				
Milwaukee, [Winkler].....	65.19	75.68	62.19	67.69	18	94	18	84.00	4	53	20	55.33	4.6
Platteville.....	69.80	84.97	72.93	75.90	18	c 96	18	88.67	2	56	1	63.67	4.4
Superior.....	65.19	72.52	64.68	67.46	23	d 88	27	80.00	6	50	6	53.00	3.0
IOWA—													
Dubuque.....	66.73	81.27	71.69	73.23	17	95	17	86.33	20	e 58	20	60.00	4.5
Fairfield.....				75		99				59			
Fort Madison (f).....	75.10	87.03	75.65	79.26	19	102	18	91.33	20	62	20	64.00	4.0
Muscatine.....	68.42	81.87	68.87	73.05	15	g 95	17	84.67	2	55	20	62.33	3.3
Pella.....	67.06	84.74	69.22	73.67	17	h 98	17	89.00	1	59	20	63.33	---
Poultney.....	68.58	83.69	65.61	72.63	12	100	16	85.67	4	53	1	58.33	5.1
Quasqueton.....	67.18	83.91	68.91	73.33	17	96	16	85.00	1	56	20	62.00	4.7
MINNESOTA—													
Lac qui Parle.....	65.56	76.50	68.54	70.20	17	91	16	81.33	1	58	1	61.33	3.2
MEXICO—													
Mirador (i).....				69.39				72.50				67.23	---
EASTERN CONTINENT—													
Mosul, Mesopotamia.....				94.32		110				75			---
WESTERN AFRICA—													
Nèngènèngè.....	73.35	78.77	77.06	76.39	8	84	8	78.67	4	70	17	73.33	---

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Observations not always taken at the usual hours.

c Same temperature on the 19th.

d Same temperature on the 24th.

e Same temperature on the 21st.

f Observations taken at 6 a. m., noon, and 7 p. m.

g Same temperature on the 17th, 18th, and 19th.

h Same temperature on the 18th.

i Hours of observations not given.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	■	°		■		°		°		°	
Montreal (a) .....	66.00	74.25	67.00	69.08		80				57			
Red River Settlement .....	58.90	69.26	61.65	63.27	5	86	5	76.33	28	b 44	15	51.33	4.7
St. Martin .....	57.84	76.38	60.80	65.01	2	93	3	79.00	28	36	30	48.00	3.1
Toronto .....				64.06		83.5				40			4.4
MAINE—													
Carmel (c) .....	56.20	75.33	55.00	62.18	2	89	3	73.00	31	40	31	49.00	2.4
Fryeburg .....													3.1
Gardiner .....	61.45	73.31	62.14	65.63	4	86	4	75.00	8	50	31	56.33	4.2
Oldtown .....	57.50	71.92	58.19	62.54	6	d 78	24	70.33	31	45	31	53.67	1.6
Perry .....	52.84	64.39	57.80	58.34	1	e 74	24	66.67	28	38	28	47.67	4.1
Steuben .....	60.77	69.03	59.48	63.09	1	79	24	70.00	31	45	31	52.67	4.9
NEW HAMPSHIRE—													
Concord .....	62.63	71.66	64.43	66.24	4	85	4	75.00	31	46	31	54.67	2.5
Exeter .....	56.77	71.68	60.22	62.89	4	82	4, 23	70.33	29	41	28	51.33	3.3
Londonderry .....	63.48	75.68	64.68	67.95	22	85	16	74.67	28	44	31	51.67	3.1
							22						
Manchester (c) .....	58.54	76.80	66.04	67.13	16	87	17	76.33	31	34	31	52.33	4.4
Stratford .....	50.53	70.87	60.06	60.49		86	16	72.33		33	30	47.33	
VERMONT—													
Brandon .....	60.71	72.52	62.81	65.35	2	84	3	75.00	31	44	27	52.00	3.4
Burlington .....	61.58	74.94	63.84	66.79	1	90	1	77.00	31	46	27	53.33	2.3
Craftsbury .....	55.52	65.85	59.16	60.18	2	82	2, 3	72.00	28	40	30	49.00	3.9
											31		
Montpelier (f) .....	51.70	70.50	61.90	61.37									
MASSACHUSETTS—													
Amherst .....	61.16	72.91	63.19	65.75	4	84	17	74.07	31	45	31	53.57	4.2
Mendon .....	62.03	75.00	63.84	66.96	24	84	16	75.67	30	46	30	55.33	4.1
							17						
Nantucket .....	67.70	73.21	65.01	68.64	24	80.5	16	75.50	31	56	31	60.67	3.1
New Bedford .....	63.52	72.13	63.36	66.34	17	82.8	17	75.80	31	49	31	55.17	5.7
Newburyport .....	61.36	74.40	63.52	66.43	4	86	23	76.70	31	49	28	56.40	6.0
North Attleboro' .....	61.29	72.44	59.22	64.32	4	83	4	71.57	31	44	31	51.40	3.5
Princeton .....	59.84	70.27	60.53	63.55	4	79	16	72.50	31	45	31	54.17	4.8
Richmond .....	58.29	77.00	65.84	67.04	3	88	3	77.00	30	38	30	48.33	4.9
Southwick .....													4.1
Springfield .....	62.90	76.58	67.19	68.89	4	85	1	77.33	31	49	27	57.00	3.4
Williamstown (g) .....	58.99	72.47	62.09	64.52	4	82	16	76.23	31	40	31	51.83	4.4
Worcester .....	61.19	73.68	63.65	66.17	4	83	16	75.00	31	50	28	54.00	2.7
Westfield .....	57.18	74.29	63.50	64.99	9	84	16	73.67	31	45	31	54.00	
RHODE ISLAND—													
Providence (h) .....	63.1	76.9	63.7	67.90	17	91	17	77.33	28	48	28	55.33	3.6
CONNECTICUT—													
New London .....	64.84	76.29	65.84	68.99	15	85	16	77.33	29	i 52	31	58.00	4.4
Pomfret .....	61.93	71.48	61.74	65.05	16	79	17	73.67	31	49	31	53.33	4.4
Saybrook (j) .....	64.47	74.53	65.64	68.21	22	83	24	75.00	29	54	27	61.00	3.6
NEW YORK—													
Angelica (c) .....	60.68	73.80	60.76	65.08	16	84	16	73.33	20	43	30	55.33	3.0
Baldwinsville .....	60.74	71.39	64.92	65.68	1	k 80	3	73.67	31	46	30	54.33	4.0
Beverly .....	65.16	73.41	66.32	68.30	1	780	1, 16	75.67	31	51	31	58.00	4.4
Canton .....	61.74	76.19	63.77	67.23	2	93	■	80.67	30	46	30	52.00	4.3
Fishkill .....	65.70	79.23	76.00	73.64		88				54			
Flushing .....				70.44	4	86			19	51			
Gouverneur .....	62.42	77.35	64.39	68.05	3	90	3	81.33	19	m 46	19	58.00	3.8
Lodi .....	62.58	73.22	63.06	66.29	3	81	3	74.33	30	45	30	52.67	5.0
Madrid .....	66.85	72.77	62.92	67.51	2	85	3	78.00	27	44	27	50.83	4.6
New York city .....	69.54	75.54	68.82	71.30	9	84	16	78.60	31	57	28	61.56	4.7

a For eight days only.

b Same temperature on the 29th.

c Incomplete.

d Same temperature on the 22d and 24th.

e Same temperature on the 24th.

f Observations taken at sunrise, noon, and sunset.

g Observations taken at 6½ a. m., 2 p. m., and 9 p. m.

h Observations taken at 6 a. m., 1 p. m., and 10 p. m. Incomplete.

i Same temperature on the 31st.

j For the last fourteen days of the month only.

k Same temperature on the 2d and 3d.

l Same temperature on the 4th.

m Same temperature on the 28th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
New York—Continued.	°	°	°	°		°		°		°			
Oswego .....	62.39	74.64	65.45	67.49	21	84	16	75.67	31	48	30	58.67	---
Penn Yan (a) .....	56.35	73.77	66.33	65.48	3	84	3	73.67	31	44	30	56.00	5.7
Sag Harbor .....	65.64	80.29	65.40	70.44	24	89	9	77.67	28	b 53	31	60.00	4.1
Smithville .....	60.13	75.45	62.84	66.14	2	c 86	2	76.33	31	42	27	54.67	3.8
Spencertown .....	62.32	72.01	63.06	65.80	4	d 82	5	74.33	31	42	31	48.67	3.6
Wampsville .....	62.10	78.00	62.90	67.67	2	86	2	76.67	31	44	30	55.33	4.5
NEW JERSEY—													
Bloomfield .....	65.16	77.53	65.76	69.48	1	86	9	78.33	31	51	31	57.00	3.7
Burlington .....	67.32	77.80	69.68	71.60	4	85	16	80.67	19	e 55	18	62.67	6.8
Lambertville .....	69.94	82.10	65.71	72.58	26	90	9	79.17	19	43.5	19	60.33	5.5
Newark (f) .....				69.44		84.5	17	77.38		49	19	61.00	---
PENNSYLVANIA—													
Bedford .....	66.26	80.23	69.11	71.87	4	89	3	78.00	21	52	18	61.67	4.8
Easton .....	64.74	80.48	65.39	70.20	4	90	4	81.67	20	50	8	61.00	4.9
Gettysburg .....	65.48	77.35	68.84	70.56	1	88	26	77.67	20	53	19	60.33	5.3
Harrisburg .....	70.35	79.27	75.54	75.05	1	g 88	26	81.33	19	58	31	66.67	5.2
Lima .....	67.40	77.10	67.02	70.51	16	84	16	77.20	19	54	19	60.70	5.5
Meadville (h) .....	61.17	75.29	66.20	67.55	7	i 82	8	74.33	19	47	18	57.67	4.4
Morrisville .....	65.00	77.74	66.35	69.70	16	86	16	76.67	31	54	19	62.00	3.7
Moss Grove .....	64.87	77.62	62.66	68.38	2	88	3	76.67	18	50	10	62.67	4.8
Norristown .....	63.48	76.05	68.28	70.27	4	j 83	16	77.60	20	53	20	61.67	4.9
Paradise .....				76.00									
Philadelphia .....	72.20	78.80	74.10	75.03	17	84	16	80.80	31	61	19	67.67	5.8
Pittsburg, [M. H.] (k) .....	65.84	76.58	72.81	71.28	16	84	4	77.75	19	53	18	60.50	---
Pittsburg, [O. S.] .....	65.84	76.74	67.81	70.13	2	84	4	76.67	19	51	18	58.67	---
Pocopson .....	69.40	80.80	69.27	73.16	4	90	16	79.83	19	57	18	63.67	5.7
Pottsville .....	66.06	78.79	64.80	69.88	4	91	13	77.17	31	53	19	60.17	5.3
West Haverford .....	65.03	78.96		71.99	24	88	16	80.00	19	52	18	64.50	5.3
MARYLAND—													
Bladensburg (h) .....	68.45	83.42	68.24	73.37	13	92.5	16	81.33	19	l 55	19	60.67	5.0
Chestertown .....	69.90	78.77	69.26	72.64	26	83	16	79.67	19	58	19	62.67	4.7
Frederick .....	68.39	79.72	69.88	72.66	1	89	16	79.27	20	55	19	62.17	5.9
Sykesville .....	68.16	77.93	68.74	71.61	26	88	16	80.00	20	55	28	62.67	4.5
DISTRICT OF COLUMBIA—													
Washington .....	70.56	81.22	72.98	74.92	26	92	26	82.00	19	58	19	65.67	5.5
VIRGINIA—													
Alexandria .....	70.10	80.16	71.13	73.80	13	87	16	80.00	19	m 58	19	63.00	5.6
Ashland .....	68.35	80.93	70.19	73.16	4	90	4	80.33	19	54	18	59.33	4.1
Crichton's Store (n) .....	73.28	84.37	80.78	79.48	13	o 94	9	86.33	19	l 61	28	69.33	5.6
Lewisburg .....	69.13	80.20	69.48	72.94	12	86	23	78.00	20	52	19	60.67	4.5
Smithfield .....				76.92	17	92	16	83.00	18	60	18	65.00	---
NORTH CAROLINA—													
Chapel Hill .....	71.77	84.10	74.16	76.68	17	98	13	83.67	20	61	18	62.67	5.6
SOUTH CAROLINA—													
All Saints .....	77.61	83.53	79.06	80.07	9	92	11	85.33	20	68	19	67.67	4.7
Camden .....	75.81	86.81	76.90	79.84	16	94	14	85.33	19	64	18	66.67	6.2
Charleston .....	77.35	88.38	80.54	82.09	---	95	16	---	---	68	20	---	---

a Observations taken at sunrise, 2 p. m., and sunset.

b Same temperature on the 31st.

c Same temperature on the 3d.

d Same temperature on the 16th.

e Same temperature on the 29th, 29th, and 31st.

f Observations taken at 7 a. m., and 6 p. m.

g Same temperature on the 4th.

h Incomplete.

i Same temperature on the 8th.

j Same temperature on the 23d.

k Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.; mean at 9 a. m., 69.90.

l Same temperature on the 20th.

m Same temperature on the 20th and 21st.

n Observations taken at 7 a. m., noon, and 6 p. m.

o Same temperature on the 17th.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—	°	°	°	■		°		°		°		°	
Savannah .....	77. 10	88. 70	79. 50	81. 77	11	97	11	87. 17	20	68	20	70. 43	5. 1
Sparta .....	71. 35	87. 53	74. 77	77. 88	14	95	16	83. 33	19	a 64	20	67. 33	5. 0
The Rock (b) .....				75. 30				81. 00				66. 0	
Whitemarsh Island .....	79. 55	85. 84	79. 39	81. 59	11	92	11	86. 00	20	68	20	70. 6	4. 3
FLORIDA—													
Cedar Keys .....	79. 97	84. 84	81. 39	82. 07	12	91	0	85. 00	20	74	20	74. 23	4. 1
Jacksonville .....	79. 77	86. 67	80. 00	82. 15	10	c 92	10	85. 67	1	d 74	20	74. 67	3. 3
Key West .....	79. 29	85. 58		82. 43	26	e 88	8, 26	84. 50	18	75	29	76. 50	5. 4
Knox Hill (f) .....	77. 60	84. 60	76. 27	79. 49	15	94	15	86. 00	4	g 72	19	72. 33	6. 6
Warrington (h) .....	77. 84	83. 13	82. 61	81. 19	16	i 88	27	85. 00	22	71	5	76. 33	3. 7
ALABAMA—													
Auburn .....	75. 03	84. 16	76. 58	78. 59	16	95	13	85. 67	19	a 66	21	66. 67	5. 4
							16						
Greene Springs .....	78. 25	88. 17	80. 08	82. 17	15	98	15	88. 67	18	70	0	73. 67	5. 0
MISSISSIPPI—													
Columbus .....				80. 09	?	93	1, 2		?	67			
Oxford (j) .....	76. 55	86. 73	77. 36	80. 21	13	94	14	83. 67	7	71	7	73. 00	3. 9
Port Gibson (k) .....	77. 67	86. 67	78. 75	81. 03	24	92	29	83. 67	26	70	26	72. 67	4. 5
LOUISIANA—													
New Orleans .....	76. 39	85. 48	79. 72	80. 53	13	91	13	84. 17	26	71	4	76. 00	4. 9
TEXAS—													
Austin .....	73. 81	88. 19	80. 39	80. 80	5	196	5	87. 33	18	70	25	73. 33	5. 6
New Wied .....	79. 03	94. 33	78. 00	83. 79	7	102m	7	88. 67	24	72	24	75. 67	5. 4
TENNESSEE—													
Glenwood (f) .....	72. 58	81. 67	74. 82	76. 36	4	n 88	13	82. 00	29	65	27	71. 80	6. 4
KENTUCKY—													
Springdale .....	64. 68	85. 32	76. 11	75. 37	12	94	12	81. 00	19	45	18	61. 33	3. 4
OHIO—													
Cleveland .....	65. 39	76. 05	66. 74	69. 39	8	o 84	2	73. 67	19	50	18	58. 67	4. 6
Gallipolis .....	72. 39	81. 71	77. 84	75. 31	4	90	4	82. 00	18	60	18	63. 67	
Germanstown .....	67. 14	78. 82	68. 24	71. 40	4	89	4	79. 18	18	p 52	18	57. 13	5. 1
Granville .....	65. 38	78. 18	66. 66	70. 07	8	88	8	78. 00	19	45	28	64. 00	4. 5
Hillsborough .....	65. 71	77. 34	67. 77	70. 27	4	88	4	79. 00	18	50	17	63. 00	3. 8
Jackson, [Crookham] .....	68. 84	81. 94	66. 48	72. 42	8	90	16	78. 33	18	50	18	57. 00	5. 4
Jackson, [Gilmor] .....	70. 73	84. 10	73. 73	76. 19	3	95	3, 31	83. 33	18	50	18	58. 33	4. 9
Oberlin .....	67. 00	78. 90	65. 40	70. 43	25	91	12	80. 33	18	49	18	56. 67	2. 9
Perrysburg (q) .....	69. 51	79. 90	70. 20	73. 20	4	92	4	83. 00	17	r 56	18	60. 67	
Richmond .....													2. 8
Savannah .....	67. 45	81. 19	68. 19	72. 28	3	92	4	81. 00	19	47	18	57. 00	4. 2
Urbana .....	68. 81	82. 56	68. 61	73. 33	22	95	22	82. 00	17	r 51	18	57. 67	5. 0
Zanesville .....	64. 87	81. 10	69. 42	71. 80	2	92	2	79. 00	19	52	19	60. 67	5. 0
MICHIGAN—													
Ann Arbor, [Woodruff] .....	61. 71	76. 26	65. 48	67. 82	3	87	3	78. 00	19	48	18	54. 67	4. 4
Ann Arbor, [Winchell] .....	63. 57	75. 21	62. 63	67. 14	3	84	3	78. 30	18	46	18	52. 67	3. 7
Battle Creek .....	65. 48	79. 22	66. 71	70. 47	3	92	3	82. 67	27	52	18	59. 00	3. 2
Cooper .....	65. 42	74. 10	65. 22	68. 25	2	86	3	81. 67	16	50	17	54. 67	3. 2
Detroit .....	66. 70	76. 00	66. 60	69. 77	3	88	3	80. 60	18	51	18	57. 00	2. 1
Flint .....	63. 80	78. 90	61. 90	68. 20	3	90	1		18	45			
Grand Rapids .....	61. 52	75. 52	65. 87	67. 64	2	90	2	77. 00	18	46	17	53. 67	3. 7
											18		
Monroe .....													5. 7
St. James .....	63. 00	70. 82	62. 53	65. 45	3	84	3	76. 00	16	s 52	27	51. 67	4. 9
Saugatuck .....	67. 67	79. 96	67. 13	71. 59	3	91	3	83. 33	18	53	18	60. 33	3. 8

*a* Same temperature on the 21st.*b* Observations taken morning, 3 p. m., and evening. Incomplete.*c* Same temperature on the 11th.*d* Same temperature on the 20th.*e* Same temperature on the 25th.*f* Incomplete.*g* Same temperature on the 5th, 6th, 19th, and 20th.*h* Observations taken at sunrise, noon, and sunset.*i* Same temperature on the 28th and 29th.*j* For the first 14 days of the month only.*k* For the last 11 days of the month only.*l* Same temperature on the 6th, 14th, and 15th.*m* Same temperature on the 17th.*n* Same temperature on the 12th and 13th.*o* Same temperature on the 29th.*p* Same temperature on the 19th.*q* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*r* Same temperature on the 18th.*s* Same temperature on the 17th and 19th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—	°	°	°	°		°		°		°			
Milton .....	67. 13	80. 80	68. 63	72. 19	3	91	3	83. 00	18	50	18	56. 83	3. 1
New Harmony .....	71. 52	82. 68	73. 18	75. 79	4	91	4	83. 00	17	59	18	64. 33	4. 9
ILLINOIS—													
Athens .....	71. 71	82. 93	72. 06	75. 57	3	98	3	87. 33	17	56	17	62. 00	4. 3
Augusta .....	65. 26	78. 06	69. 03	70. 78	3	92	3	85. 33	17	50	17	58. 33	3. 7
Manchester (a) .....	66. 13	75. 35	68. 63	70. 05	3	b 92	3	82. 67	17	51	17	59. 00	4. 3
Ottawa (c) .....	66. 03	79. 35	66. 83	70. 74	3	93	3	84. 00	17	d 55	26	62. 67	3. 9
Upper Alton .....	67. 29	78. 59	68. 26	71. 33	3	91	3	82. 00	19	52	17	61. 33	2. 9
MISSOURI—													
St. Lou's .....	70. 02	80. 72	72. 34	74. 36	3	93	3	85. 00	17	e 57	17	64. 00	4. 8
WISCONSIN—													
Beloit .....	61. 90	78. 03	66. 45	68. 79	3	89	3	81. 33	18	f 44	18	56. 67	2. 4
Janesville .....	63. 32	78. 16	65. 06	68. 85	3	92	3	80. 67	18	50	26	57. 33	4. 9
									28				
Milwaukee, [Winkler] .....	63. 13	73. 35	59. 74	65. 41	3	90	3	79. 33	27	47	26	53. 00	3. 4
Platteville .....	65. 90	81. 13	70. 16	72. 40	3	93	3	83. 67	18	48	17	60. 00	4. 4
Superior .....	60. 32	69. 06	60. 13	63. 17	0	87	6	75. 67	25	g 50	15	53. 00	4. 4
IOWA—													
Dubuque .....	63. 72	77. 15	67. 10	69. 32	3	93	3	86. 33	18	43	17	56. 00	4. 1
Fairfield .....				62. 00		98				49			
Fort Madison (h) .....	68. 71	80. 58	71. 19	73. 49	3	98	3	90. 33	27	51	27	60. 33	3. 7
Muscatine .....	66. 97	78. 90	65. 48	70. 45	3	96	3	83. 00	22	52	17	58. 33	4. 4
Pella .....	61. 58	80. 13	65. 35	69. 02	3	98	3	83. 33	17	46	17	54. 33	---
Poultney (i) .....	61. 80	82. 70	61. 18	68. 56	3	j 96	15	77. 67	17	43	17	52. 00	4. 1
MINNESOTA—													
Lac qui Parle .....	53. 84	70. 00	61. 48	63. 44	14	k 81	19	71. 67	16	l 46	16	50. 33	4. 6
MEXICO—													
Mirador (m) .....				69. 30				73. 24				66. 49	---
EASTERN CONTINENT—													
Mosul, Mesopotamia .....				93. 87		109				78			---
WESTERN AFRICA—													
Nèngenènge .....	72. 97	77. 10	76. 52	75. 53	22	82	22	77. 67	5	71	5	73. 67	---

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 4th.

c Hours of observation not perfectly uniform.

d Same temperature on the 18th, 23d, and 26th.

e Same temperature on the 18th.

f Same temperature on the 22d.

g Same temperature on the 26th.

A Observations taken at 6 a. m., noon, and 7 p. m.

t Incomplete.

j Same temperature on the 15th.

k Same temperature on the 19th.

l Same temperature on the 17th.

m Hours of observation not given.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Horton	51.34	61.84	53.00	55.39	12	79	12	70.37	23	37.5	19	45.03	3.2
Montreal	56.52	66.58	60.72	61.27	12	83	9	74.50	19	43	29	49.00	5.0
Red River Settlement	53.77	68.10	56.67	59.51	4	82 <sup>a</sup>	5	73.67	25	40 <sup>b</sup>	30	48.00	4.5
St. Martin	51.43	68.78	55.33	58.51	9	80	12	77.80	29	32	19	42.00	4.1
Toronto				59.49		82.6				33			4.5
MAINE—													
Carmel	49.79	67.70	50.14	55.88	12	89	9	76.67	20	32 <sup>c</sup>	19	42.67	4.4
Fryeburg													3.6
Gardiner	56.17	67.22	56.63	60.01	12	89	12	75.00	20	40	20	48.17	4.9
Perry	47.93	60.57	51.87	53.46	9	76	9	66.00	19	34	19	40.67	4.1
Steuben	53.90	62.17	52.70	56.26	9	84	12	68.33	30	37	23	44.33	4.6
NEW HAMPSHIRE—													
Concord	53.47	69.50	58.97	60.65	11	85	9	74.33	20	34	20	44.33	2.8
Exeter	49.87	68.33	55.00	57.73	11	87	12	74.33	20	32	19	44.33	3.4
Londonderry	53.73	69.87	58.83	60.81	12	90	12	80.33	20	32	19	46.67	3.0
Manchester	51.89	69.64	58.82	60.12	12	88	12	76.67	20	28	19	45.33	4.5
Stratford	47.40	65.07	57.13	56.53		80	12	71.67		30	19	41.67	
VERMONT—													
Brandon	53.84	66.41	55.60	58.62	12	84	12	75.67	20	30	19	42.17	4.4
Burlington	54.90	68.70	58.26	60.62	12	85	12	77.67	20	34	19	43.33	2.6
Craftsbury	49.63	63.47	55.60	56.23	12	79	12	72.00	20	32	19	37.00	4.8
Montpelier (d)	48.30	64.70	57.90	56.97									
MASSACHUSETTS—													
Amherst	53.47	69.17	57.93	60.19	12	85	12	74.90	20	33	20	45.90	4.1
Boston (e)	55.33	71.93	65.07	64.11	90	90	9	78.67	20	38	29	50.00	1.8
Mendon	56.17	69.17	59.10	61.48	12	89	12	78.67	20	39	20	43.33	3.8
Nantucket	62.52	69.04	60.82	64.13	9	79	9	75.83	29	50.5	19	54.10	3.0
New Bedford	56.70	68.93	57.93	61.19	11	86	11	76.33	20	39	19	48.67	5.2
										20			
Newburyport (f)	55.47	69.06	58.77	61.10	12	92	12	79.17	20	40	19	47.97	5.9
North Attleboro'	52.92	67.84	52.21	57.66	12	87	12	74.83	20	36	19	45.33	3.4
Princeton	54.38	65.65	56.08	58.70	12	81	12	73.80	19	39	19	42.80	4.8
Richmond	54.63	72.07	61.00	62.57	12	89	12	78.33	20	28	20	41.00	3.4
Southwick													3.7
Springfield	56.30	72.33	62.00	63.54	12	91	12	79.00	20	39	19	48.67	3.5
Westfield	52.93	69.60	59.30	60.61	12	88	11	73.33	20	32	20	45.33	
Williamstown	53.35	66.65	57.27	59.09	8	79	9	71.33	20	33	19	44.40	5.2
Worcester	55.97	67.07	56.77	59.94	12	86	12	76.67	20	34	19	42.00	3.9
RHODE ISLAND—													
Providence (g)	56.3	72.4	57.1	61.93	12	90	9, 12	77.00	20	38	19	47.7	3.9
CONNECTICUT—													
New London	57.97	73.00	61.73	64.23	8	84	9	74.67	29	44	29	33.33	3.0
Pomfret	55.73	67.33	57.00	60.02	12	85	9	74.67	19	41	19	47.67	3.9
Saybrook	59.70	70.00	59.27	62.99	9	80 <sup>h</sup>	9	74.33	20	42	20	52.33	3.8
NEW YORK—													
Angelica (i)	57.56	68.14	57.45	61.05	12	84	12	75.67	19	40 <sup>j</sup>	19	46.33	3.3
Baldwinsville	55.13	65.50	59.73	60.12	12	82	12	76.67	20	37	19	44.00	3.8
Beverly	59.75	70.04	61.37	63.72	8	81	17	71.33	20	44	19	49.33	4.7
Canton	52.72	68.72	57.50	59.65	12	85 <sup>k</sup>	12	78.33	20	33	19	41.00	5.0
Flushing				63.73	12	88			20	44			
Gouverneur	55.90	69.53	61.23	62.22	12	88	12	77.33	20	28	19	40.33	4.7
Lodi	58.13	68.30	58.10	61.51	12	84	12	78.00	20	35	19	42.33	4.4
New York city	62.82	71.60	64.12	66.18	12	87	12	80.67	20	46	19	51.96	4.4
Oswego	57.77	69.50	61.20	62.82	12	88	12	79.67	20	37	19	47.67	
Penn Yan (l)	54.33	69.13	61.63	61.70	11	84	12	78.00	20	32	19	44.33	5.0

<sup>a</sup> Same temperature on the 6th.<sup>b</sup> Same temperature on the 29th and 30th.<sup>c</sup> Same temperature on the 24th.<sup>d</sup> Observations taken at sunrise, noon, and sunset.<sup>e</sup> Observations taken at sunrise, 2 p. m., and 10 p. m.<sup>f</sup> Observations taken at 7 a. m., 1½ p. m., and 9 p. m.<sup>g</sup> Observations taken at sunrise, 1 p. m., and 10 p. m.<sup>h</sup> Same temperature on the 13th.<sup>i</sup> For the first 23 days of the month only.<sup>j</sup> Same temperature on the 20th.<sup>k</sup> Same temperature on the 16th.<sup>l</sup> Observations taken at sunrise, 2 p. m., and sunset.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Sag Harbor.....	60.85	75.85	58.85	65.18	9	90	9	78.67	25	45 <i>a</i>	20	54.67	3.7
Smithville.....	53.60	70.73	57.13	60.49	1	85 <i>b</i>	12	78.00	20	34	28	43.67	4.0
Spencertown.....	53.97	68.40	58.00	60.12	12	84	12	77.33	20	30	19	43.33	3.4
Wampsville.....	56.67	71.40	57.57	61.88	12	85	12	78.33	20	38	19	46.33	4.5
NEW JERSEY—													
Bloomfield.....	58.22	74.48	61.60	64.77	12	94	9	80.67	20	40	19	52.50	3.2
Burlington.....	61.50	74.20	65.60	67.10	12	90	2	82.00	20	46	19	53.33	7.9
Lambertville.....	58.45	76.19	61.47	65.37	12	93	12	79.67	20	37	28	52.50	5.8
Newark ( <i>c</i> ).....				64.50	---	88.75	13	78.87	---	40	19	51.12	---
PENNSYLVANIA—													
Easton.....	56.63	78.60	63.47	66.23	12	94	12	79.33	20	40	28	55.00	4.5
Gettysburg.....	67.00	72.73	64.10	67.94	2	88	2	78.00	29	44	19	51.67	5.4
Harrisburg.....	64.07	74.17	69.93	69.39	12	89	12	82.67	29	48	20	56.67	5.0
Lima.....	59.52	72.72	62.62	64.95	18	85	1	74.50	24	41.5	24	50.50	4.6
Meadville.....	60.67	70.10	63.37	64.71	12	85	1	76.33	28	42	28	51.33	5.5
Morrisville.....	58.83	73.63	61.60	64.69	12	91	2	77.33	20	46	19	52.67	3.2
Moss Grove.....	59.63	72.96	60.04	64.21	10	88	10	78.67	28	34	28	47.00	5.7
Norristown.....	58.38	71.23	62.35	63.99	12	86 <i>d</i>	12	77.33	29	44	19	52.33	3.8
Paradise.....				72.00									
Philadelphia.....	65.75	75.67	69.20	70.21	12	90	12	83.67	20	50	20	58.83	4.7
Pittsburg, [Oakland Station]	62.77	72.10	65.17	66.68	12	86	2	76.67	28	44	28	51.67	---
Pittsburg, [Marine Hosp ] ( <i>e</i> )	64.47	73.10	69.41	68.49	12	86	12	78.00	28	45	28	52.25	---
Pocopson.....	62.33	76.02	64.35	67.57	18	90	12	79.67	29	48	19	56.17	5.5
Pottsville.....	59.45	72.40	60.03	63.96	12	93	9	77.67	29	40	19	49.83	5.1
Randolph.....	59.83	72.90	61.73	64.82	11	89	11	78.67 <i>b</i>	20	42 <i>f</i>	27	46.67	---
West Haverford.....	60.97	74.97	---	67.97	12	91	13	82.50	21	48	21	56.50	4.9
DELAWARE—													
Newark ( <i>g</i> ).....	60.68	73.79	64.90	66.46	12	86 <i>d</i>	12	79.67	29	44	28	53.00	3.6
MARYLAND—													
Bladensburg ( <i>g</i> ).....	61.64	76.40	65.22	67.75	18	93	2	80.00	29	43	30	57.00	5.0
Frederick.....	62.04	74.76	66.47	67.76	12	89	12	79.83	29	45	28	53.67	5.8
Sykesville.....	63.07	75.40	65.10	67.86	9	89 <i>h</i>	12	81.00	29	45	30	55.33	4.6
DISTRICT OF COLUMBIA—													
Washington.....	64.20	77.33	68.70	70.08	12	93	12	83.33	29	47	19	56.67	5.9
VIRGINIA—													
Alexandria.....	63.97	76.00	67.31	69.09	11	90	11	82.00	28	46	28	55.00	5.2
Ashland.....	66.13	77.27	68.00	70.47	17	87	17	78.67	28	46	27	55.33	4.8
Crichton's Store ( <i>i</i> ).....	67.25	77.75	74.62	73.21	12	95	11	85.67	20	55	20	61.67	4.6
Lewisburg.....	62.03	76.97	63.73	67.58	13	90	13	76.33	28	42	28	50.67	4.6
Smithfield ( <i>j</i> ).....				71.71	13	93 <i>k</i>	13	83.50	28	48	28	57.50	---
NORTH CAROLINA—													
Chapel Hill.....	66.83	82.13	71.73	73.56	13	94	13	83.33	29	52	28	62.00	2.7
SOUTH CAROLINA—													
All Saints.....	74.10	82.55	77.62	78.09	18	90	18	84.33	28	64	28	73.00	3.8
Camden.....	71.80	84.76	74.80	77.12	11	93 <i>b</i>	12	84.33	25	59	28	65.67	4.7
Charleston.....	74.83	84.70	78.50	79.34	---	92	18	---	---	68	28	---	---
GEORGIA—													
Savannah.....	73.60	85.10	77.30	78.67	17	96	17	85.00	25	67	28	71.00	3.9
Sparta.....	68.50	85.33	74.00	75.91	13	94 <i>l</i>	15	80.67	26	59	25	69.67	4.1
The Rock.....				74.14				78.00				70.00	---
Whitemarsh Island.....	75.53	82.37	76.90	78.27	18	90 <i>m</i>	17	83.33	28	69	28	71.00	3.7

<sup>a</sup> Same temperature on the 29th.<sup>b</sup> Same temperature on the 12th.<sup>c</sup> Observations taken at 7 a. m. and 6 p. m.<sup>d</sup> Same temperature on the 18th.<sup>e</sup> Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean

at 9 a. m., 67.00.

<sup>f</sup> Same temperature on the 28th.<sup>g</sup> Record incomplete.<sup>h</sup> Same temperature on the 12th and 18th.<sup>i</sup> Observations taken at 7½ a. m., noon, and 6 p. m.<sup>j</sup> Observations taken morning, 3 p. m., and evening.<sup>k</sup> Same temperature on the 14th.<sup>l</sup> Same temperature on the 14th, 17th, and 22d.<sup>m</sup> Same temperature on the 19th.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1855.

NAME AND STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
FLORIDA—	°	°	°	°		°		°		°			
Cedar Keys.....	77.70	84.53	79.63	80.62	1	59	23	84.00	25	72	25	76.33	3.1
Jacksonville.....	78.33	84.93	78.43	80.56	19	91	15	85.33	24	73	7, 25	75.66	3.4
Key West.....	78.83	84.77		81.80	4	89	14	84.00	3	77 a	3	79.50	5.0
Knox Hill.....	75.30	86.40	77.27	79.66	14	93	22	83.67	25	70	27	74.33	5.4
Warrington (b).....	77.30	83.13	82.03	80.82	20	87	6, 20	83.67	26	72 c	27	75.33	3.3
ALABAMA—													
Auburn.....	75.43	85.43	76.73	79.20	12	92 d	13	86.33	27	53	27	70.00	3.8
MISSISSIPPI—				78.06	?	92.5			?	57			
Columbus.....				76.23	12	90 f	12	85.33	27	56	27	60.33	4.1
Oxford (e).....	74.64	81.55	72.50	76.23	12	90 f	12	85.33	27	56	27	60.33	4.1
LOUISIANA—													
New Orleans.....	75.43	82.70	75.33	77.82	14	89	14	82.33	27	58	27	73.83	4.5
TEXAS—													
Austin.....	71.40	85.80	77.20	78.13	3	92	2	82.33	30	54	30	70.00	5.6
New Wied.....	76.67	90.47	75.80	80.98	3	97 g	2, 4	85.67	30	68	27	73.67	6.0
TENNESSEE—													
Glenwood.....	69.86	79.92	71.60	73.79	12	88	12	79.23	28	51	27	57.70	5.5
KENTUCKY—													
Bowling Green.....	69.27	84.57	69.03	74.29	20	94	20	79.67	28	44	27	55.67	4.9
Danville.....	71.65	82.48	72.74	75.62	4	90	12	80.67	18	60 h	18	64.67	3.5
Springdale.....	65.12	81.63	73.70	73.48	10	90	1	79.00	28	42	27	58.30	5.3
OHIO—													
Cincinnati (i).....	68.20	78.70	70.97	72.62	11	89	3, 12	79.33	28	50	20	60.67	4.6
Cleveland.....	61.59	73.25	64.74	66.53	1	86	1	79.00	27	42	27	52.00	5.8
Gallipolis.....	69.00	80.01	71.27	73.43	17	99	17	81.33	28	49	27	57.33	-----
Germantown.....	65.50	74.63	65.23	68.45	5	86	11	76.55	28	44	27	54.05	6.4
Granville.....	65.71	76.21	66.00	69.31	9	85 j	10	76.67	28	45	28	54.67	5.6
Hillsborough.....	63.97	73.40	65.83	67.73	11	83	1	75.00	28	43	27	52.33	5.2
Hiram.....	59.97	68.27	58.57	62.27	11	81	11	75.00	27	40	19	46.67	-----
Jackson, [Gilmor].....	69.93	79.50	72.23	73.89	11	93	11	85.33	29	47	28	49.33	4.7
Oberlin.....	64.5	75.5	63.9	67.97	8	89	8, 11	77.67	28	42	27	52.67	4.4
Perrysburg.....	67.43	74.73	66.97	69.71	11	90	1	82.00	27	50	27	53.33	-----
Richmond.....													5.1
Savannah.....	68.83	76.50	66.00	70.44	12	90	2	81.00	28	40	28	53.00	5.7
Unionville.....	63.43	70.63	62.73	65.60	9	84	1, 7	78.00	28	44	19	52.00	5.4
Urbana.....	63.60	77.41	66.24	69.08	9	90 k	9	78.67	28	46	19	53.67	6.1
Zanesville.....	65.23	76.48	67.25	69.65	10	90 j	9	79.00	28	48	27	55.67	5.7
MICHIGAN—													
Ann Arbor, [Woodruff].....	59.20	70.83	62.30	64.11	1	87	1	77.67	28	40	27	49.67	6.2
Ann Arbor, [Winchell].....	60.51	73.10	59.82	64.48	1	85	1	77.03	28	39	27	46.60	-----
Battle Creek.....	62.33	73.77	63.39	66.50	1	89 l	1	81.00	18	47 m	27	52.67	5.5
Cooper.....	62.33	69.73	62.79	64.95	10	85	10	77.00	18	43 n	19	52.00	4.4
Detroit.....	61.80	71.13	62.80	65.24	1	87	1	78.00	28	41	27	50.00	5.1
Flint.....	59.00	73.70	59.30	64.00	11	87			27	39			-----
Grand Rapids.....	58.93	71.47	61.67	64.02	8	83 o	10	76.33	27	43	27	49.33	5.3
Monroe, [Whelpley].....													6.8
St. James.....	59.87	65.47	57.38	60.91	10	85	11	76.67	27	46	27	50.00	5.5
Saugatuck.....	64.83	75.93	64.93	68.56	11	87	11	80.67	27	47	27	53.67	5.5
INDIANA—													
Milton.....	64.42	75.43	66.58	68.81	8	86 p	18	78.83	28	43	28	53.67	5.1
New Harmony.....	70.10	80.20	72.17	74.16	19	89	19	81.00	28	51	27	57.67	5.7

a Same temperature on the 7th, 9th, and 28th.  
b Observations taken at sunrise, noon, and sunset.  
c Same temperature on the 27th.  
d Same temperature on the 13th and 14th.  
e For the last 22 days of the month only.  
f Same temperature on the 20th.  
g Same temperature on the 4th.  
h Same temperature on the 19th.

i Observations taken at 6 a. m., 1 p. m., and 9 p. m.  
j Same temperature on the 13th.  
k Same temperature on the 11th.  
l Same temperature on the 8th and 10th.  
m Same temperature on the 28th.  
n Same temperature on the 19th and 20th.  
o Same temperature on the 10th and 11th.  
p Same temperature on the 9th and 21st.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—	○	○	○	○		○		□		○		□	
Athens.....	68.10	79.30	69.53	72.31	2	91 <i>a</i>	1	81.67	30	50	27	58.00	5.6
Augusta.....	64.33	76.43	67.36	69.37	8	91	1	80.00	30	39	27	53.33	5.1
Manchester ( <i>b</i> ).....	64.60	76.47	66.93	69.33	8	92	8	79.67	27	44	27	54.67	5.5
Ottawa.....	63.93	75.48	64.40	67.94	---	88	9	78.33	---	45	27	53.67	5.1
Upper Alton.....	66.14	77.45	67.57	70.39	8	86 <i>c</i>	9, 16	77.33	20	44	27	54.00	4.0
MISSOURI—													
St. Louis.....	68.47	79.77	70.93	73.06	9	90.5	9	80.81	30	49.5	27	57.83	4.6
WISCONSIN—													
Beloit.....	58.40	72.06	59.80	63.42	8	90	8	76.33	27	40	27	48.67	3.2
Janesville.....	61.53	72.73	61.43	65.23	8, 10	92	10	79.33	28	48	28	52.00	4.4
Milwaukee, [Winkler].....	58.60	68.07	57.67	61.45	8	89	8	76.33	27	42	27	46.67	5.4
Platteville.....	62.37	74.87	64.73	67.32	8	92	9, 10	79.67	27	42 <i>d</i>	27	50.67	6.3
Superior.....	55.43	61.37	56.37	57.72	10	78	8	69.33	26	42	18	44.33	---
IOWA—													
Dubuque.....	61.40	69.10	63.33	64.61	10	91	8, 10	79.67	27	46	18	52.33	5.7
Fairfield.....				70.00	---	98	---	---	---	38	---	---	---
Fort Madison ( <i>e</i> ).....	63.93	78.77	68.47	70.39	8	92 <i>f</i>	9	81.00	30	34	30	50.33	6.7
Muscatine.....	64.60	73.77	64.60	67.66	8	92	8	83.00	27	35	30	48.00	5.7
Pella.....	60.33	75.60	62.33	66.09	8	91	8	77.67	27	36	30	49.00	---
Poultney.....	58.96	73.12	58.79	63.62	10	97	10	79.00	27	33	26	48.67	5.9
							11				27		
MINNESOTA TERRITORY—													
Lac qui Parle.....	55.42	68.59	57.15	60.39	7	88	7	79.00	19	40	18	44.00	5.1
MEXICO—													
Mirador ( <i>g</i> ).....	---	---	---	67.30	---	---	---	71.60	---	---	---	65.37	---
EASTERN CONTINENT—													
Mosul, Mesopotamia.....	---	---	---	80.17	---	103	---	---	---	61	---	---	---
WESTERN AFRICA—													
Nèngenènge.....	74.30	78.77	77.77	76.95	15 <i>h</i>	83	15	79.33	7 <i>a</i>	72	7	74.33	---

<sup>a</sup> Same temperature on the 8th.<sup>b</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.<sup>c</sup> Same temperature on the 21st.<sup>d</sup> Same temperature on the 30th.<sup>e</sup> Observations taken at 6 a. m., noon, and 7 p. m.<sup>f</sup> Same temperature on the 9th.<sup>g</sup> Hours of observation not given.<sup>h</sup> Same temperature on the 22d.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Horton	48.84	57.53	51.44	52.60	6	71.1	4	64.40	31	33.2	31	38.30	4.7
Montreal	45.93	52.31	47.41	48.55	5	70	5	63.45	26	32	24	34.67	6.7
Red River Settlement	38.14	49.72	38.93	42.26	1	70	10	62.33	23	19	20	26.00	6.0
St. Martin	41.43	53.26	44.62	46.44	5	50	6	62.43	31	28	24	31.93	5.9
Toronto (a)	40.90	50.60	44.40	45.50	5	68	5	59.80	12	22.6	24	31.00	6.8
MAINE—													
Carmel (b)	45.36	54.56	43.65	47.86	6	67	6	61.63	19	31	26	37.00	7.0
Fryeburg													5.7
Gardiner	47.74	55.37	49.45	50.85	4	67	3, 4	61.67	31	23	29	39.33	7.5
											31		
Perry	43.61	51.10	44.87	46.53	6	c 62	6	56.67	29	29	29	33.67	6.6
Portland	45.89	54.71	47.79	48.13	5	69	5	61.00	26	32	28	39.00	7.1
Steuben	45.94	52.87	46.39	48.40	1	62	4	59.33	31	29	26	36.00	7.4
NEW HAMPSHIRE—													
Concord	45.42	56.07	48.43	49.97	5	72	5	64.33	18	32	29	38.33	5.3
Exeter	45.19	54.94	46.42	48.85	5	70	5, 6	61.33	18	30	29	34.33	5.9
Londonderry	46.06	57.35	48.35	50.59	5	d 75	4	66.00	27	32	28	38.33	5.1
Manchester (e)	49.36	62.81	54.72	55.63	5	72	3	65.00	8	34	8	40.33	6.7
Stratford (f)	41.58	51.03	44.55	45.72		67	3	63.00		28	26	37.00	
VERMONT—													
Brandon	43.98	52.47	45.97	47.47	2	g 70	2	63.33	31	28	24	35.00	7.2
											25		
Burlington	45.97	54.61	47.77	49.45	2	75	2	66.67	31	30	24	35.00	4.2
Castleton (h)	39.48	52.88	42.72	45.03	20	74	20	59.33	31	28	24	36.00	5.9
Craftsbury	40.71	49.90	43.29	44.63	3	71	3	63.00	31	27	25	31.00	7.0
Montpelier (i)	40.70	52.10	48.00	46.93									
MASSACHUSETTS—													
Amherst	45.21	55.20	48.41	49.61	5	73	6	65.33	31	30	25	38.67	5.9
Boston (j)	46.52	62.34	50.58	53.15	5	76	5, 6	66.67	29	32	28	41.33	6.4
Mendon	50.42	57.71	51.71	53.28	14	69	3	65.00	29	34	26	39.33	4.9
Nantucket	55.84	61.03	55.07	57.31	3	69	3	64.73	28	k 43	29	45.67	4.6
New Bedford	51.26	59.17	51.88	54.10	5	70	5	65.70	26	36	29	42.70	6.2
Newburyport (l)	47.16	56.22	49.01	50.80	5	75	5	65.40	26	33	28	38.60	7.9
North Attleboro'	44.42	57.60	45.50	49.17	3	72	3	62.10	18	30	17	36.66	5.0
Princeton	44.74	53.36	46.35	48.15	8	70	2	62.00	29	29	28	36.17	6.0
Richmond	44.32	56.42	49.23	49.99	10	76	2	66.00	29	29	29	34.00	7.2
Southwick (m)													6.1
Springfield	45.81	58.58	49.26	51.22	5	77	3	67.33	31	30	25	39.33	5.4
Westfield	43.68	55.26	47.52	48.82	5	74	2, 5	64.67	18	30	25	39.00	
											27		
Williamstown	43.73	52.58	45.36	47.22	2	70	2	64.56	31	28	25	35.20	7.2
Worcester	46.03	56.16	48.42	50.20	5	72	5	65.00	29	32	29	37.67	4.6
RHODE ISLAND—													
Providence (n)	47.60	59.80	49.90	52.43	5, 6	74	6	67.33	29	33	29	40.33	5.2
CONNECTICUT—													
New London	50.19	60.77	52.65	54.54	3	74	3	67.00	26	36	26	44.67	4.7
Pomfret	45.94	55.70	48.29	49.98	5	71	5	64.33	29	32	26	38.33	5.5
Saybrook	48.10	57.65	53.45	53.07	3	o 68	6	67.00	26	35	25	42.00	4.8
NEW YORK—													
Angelica	41.14	52.50	42.68	45.44	5	75	5	61.00	31	22	26	28.67	7.0
Baldwinsville	44.10	51.71	46.77	47.53	5	68	5	61.00	25	32	25	34.33	6.4
Beverly	47.35	56.55	49.58	51.16	5	72	1, 5	65.67	31	34	25	38.67	5.8
Canton	44.58	53.87	46.06	48.17	5	75	1	64.67	15	k 31	25	33.00	6.1
Flushing				52.85		71				32			
Gouverneur	42.90	54.13	47.68	48.24	5	70	3, 6	62.00	14	28	25	31.33	6.3
Lodi	42.00	52.52	43.79	46.10	5	70	5	63.67	25	p 30	25	30.00	6.7

a Observations taken at 6 a. m., 2 p. m., and 10 p. m.

b Record incomplete.

c Same temperature on the 8th.

d Same temperature on the 6th.

e For the first 11 days of the month only.

f Observations taken morning, noon, and night.

g Same temperature on the 5th.

h For the last 25 days of the month only.

i Observations taken at sunrise, noon, and sunset.

j Observations taken at 6 a. m., 1 p. m., and 10 p. m.

k Same temperature on the 29th.

l Observations taken at 7 a. m., 1½ p. m., and 9 p. m.

m Incomplete.

n Observations taken at sunrise, 1 p. m., and 10 p. m.

o Same temperature on the 5th and 6th.

p Same temperature on the 31st.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
New York city .....	50.29	57.59	52.04	53.31	5	70	1	67.40	26	34	25	39.83	5.0
Oswego .....	45.87	54.77	48.55	49.73	19	71	5	61.33	15	33	24	37.67	---
Penn Yan (a) .....	42.23	53.97	47.03	47.74	5	75	5	64.67	31	31	25	33.67	7.1
Sag Harbor .....	50.96	63.68	53.00	55.88	5	78	1	71.66	26	38	25	44.00	5.3
Smithville .....	42.77	52.71	44.58	46.69	2	b 68	5	62.33	17	28	24	31.67	6.7
Spencertown .....	43.65	53.06	46.90	47.87	5	73	1	64.33	31	27	25	36.33	5.4
Wampsville .....	44.42	54.06	45.16	47.88	5	75	5	64.33	24	c 32	25	33.67	7.2
NEW JERSEY—													
Bloomfield .....	47.93	57.58	49.45	51.65	3	71	1	67.83	27	30	29	43.00	5.0
Burlington .....	50.32	61.10	51.84	54.42	1	76	1	72.00	26	32	25	39.00	6.8
											26		
Lambertville .....	44.36	60.28	43.77	49.57	1	80	1	70.33	29	29	25	36.83	5.1
Newark (d) .....				51.43	---	72.5	1	67.25	---	33	26	40.38	---
PENNSYLVANIA—													
Bedford (e) .....	42.55	54.00	45.84	47.46	1	82	1	72.67	29	27	25	32.66	5.7
Easton .....	42.39	61.42	46.61	50.14	5	80	1	65.67	26	33	24	38.00	4.4
Gettysburg .....	44.06	58.48	47.39	49.98	1	72	1	62.67	26	30	25	36.00	5.0
Harrisburg .....	49.10	58.39	51.69	53.06	5	73	6	63.00	26	34	25	40.67	5.1
Lima .....	46.14	58.06	48.48	50.89	11	71	1	66.10	26	27	26	38.50	5.1
Meadville .....	42.48	54.29	44.74	47.17	10	74	5	60.00	17	29	25	33.00	6.0
Morrisville .....	47.00	55.84	49.03	50.62	5	74	1	67.33	26	32	25	39.67	3.5
Moss Grove .....	41.66	52.29	42.39	45.45	10	72	1	60.33	17	24	25	30.67	6.0
Norristown .....	46.08	60.61	49.98	52.22	5	71	1	65.33	26	31	25	39.00	4.6
Paradise .....				55.00									
Philadelphia .....	50.84	61.08	53.69	55.20	5	77	1	72.16	26	35	25	41.67	5.4
Pittsburg, [O. S.] .....	44.06	55.52	47.13	48.90	21	70	1	61.00	29	30	25	35.33	---
Pittsburg, [M. H.] (f) .....	45.42	54.77	50.86	49.54	1	g 68	1	62.75	29	34	25	36.75	6.3
Pocopson .....	47.85	59.36	49.83	52.35	5	75	1	67.67	26	33	25	40.33	5.5
Pottsville .....	44.89	54.72	43.48	47.70	1	68.5	1	63.70	26	26	26	34.33	5.7
West Haverford .....	47.25	59.58		53.41	11	75	1	69.00	26	31	26	39.00	5.2
DELAWARE—													
Newark (e) .....	46.96	58.78	49.20	51.65	1	73	1	67.33	26	31	25	39.67	4.3
MARYLAND—													
Chestertown .....	48.23	58.93	48.94	52.03	1	72	1	65.33	26	30	25	36.33	4.0
Frederick .....	45.93	59.00	49.37	51.43	11	76	1	64.97	26	31	25	39.10	4.8
Sykesville .....	46.71	62.26	48.48	52.48	1	76	1	66.00	8	h 34	24	38.00	3.8
DISTRICT OF COLUMBIA—													
Washington .....	48.26	61.39	52.18	53.94	1	77	1	68.33	26	32	25	40.33	4.1
VIRGINIA—													
Alexandria .....	46.13	59.42	50.13	51.89	1	i 72	1	65.67	26	28	25	38.00	4.3
Ashland .....	43.74	60.94	50.64	51.77	30	76	1	62.00	25	28	25	36.00	3.4
Crichton's Store (j) .....	52.28	64.78	64.13	60.40	5	79	1	73.00	26	36	24	44.00	4.2
Lewisburg .....	44.70	61.04	45.65	50.46	17	74	1	60.67	26	26	26	33.00	3.7
Smithfield .....				57.18	1	78	1	70.75	25	32	25	42.00	---
Winchester .....	47.19	60.61	45.68	51.16	30	76	5	64.33	26	30	26	39.33	3.9
NORTH CAROLINA—													
Chapel Hill .....	50.42	68.74	56.35	58.50	1	83	1	71.67	26	31	25	43.00	6.4
SOUTH CAROLINA—													
All Saints .....	56.87	71.10	62.73	63.57	1	k 80	1	77.67	26	37	25	45.67	2.8
Camden .....	50.68	71.90	55.61	59.40	1	83	1	74.67	26	31	25	43.00	3.9
											26		
Charleston .....	58.58	72.19	63.96	64.91	---	86	1	---	---	39	25	---	---
GEORGIA—													
Savannah .....	56.50	73.40	62.50	64.13	1	86	1	77.36	25	37	25	46.20	3.0
Sparta .....	48.06	71.00	56.55	58.54	11	81	1	70.67	26	29	25	38.00	2.6
The Rock (l) .....				58.85				72.00				37.00	---
Whitemarsh Island .....	57.52	70.90	62.10	63.51	1	79	1	75.33	25	39	25	46.67	2.7

a Observations taken at sunrise, 2 p. m., and sunset.

b Same temperature on the 21st.

c Same temperature on the 25th and 29th.

d Observations taken at 7 a. m. and 6 p. m.

e Record incomplete.

f Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 47.10.

g Same temperature on the 10th.

h Same temperature on the 14th.

i Same temperature on the 6th and 11th.

j Observations taken at 8 a. m., noon, and 5 p. m.

k Same temperature on the 6th.

l Observations taken morning, 3 p. m., and evening.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—	○	○	□	□		○		○		○		○	
Cedar Keys .....	64.58	73.22	69.52	69.11	1	82	1	80.67	25	42	25	49.33	3.6
Jacksonville .....	62.16	72.11	64.12	66.13	1	86	1	80.00	25	44	25	49.00	2.8
Key West .....	75.06	80.35		77.70	7	89	1	84.50	25	67	27	71.00	5.4
Knox Hill .....	58.40	74.70	64.00	65.70	20	83	1, 19	72.67	25	34	25	44.00	3.6
Warrington (a) .....	61.58	71.71	70.16	67.82	11	82	5	76.67	25	39	25	48.00	3.2
ALABAMA—													
Auburn .....	55.10	71.19	60.42	62.24	20	81	10	69.33	25	34	24	41.33	2.9
Greene Springs (b) .....	51.44	73.06	60.29	61.60	19	84	11	70.67	25	c 32	25	41.00	3.5
MISSISSIPPI—													
Columbus .....				59.56	?	78			?	31			
Jackson .....	49.61	68.58	58.74	58.98	2	d 76	17	67.67	25	28	25	37.67	1.5
Oxford .....	51.68	66.16	54.68	57.51	4	77	20	68.33	25	28	■	45.33	2.8
LOUISIANA—													
New Orleans .....	60.02	69.47	64.35	64.61	11	77	5	72.83	25	39	25	45.00	3.2
TEXAS—													
Austin .....	54.61	75.87	60.58	63.69	1	e 84	4	76.00	25	34	24	44.67	5.1
New Wied .....	59.87	76.77	64.87	67.17	3	f 89	4	84.33	25	37	24	49.33	6.1
ARKANSAS—													
Camden (g) .....	56.83	69.17	60.00	62.00		81	4	70.33		38	6, 7	50.67	5.9
TENNESSEE—													
Glenwood .....	48.56	63.56	51.92	54.68	20	h 75	28	62.83	25	32	24	34.87	3.6
KENTUCKY—													
Bowling Green .....	44.45	70.06	50.52	55.01	10	89	30	64.33	25	27	25	32.33	3.2
Millersburg .....	44.77	60.52	46.48	50.59	20	78	4	63.00	25	29	24	35.33	3.6
Springdale .....	40.74	64.00	57.10	53.95	10	78	30	67.83	25	25	24	35.83	3.2
OHIO—													
Cheviot .....	44.39	61.48	55.26	53.71		78	20	66.33		28	25	34.00	
Cincinnati (i) .....	48.10	63.35	53.10	54.85	10	76	10	63.33	25	32	25	48.33	7.2
Cincinnati, [Harper] .....	47.13	62.52	50.23	53.29	10	j 75	10	66.00	24	30	24	36.67	3.4
Cleveland .....	45.00	54.30	47.40	48.90	10	71	10	62.00	17	32	25	34.67	6.5
Gallipolis .....	46.97	62.22	49.19	52.79	10	k 74	1	62.33	25	31	25	35.33	
Germantown .....	41.29	58.34	45.36	48.33	20	75	1	59.45	25	27	25	32.29	4.7
Granville .....	43.36	59.29	47.93	50.19	10	j 71	1	62.67	13	29	24	37.00	4.1
Hillsborough .....	43.26	57.53	47.94	49.58	20	71	10	60.00	25	27	24	33.00	3.3
Hiram .....	42.77	52.71	43.06	46.18	20	70	1	62.00	25	28	25	29.67	3.3
Jackson, [Gilmor] .....	41.32	65.33	49.70	52.12	20	l 80	1	67.00	14	m 28	7	43.00	3.5
Oberlin .....	43.70	55.97	45.29	48.32	1	72	1	64.00	25	n 28	25	33.67	4.0
Perrysburg .....	45.90	59.06	51.00	51.99	10	77	10	68.33	25	29	12	42.00	
Richmond .....											13		4.6
Savanna .....	41.29	57.13	45.32	47.91	10	76	10	63.00	25	27	25	33.00	4.4
Unionville .....	46.94	54.03	47.40	49.46	19	70	5	61.33	30	30	24	36.00	6.4
Urbana .....	42.03	59.42	44.87	48.77	20	75	1	59.67	25	29	24	32.67	4.0
Zanesville .....	43.58	59.68	49.06	49.77	10	85	5	65.33	7	n 32	25	33.33	5.9
MICHIGAN—													
Ann Arbor, [Woodruff] .....	39.74	53.03	44.55	45.77	10	71	4, 10	58.33	25	27	24	32.00	4.5
Ann Arbor, [Winchell] .....	40.24	53.01	42.81	45.35	10	71	10	59.73	25	26	25	30.60	4.9
Battle Creek .....	42.35	54.61	45.61	47.52	9	o 70	10	63.67	25	26	24	32.00	4.6
Cooper .....	45.55	52.45	46.00	48.00	10	76	10	68.00	24	p 30	24	32.00	4.5
Detroit .....	41.97	53.94	45.87	47.26	10	71	10	62.33	25	28	24	33.00	4.5
Flint .....	37.60	51.90	42.20	43.90	10	73			24	25			
Grand Rapids .....	38.03	52.48	44.00	44.84	18	78	18	61.33	25	19	24	28.00	4.1
Monroe, [Whelpley] .....													5.3
St. James .....	41.32	51.31	41.71	44.78	1	q 68	1	63.00	23	31	28	33.00	6.3
Saugatuck .....	46.00	57.06	47.81	50.29	10	78	10	68.67	24	28	24	33.00	4.9

a Observations taken at sunrise, noon, and sunset.

b Observations taken at sunrise, 2 p. m., and 9 p. m.

c Same temperature on the 26th.

d Same temperature on the 4th and 15th.

e Same temperature on the 2d, 4th, and 19th.

f Same temperature on the 4th.

g For the first 12 days of the month only.

h Same temperature on the 30th and 31st.

i Observations taken at 6 a. m., 1 p. m., and 9 p. m.

j Same temperature on the 20th.

k Same temperature on the 19th and 30th.

l Same temperature on the 30th.

m Same temperature on the 29th.

n Same temperature on the 12th, 13th, 17th, 25th and 26th.

o Same temperature on the 19th.

p Same temperature on the 25th.

q Same temperature on the 3d and 9th.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—	°	°	°	■		■		■		□		□	
Milton .....	41.38	58.74	46.97	49.03	19	73	17	65.00	25	29	24	35.33	3.3
New Harmony .....	45.82	62.06	50.58	52.82	10	a 75	4, 20	63.33	25	28	25	35.67	3.6
ILLINOIS—													
Athens .....	44.87	62.19	49.58	52.21	10	81	10	68.33	25	25	24	35.00	3.8
Augusta .....	41.61	68.58	49.03	53.07	10	80	10	67.00	25	21	24	33.00	2.9
Manchester .....	43.52	61.55	47.81	50.96	10	84	10	66.50	25	24	24	31.33	3.9
Ottawa (b) .....	40.07	59.87	46.71	48.88	10	82	10	66.00	25	22	23	36.00	3.8
Upper Alton .....	43.61	59.07	50.43	51.04	29	75	31	59.33	25	26	24	33.00	2.4
MISSOURI—													
St. Louis .....	45.89	63.16	52.74	53.93	10	80	5, 10	67.00	25	28	24	34.00	3.5
WISCONSIN—													
Beloit .....	38.64	54.71	42.13	45.16	10	c 74	10	63.67	25	20	24	30.67	2.2
Janesville .....	38.16	54.65	43.00	45.27	10	81	10	64.67	23	20	23	29.33	5.2
Milwaukee, [Winkler] .....	38.42	53.03	42.39	44.61	9	78	10	63.00	25	22	24	28.33	3.8
Milwaukee, [Pomeroy] .....	41.74	59.23	43.77	48.25	9	84	9	67.67	24	22	24	28.67	---
Platteville .....	39.87	59.03	45.90	48.27	?	77	---	64.33	?	20	---	25.67	3.7
Superior .....	39.06	49.58	42.39	43.68	8	68	8	57.67	24	24	23	26.67	3.2
IOWA—													
Dubuque .....	41.55	57.10	46.70	48.45	9	81	18	66.00	25	26	23	31.33	4.0
Fairfield .....				52.00		80				22			---
Fort Madison (d) .....	40.03	59.55	49.61	49.73	10	78	10	65.67	25	18	25	32.67	3.4
Muscatine .....	38.10	58.71	44.52	47.11	10	84	10	64.33	25	15	24	31.00	4.3
Pella .....	37.10	57.35	42.53	45.66	18	79	18	64.00	25	20	24	26.67	---
Poultney .....	37.92	55.83	41.48	45.08	18	81	18	63.33	25	24	24	29.00	4.8
Quasqueton (e) .....	36.28	57.31	43.24	45.61	10	79	9, 10	57.00	25	16	23	30.00	4.5
MEXICO—													
Mirador (f) .....				65.93				73.08				61.20	---
WEST INDIES—													
Up Park Camp, Jamaica (g) ..	80.06	84.70	---	82.38	23	89	21	85.75	13	75	13	76.75	5.4
EASTERN CONTINENT—													
Mosul, Mesopotamia .....				70.27	---	90	---		---	54	---	---	---
WESTERN AFRICA—													
Nèngenènge .....	75.77	81.35	78.68	78.60	2	85	26	80.67	1	74	45	76.67	---

a Same temperature on the 20th.

b Record incomplete; for the last eight days of the month.

c Same temperature on the 18th.

d Observations taken at 6 a. m., noon, and 7 p. m.

e Record incomplete.

f Hours of observation not given.

g Observations taken at 9½ a. m. and 3½ p. m.

h Same mean temperature on the 11th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Horton .....	35.09	41.70	37.53	38.11	8	70.4	8	61.30	25	12	20	21.40	5.4
Montreal .....	31.32	37.81	33.48	34.20	7	54	8	51.55	24	8	24	10.00	5.5
Red River Settlement .....	16.04	24.46	18.88	19.79	1	a 40	2	35.33	17	-24	17	-20.33	6.0
St. Martin .....	27.87	37.63	30.12	31.87	7	57	7	48.80	20	1	20	9.67	5.0
Toronto (b) .....	36.30	42.70	37.70	38.90	15	59.2	12	50.13	29	15.5	29	24.80	6.0
MAINE—													
Carmel .....	28.20	40.52	28.58	32.43	14	57	7	47.67	24	7	20	15.00	5.8
Fryeburg .....													5.6
Gardiner .....	32.17	40.77	34.50	35.81	1	57	1	51.00	25	1	20	20.33	6.2
Perry .....	31.47	38.50	33.30	34.42	1	a 56	8	51.00	24	13	22	21.67	6.4
Portland .....	33.13	41.46	35.23	36.61	16	59	16	49.33	24	13	24	21.26	5.8
Steuben .....	31.83	38.90	34.07	34.93	7	c 53	8	51.00	21	d 12	20	18.67	6.4
Windham (e) .....	24.09	31.32	25.77	27.06	8	43	15	36.33	23	■	30	15.33	4.4
NEW HAMPSHIRE—													
Concord .....	32.73	42.33	36.20	37.09	16	■	16	50.67	23	f 12	24	23.67	4.9
Exeter .....	33.53	41.80	34.36	36.56	16	61	16	49.33	23	10	24	20.33	5.6
Londonerry .....	33.90	45.30	36.40	38.53	1	70	1	55.33	23	15	20	20.67	5.2
Manchester .....	30.76	42.70	34.70	36.05	16	63	7	48.67	23	10	22	21.00	5.6
Stratford (g) .....	28.93	37.87	34.07	33.62		54	8	46.33		10	24	13.33	
VERMONT—													
Brandon .....	32.15	41.51	31.52	35.06	1	58	1	52.67	24	10	24	17.00	5.5
Burlington .....	33.07	40.87	35.23	36.39	13	58	1	52.67	22	12	24	17.00	3.4
Castleton .....	32.10	43.37	34.53	36.36	11	63	1,8	52.00	22	11	24	18.67	5.8
Craftsbury .....	26.30	35.57	30.20	30.69	14	54	1,7	46.00	20	2	20	7.00	6.9
Montpelier (h) .....	28.80	39.20	35.80	34.60									
MASSACHUSETTS—													
Amherst .....	34.63	43.63	37.21	38.49	16	63	16	53.70	23	f 15	20	25.20	5.7
Mendon .....	36.07	43.63	39.10	39.60	14	59	1	53.00	23	18	20	25.33	5.6
Nantucket .....	45.80	42.47	45.32	44.53	1	60	1	57.67	30	28	30	34.00	5.6
New Bedford .....	39.97	47.25	41.75	42.99	11	60.5	1	56.33	22	21	20	26.67	6.6
Newburyport .....	35.10	43.30	38.45	38.95	16	65	16	53.70	24	15	20	23.40	8.2
North Attleboro' .....	37.83	46.82	39.88	41.51	1	67	1	50.63	20	21	20	25.20	5.6
Princeton .....	33.25	39.98	35.55	36.26	1	60	1	52.00	23	14	22	19.33	5.8
Richmond .....	31.73	41.60	34.57	35.97	12	62	■	47.67	20	i 17	23	20.00	7.0
Southwick .....													6.4
Springfield .....	35.27	46.57	39.13	40.32	11	j 64	16	54.67	23	16	22	26.00	5.4
Westfield .....	35.33	43.93	37.93	39.06	16	65	16	55.00	23	16	22	25.00	
Williamstown .....	32.90	41.39	36.83	37.04	16	58	1	52.50	25	11	29	18.67	6.8
Worcester .....	35.37	45.27	38.13	39.59	23	68	16	53.00	23	16	22	22.00	5.0
RHODE ISLAND—													
Providence (k) .....	38.00	47.60	40.50	42.03	16	66	16	54.67	20	20	20	25.00	5.9
CONNECTICUT—													
New London .....	40.00	49.23	42.87	44.03	14	66	1	56.33	22	21	22	27.33	5.0
Pomfret .....	36.03	43.57	38.27	39.29	16	63	1	54.33	22	17	20	23.67	5.8
Saybrook (l) .....	40.89	47.96	44.56	44.47	1	60	1	54.67	22	22	22	27.33	5.7
NEW YORK—													
Angelica .....	33.55	41.81	33.23	36.20	11	61	12	54.00	30	10	29	19.67	6.6
Baldwinsville .....	36.90	42.67	39.90	39.82	1	58	12	54.33	29	20	24	22.67	7.0
Beverly .....	38.15	45.29	41.15	41.53	1	58	1	54.00	23	23	29	27.50	6.2
Blackwell's Island .....	42.55	48.53	45.03	45.37	16	65	16	56.33	23	28	29	31.00	5.4
Canton .....	32.52	42.84	33.15	36.17	7	61	7	51.33	24	10	24	14.33	6.2
Flushing .....				41.68		64				17			
Gouverneur .....	30.93	41.23	36.30	36.15	1	m 56	12	50.67	20	6	20	18.67	4.2

a Same temperature on the 8th.

b Observations taken at 6 a. m., 2 p. m., and 10 p. m.

c Same temperature on the 10th and 11th.

d Same temperature on the 24th.

e For the last 22 days of the month only.

f Same temperature on the 25th.

g Observations taken morning, noon, and night; hour not specified.

h Observations taken at sunrise, noon, and sunset.

i Same temperature on the 27th.

j Same temperature on the 16th.

k Observations taken at sunrise, 1 p. m., and 10 p. m.

l For the first 25 days of the month only.

m Same temperature on the 12th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	W'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Lodi .....	36.10	43.83	38.67	39.53	7	60	12	55.00	29	18	29	22.67	7.3
New York city .....	41.44	47.90	43.79	44.38	15	59	1	55.16	23	27	29	30.33	6.1
Ogdensburg .....													5.6
Ovid .....	36.67	43.33	39.43	39.81	7	60	12	55.33	29	16	29	21.33	7.1
Penn Yan (a) .....	37.63	43.87	39.93	40.48	1	59	12	55.00	29	17	29	22.00	7.3
Smithville .....	33.93	42.80	37.13	37.95	12	60	12	57.00	20	b 15	24	19.00	6.2
Spencertown .....	35.27	42.27	38.27	38.60	1	c 59	1	54.67	22	13	22	19.00	5.5
Wampsville .....	36.33	45.63	37.90	39.95	1	64	1	55.33	29	16	29	22.33	7.2
NEW JERSEY—													
Bloomfield .....	41.10	50.75	43.35	45.07	16	67	2	56.83	25	23	29	30.16	5.0
Burlington .....	42.23	51.73	43.40	45.79	16	70	2	60.33	23	d 26	29	31.33	7.5
Lambertville .....	39.63	50.85	41.43	43.97	16	69	2	57.83	25	23.5	29	28.00	3.9
Newark (e) .....				44.10		66	16	56.12		22	23	30.37	
PENNSYLVANIA—													
Bedford .....	38.08	47.73	41.00	42.27	16	68	16	59.00	30	17	29	26.67	5.4
Easton .....	37.53	49.87	40.52	42.64	16	68	2	56.00	23	19	29	27.67	5.3
Gettysburg .....	40.20	49.80	42.10	44.03	16	72	3	55.33	30	23	30	28.00	5.7
Harrisburg .....	44.17	51.54	47.78	47.83	16	67	16	58.67	23	31	20	37.67	6.1
Lima .....	41.47	50.60	42.78	44.95	16	68	2	58.40	23	23	20	30.00	6.0
Meadville .....	37.77	47.00	39.75	41.51	11	f 66	11	59.67	30	18	30	25.00	6.8
Morrisville .....	40.07	50.63	42.03	44.24	1	64	2	56.67	23	24	22	32.00	4.6
Moss Grove .....	38.10	45.29	39.58	40.99	11	64	11	56.00	30	18	22	28.00	6.5
Norristown .....	42.02	50.38	43.10	45.17	16	69	2	57.67	22	27	29	30.00	6.3
Paradise .....				41.00									
Philadelphia .....	44.50	53.10	47.00	48.20	16	67	2	60.00	23	29	29	33.17	6.6
Pittsburg, [O. S.] .....	41.52	49.40	43.07	44.66	12	g 64	7	58.67	30	20	29	27.00	
Pittsburg, [M. H.] (h) .....	43.03	49.53	45.87	45.56	12	64	12	60.00	30	24	30	30.75	6.4
Pocopson .....	42.53	52.32	43.78	46.21	16	68	2	58.67	23	25	30	32.67	6.8
Pottsville .....	40.85	46.54	39.02	42.14	16	66	12	54.10	22	21	29	26.33	6.6
West Haverford .....	42.23	51.33		46.78	16	68	2, 16	59.00	30	28	29	32.00	6.4
DELAWARE—													
Newark (i) .....	41.12	51.14	41.16	44.47	2	66	2	60.00	23	24	29	31.67	5.3
MARYLAND—													
Annapolis (j) .....	46.17	53.27	47.79	49.08	16	74	16	64.00	30	27	30	34.00	5.6
Bladensburg (i) .....	41.04	51.05	44.10	45.40	1	63	3	55.33	30	20	29	33.67	5.8
Chestertown .....	42.76	49.93	44.45	45.71	2	62	2	52.33	30	28	30	32.67	5.3
Frederick .....	42.36	51.66	44.74	46.25	16	70	16	59.07	30	26	30	32.13	5.8
Sykesville .....	41.50	52.40	43.97	45.96	16	73	16	61.00	29	23	29	30.33	5.3
DISTRICT OF COLUMBIA—													
Washington .....	44.00	53.67	47.28	48.32	16	69	16	61.33	30	26	30	35.33	5.8
VIRGINIA—													
Alexandria .....	44.18	53.57	46.95	48.23	16	70	16	62.33	30	25	30	35.00	6.0
Ashland .....	44.60	56.23	46.53	49.12	11	76	11	65.67	20	28	22	34.33	4.8
Crichton's Store .....	50.00	57.24	57.44	54.89	16	74	16	68.33	30	32	22	40.33	6.6
Lewisburg .....	42.00	55.17	46.14	47.77	14	g 70	15	60.67	29	22	28	33.33	6.3
Smithfield .....				51.02	16	70	3	65.50	29	25	22	36.00	
Winchester .....	42.87	54.67	44.87	47.47	1	k 72	16	62.67	30	20	30	32.33	5.5
NORTH CAROLINA—													
Chapel Hill (l) .....	47.79	60.73	53.08	53.87	16	81	16	67.33	30	25	22	38.33	3.8
SOUTH CAROLINA—													
All Saints .....	54.53	66.97	57.07	59.52	4	77	8	69.00	30	35	29	44.33	4.6
Camden .....	50.87	66.26	56.00	57.71	2	m 80	3	70.67	30	30	29	40.33	6.0
Charleston .....	57.80	67.73	62.13	62.55		77	4			40	29		

a Observations taken at sunrise, 2 p. m., and sunset.

b Same temperature on the 24th.

c Same temperature on the 11th.

d Same temperature on the 25th.

e Observations taken at 7 a. m. and 6 p. m.

f Same temperature on the 14th.

g Same temperature on the 15th.

h Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 43.80.

i Incomplete.

j Observations taken at 7½ a. m., 2 p. m., and 9 p. m.

k Same temperature on the 16th.

l No observation before the 3d of the month; irregular till the 5th.

m Same temperature on the 3d and 4th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—	°	°	°	°		°		°		°		°	
Savannah	57.20	69.00	61.20	62.47	4	79	7	71.80	29	38	29	45.67	5.9
Sparta	51.90	66.13	56.23	58.09	2	a 82	4	70.67	29	b 34	29	40.67	6.3
The Rock (c)				55.04				68.00				42.00	
Whitemarsh Island	57.20	67.43	61.23	61.95	4	77	7	71.67	29	37	29	45.00	5.4
FLORIDA—													
Cedar Keys	66.03	73.03	69.37	69.48	5	d 79	9	76.33	30	51	29	54.33	4.1
Jacksonville	65.36	75.93	65.43	68.91	8	82	8	77.00	30	40	29	49.33	5.2
Key West	75.63	79.23		77.43	8	86	8	83.00	30	62	30	66.00	5.4
Knox Hill	58.93	70.46	63.04	64.14	4	84	5	74.33	29	41	29	50.67	6.6
St Augustine	69.90	74.30	69.50	71.23	21	e 82	5	76.67	29	45	29	50.67	3.7
Warrington (f)	62.50	70.33	67.63	66.82	2	81	5	76.00	19	45	29	54.67	6.3
ALABAMA—													
Auburn	55.53	65.53	59.80	60.29	4	81	4	73.33	29	38	29	46.00	6.5
Greene Springs	55.72	69.05	60.02	61.60	15	80	4	73.33	29	37	29	44.67	7.5
MISSISSIPPI—													
Columbus				59.02	?	78			?	32			
Jackson	54.23	64.47	58.50	59.07	16	79	16	76.33	29	34	22	45.00	2.9
Oxford	51.67	62.60	54.37	56.21	15	g 76	4	67.67	19	34	29	42.67	6.2
LOUISIANA—													
New Orleans	60.90	68.32	64.33	64.52	4	80	4	75.00	29	47	28	54.00	6.8
TEXAS—													
Austin	50.57	70.50	55.60	58.89	4	85	3	76.67	29	b 35	22	45.33	6.0
New Wied	55.43	73.13	59.70	62.75	4	87	3	80.33	27	40	22	47.67	6.0
ARKANSAS—													
Camden	50.30	64.87	56.30	57.16	4	h 81	4	75.67	19	32	22	43.00	5.7
TENNESSEE—													
Glenwood	48.29	58.68	50.79	52.59	14	71.5	5	67.77	22	27	29	35.90	6.0
KENTUCKY—													
Danville	49.17	60.00	52.31	53.83	5	76	5	68.67	22	26	22	36.00	4.3
Millersburg (i)	46.27	56.00	49.41	50.56	5	j 70	5	65.33	30	25	29	34.00	7.8
Springdale	43.00	55.13	51.30	49.81	5	73	5	68.00	22	19	22	30.81	5.8
OHIO—													
Cincinnati, [Harper]	44.67	53.47	45.03	47.72	5	72	15	64.33	30	27	22	32.67	5.1
Cheviot	42.43	53.23	47.80	47.82		70	15	63.67		25	22	32.00	
Cleveland	39.87	48.33	41.60	43.27	15	64	6	59.33	30	21	30	26.53	6.7
Dayton	42.41	52.11		47.26		73		42.50		24	22	30.00	
Gallipolis	44.83	56.42	46.67	49.31	11	73	11	63.67	30	26	22	33.00	
Germantown	40.01	49.98	42.62	44.20	5	72.5	5	63.88	30	20.5	30	28.92	6.6
Granville	41.67	47.80	43.13	44.20	15	68	15	59.67	30	24	29	29.67	6.2
Hillsborough	41.75	51.65	4.00	45.80	11	69	11	61.17	27	24	22	30.81	5.8
Jackson, [Gilmor]	42.10	59.60	46.83	49.51	11	72	7	68.67	27	19	21	37.00	6.0
Oberlin	40.37	49.04	41.70	43.70	15	66	6	60.33	30	21	19	21.33	5.8
Perrysburg (k)	41.13	50.73	43.50	45.12	15	70	15	62.67	29	23	29	28.00	
Savannah	38.17	47.47	40.27	41.97	15	67	12	55.33	27	20	29	27.00	6.5
Unionville	40.37	48.60	39.50	42.82	11	66	6	56.00	29	28	22	32.67	7.0
Urbana	38.77	48.73	41.53	43.01	15	74	15	64.33	22	19	22	27.33	6.1
Zanesville	41.82	51.07	44.23	45.71	11	69	11	49.00	30	23	22	33.00	6.8
MICHIGAN—													
Ann Arbor, [Woodruff]	35.17	44.95	38.23	39.45	15	64	15	58.00	29	18	29	23.33	6.0
Ann Arbor, [Winchell]	34.83	44.27	37.24	38.78	15	65	15	57.67	29	17	29	22.47	5.9
Battle Creek	37.13	47.43	40.00	41.52	15	65	15	59.67	29	22	29	27.00	5.1
Cooper	29.25	46.57	39.60	38.47	15	66	15	62.67	22	24	22	28.00	4.4

a Same temperature on the 3d and 4th.

b Same temperature on the 30th.

c Observations taken morning, 3 p. m., and evening.

d Same temperature on the 2th.

e Same temperature on the 20th.

f Observations taken at sunrise, noon, and sunset.

g Same temperature on the 16th.

h Same temperature on the 15th.

i Observations broken from the 20th to the 29th.

j Same temperature on the 11th.

k Observations taken at 7 a. m., 1 p. m., and 9 p. m.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°		°		°		°		°	
Detroit.....	38. 20	45. 87	40. 80	41. 62	15	63	15	58. 67	29	20	29	26. 33	5. 8
Flint.....	32. 40	44. 30	35. 70	37. 47	15	64	—	—	29	14	29	19. 67	—
Grand Rapids.....	33. 33	43. 93	37. 20	39. 15	5	62	5	57. 33	29	18	22	24. 33	5. 1
Monroe.....	—	—	—	—	—	—	—	—	—	—	—	—	5. 7
St. James.....	35. 60	40. 65	36. 43	37. 56	9	55	13	49. 00	19	20	28	22. 00	6. 5
Saugatuck.....	39. 70	49. 36	42. 76	43. 94	5	67	5	60. 67	29	28	19	31. 67	6. 0
INDIANA—													
Milton.....	39. 31	49. 76	42. 47	43. 85	15	a 66	15	60. 15	22	22	21	27. 10	5. 3
New Harmony.....	43. 77	54. 50	47. 53	48. 60	15	74	15	68. 33	22	22	22	31. 67	5. 7
ILLINOIS—													
Athens.....	38. 23	52. 00	42. 10	44. 11	5	70	15	63. 00	22	18	21	25. 00	5. 5
Augusta.....	36. 17	50. 00	40. 33	42. 17	15	71	14	59. 33	22	14	21	22. 67	5. 0
Manchester (b).....	37. 80	51. 27	39. 80	42. 96	14	72	11	61. 00	21	17	21	22. 33	5. 1
Ottawa (c).....	29. 90	41. 50	33. 18	34. 86	20	d 48	25	42. 67	21	18	21	24. 00	4. 7
Upper Alton.....	38. 58	51. 67	44. 90	45. 05	14	e 70	15	67. 00	22	18	21	26. 00	4. 3
MISSOURI—													
St. Louis.....	42. 22	52. 97	46. 13	47. 11	14	71	15	66. 00	22	24	21	28. 67	5. 2
WISCONSIN—													
Beloit.....	34. 63	44. 60	36. 30	38. 51	5	67	11	60. 00	19	14	21	21. 33	2. 8
Janesville.....	34. 13	45. 23	31. 47	36. 94	5	70	5, 11	58. 00	19	10	21	20. 67	4. 9
									22				
Milwaukee, [Winkler].....	33. 17	41. 97	34. 70	36. 61	15	63	5	53. 00	19	11	19	18. 67	4. 3
Milwaukee, [Pomeroy].....	33. 80	44. 27	34. 63	37. 57	15	64	5	52. 00	19	10	19	20. 00	—
Platteville.....	32. 87	45. 90	36. 83	38. 53	5	68	11	60. 33	19	f 8	21	15. 33	5. 0
Superior.....	27. 04	38. 40	30. 24	31. 89	4	57	28	49. 33	19	7	21	14. 33	3. 8
IOWA—													
Dubuque (g).....	35. 33	45. 15	38. 27	39. 58	10	62	11	59. 33	21	15	21	—	4. 9
Fairfield.....	—	—	—	33. 00	—	70	—	—	—	12	—	—	—
Fort Madison (h).....	35. 13	48. 57	40. 07	41. 26	11	e 70	11	62. 00	—	13	21	21. 00	4. 6
Muscatine.....	33. 36	44. 80	34. 90	37. 69	11	67	5	53. 67	22	10	21	20. 00	4. 7
Pella.....	29. 00	43. 00	32. 20	34. 73	9	63	9	50. 00	21	8	21	14. 00	—
Poultney.....	28. 04	42. 07	31. 37	33. 83	11	64	5	50. 00	24	8	21	14. 00	5. 3
Quasqueton (i).....	27. 98	38. 76	30. 53	32. 42	11	61	11	53. 26	19	f 4	21	13. 00	4. 9
MINNESOTA—													
Red Wing.....	28. 67	39. 50	31. 58	33. 25	5	59	9	52. 37	21	8	21	13. 76	5. 8
MEXICO—													
Mirador (j).....	—	—	—	64. 76	—	—	—	73. 26	—	—	—	57. 60	—
WEST INDIES—													
Up Park Camp, Jamaica (k) ..	80. 87	83. 64	—	82. 26	12	87½	28	86. 25	5	l 73½	11	76. 25	5. 7
EASTERN CONTINENT—													
Mosul, Mesopotamia.....	—	—	—	55. 27	—	70	—	—	—	42	—	—	—

a Same temperature on the 20th.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c For the last 11 days of the month only.

d Same temperature on the 27th.

e Same temperature on the 15th.

f Same temperature on the 22d.

g Observations omitted at 2 p. m. on the 21st, which was probably the coldest day.

h Observations taken at 6 a. m., noon, and 7 p. m.

i Incomplete.

j Hours of observation not given.

k Observations taken at 9½ a. m. and 3½ p. m.

l Same temperature on the 11th and 18th.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Horton .....	27.64	34.79	29.65	30.69	2	55.6	2	48.85	29	— 1	29	3.77	5.3
Montreal .....	20.18	25.24	22.17	22.53	2	46	2	41.12	29	—14	29	—9.50	6.4
Red River Settlement .....	—12.21	—2.97	—9.24	—8.14	5	26	6	22.67	24	—48	23	—39.33	4.5
St. Martin .....	16.91	25.23	20.18	20.77	2	48	2	41.40	29	—23	29	—12.90	6.0
Toronto (a) .....	24.80	30.50	26.30	27.20	2	47	1	41.78	29	— 5.2	29	6.60	6.7
MAINE—													
Carmel .....	16.63	29.32	20.50	22.17	2	52	3	39.67	31	—19	29	—2.00	4.9
Fryeburg .....													4.9
Gardiner .....	21.61	31.37	24.58	25.85	1	48	2	43.33	31	—18	29	6.33	5.1
Perry .....	24.26	30.51	25.13	26.63	2	48	2	42.33	29	0	29	4.00	4.6
Portland .....	23.21	32.23	25.71	27.05	9	48	3	38.16	29	3	29	10.16	5.8
Steuben .....	23.29	32.77	25.42	27.16	3	45.2	2	44.67	29	— 3	29	5.33	5.4
Windham .....	24.15	28.90	23.40	25.48	3	36	2, 3	33.33	29	—	29	8.67	3.3
NEW HAMPSHIRE—													
Concord .....	22.97	32.03	26.26	27.09	2	45	3	38.67	31	— 5	31	4.33	4.0
Exeter .....	23.00	32.61	23.94	26.52	22	49	22	41.00	29	— 4	29	10.33	4.6
Londonderry .....	24.45	33.52	27.58	28.52	1	50	2	42.00	29	—	29	10.33	4.6
Manchester .....	22.82	33.44	27.18	27.81	9	53	2	39.33	31	— 6	31	7.00	4.9
Stratford (e) .....	19.68	27.84	25.26	24.26	—	44	2	38.00	—	—12	29	0.67	—
VERMONT—													
Brandon .....	22.87	30.93	24.31	26.04	2	52	2	41.33	29	—10	29	—1.50	5.9
Burlington .....	24.13	30.81	25.84	26.93	2	52	2	45.33	29	—12	29	—0.67	3.9
Craitsbury .....	16.74	24.45	19.39	20.19	2	45	2	39.00	29	—15	29	—4.00	6.2
Montpelier (f) .....	18.80	29.80	26.90	25.17	—	—	—	—	—	—	—	—	—
MASSACHUSETTS—													
Amherst .....	24.41	32.44	27.52	28.12	1	46	2	40.50	31	7	29	9.00	5.9
Boston (a) .....	28.10	38.03	30.81	32.31	5	62	2	43.33	29	7	29	16.33	3.5
Mendon .....	25.84	33.74	29.29	29.62	2	52	2	44.00	29	2	27	12.33	4.8
Nantucket .....	37.88	41.43	38.51	39.27	23	54	2	51.83	29	22	27	25.83	5.5
New Bedford .....	31.14	38.16	33.44	34.25	23	55	2	49.00	29	9	29	17.67	6.3
Newburyport .....	26.27	35.02	26.92	29.40	9	50	23	40.90	29	5	30	14.00	7.9
North Attleboro' .....	28.12	36.23	30.12	31.49	9	55	23	45.30	29	3	29	10.83	4.3
Princeton .....	24.21	29.74	26.00	26.65	9	46	23	38.33	29	3	29	8.67	5.9
Richmond .....	24.90	32.48	27.97	28.45	6	46	6	38.33	28	8	27	11.00	5.8
Southwick .....													6.3
Springfield .....	25.16	35.61	27.81	29.53	1	52	23	42.00	31	2	29	10.33	4.5
Westfield .....	24.42	33.29	27.74	28.48	1	50	23	40.33	31	— 5	31	7.00	4.8
Williamstown .....	23.69	30.32	26.18	26.73	2	47	2	40.30	29	3	29	8.90	6.3
Worcester .....	25.84	35.42	28.52	29.93	8	57	9, 23	42.67	31	5	29	9.67	5.3
RHODE ISLAND—													
Providence (h) .....	28.80	36.50	31.20	32.17	23	53	23	47.00	29	8	29	15.67	4.7
CONNECTICUT—													
New London .....	31.13	39.68	33.74	34.85	23	57	23	48.67	29	13	29	18.33	4.6
Pomfret .....	26.84	33.36	27.77	29.32	9	53	9	42.33	29	7	29	12.00	5.2
Saybrook (i) .....	28.87	35.00	31.87	31.91	9	52	9	47.67	29	16	29	18.67	4.8
NEW YORK—													
Angelica .....	19.74	27.52	21.94	23.07	1	44	2	39.67	27	— 4	27	4.00	6.6
Baldwinsville .....	26.26	31.10	28.35	28.57	2	50	2	43.67	29	6	29	8.67	6.9
Beverly .....	28.38	33.46	30.79	30.88	9	52	2	46.67	29	11	29	13.33	5.4
Canton .....	22.61	28.94	24.84	25.46	2	50	2	45.33	29	—21	29	—7.33	7.0
Flushing .....				30.39		50				7.5			
Gouverneur (j) .....	26.93	33.60	29.60	30.04	9	60	2	49.33	29	0.6	29	10.87	7.5
Lodi .....	25.13	32.87	27.29	28.43	2	56	2	43.33	27	5	29	11.00	7.3
Madrid (k) .....	18.27	31.24	18.55	22.69	22	40	22	38.17	29	—22	29	—	7.1
New York city .....	32.09	38.04	34.03	34.72	9	53	23	48.60	27	14	29	18.73	5.7
Oswego (l) .....	27.16	35.64	31.00	31.27	5	59	2	45.00	29	2	29	8.00	—

a Observations taken at 6 a. m., 2 p. m., and 10 p. m.

b Same temperature on the 4th.

c Same temperature on the 31st.

d Same temperature on the 2d.

e Observations taken morning, noon, and night; hours not specified.

f Observations taken at sunrise, noon, and sunset.

g Same temperature on the 9th.

A Observations taken at sunrise, 1 p. m., and 10 p. m.

i For the last 23 days of the month.

j Observations taken at Watertown, N. Y., after the 6th of the month.

k Observations very irregular; none before the 9th. No observations on the 29th, which was probably the coldest day.

l Observations taken at 8 a. m., 2 p. m., and 9 p. m.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Ovid .....	26.14	32.50	27.69	28.78	1	53	1	44.67	29	5	29	10.33	6.5
Penn Yan (a) .....	25.81	33.97	29.65	29.81	1	54	1	45.33	27	8	29	13.67	7.5
Sag Harbor .....	32.90	40.84	35.74	36.49	1	b 56	16	50.33	29	c 18	27	21.00	5.3
Smithville .....	23.81	30.26	27.03	27.03	1	48	2	44.67	29	—13	29	—1.33	7.4
Spencertown .....	24.10	31.94	27.45	27.83	1	49	2	43.33	31	—3	31	6.33	4.5
Wampsville .....	25.58	34.29	29.90	29.92	2	56	2	46.00	29	0	29	7.67	6.9
NEW JERSEY—													
Bloomfield .....	32.18	42.56	35.56	36.77	9	55	9	47.67	14	8	11	28.33	4.1
											12		
											20		
Burlington .....	30.13	39.65	33.35	34.38	9	58	9	54.33	27	8	27	16.00	7.6
Lambertville .....	27.29	38.59	31.46	32.45	9	55	9	48.67	31	8	31	17.08	4.3
Newark .....				33.60		53.5		49.00		12		18.13	
PENNSYLVANIA—													
Lickinson College .....	28.16	35.67	30.02	31.28	23	53	23	45.50	31	4	31	10.67	5.0
Easton .....	25.52	38.97	29.48	31.32	9	56	9	45.67	31	0	31	12.00	5.1
Gettysburg .....	26.90	37.71	30.16	31.59	23	54	23	46.67	31	4	31	12.33	5.0
Harrisburg .....	32.55	38.71	34.77	35.34	9	55	23	46.67	27	16	31	20.00	5.7
Lima .....	29.58	38.92	32.67	33.72	16	58	9	51.00	31	9	31	17.10	5.7
Meadville .....	25.35	34.74	26.90	29.00	1	50	1	42.67	27	—4	27	8.00	7.1
Morrisville .....	29.28	39.13	31.94	33.45	23	54	9.23	46.00	31	13	27	18.67	4.6
											29		
Moss Grove .....	24.00	30.71	25.63	26.78	1	52	1	42.67	27	—2	27	6.00	6.8
Nazareth .....	24.74	34.45	27.24	28.81	9	52	9	42.67	31	8	31	13.00	5.4
Norristown .....	28.80	36.53	31.41	32.25	22	54	22	44.67	27	13	29	17.60	5.9
Paradise .....				26.00									
Philadelphia .....	34.00	41.30	37.20	37.50	16	60	16	53.00	27	14	27	20.00	6.7
Pittsburg, [O. S.] .....	29.10	35.61	30.80	31.84	15	55	15	47.33	27	4	27	11.33	
Pittsburg, [M. H.] (d) .....	31.03	37.19	33.13	33.20	15	56	9.15	46.50	27	10	27	13.00	7.3
Pocopson .....	30.20	39.94	33.21	34.45	9	58	9	52.00	31	10	27	17.67	6.3
Pottsville (e) .....	26.18	35.27	26.94	29.46	9	51	9	43.40	27	8	31	13.33	6.1
West Haverford .....	31.97	40.71		36.34	16	59	9	52.00	27	13	31	20.00	5.4
MARYLAND—													
Annapolis .....	34.63	41.27	37.03	37.64	9	58	16	52.90	27	15	27	22.67	5.2
Bladensburg .....	29.12	42.33	33.77	35.07	16	61	?	?	27	12	26	20.00	6.7
Chestertown .....	31.81	40.81	34.32	35.65	17	56	16	54.00	27	15	27	20.33	4.9
Frederick .....	30.76	39.71	34.77	35.08	9	56	16	47.27	27	13	31	20.40	6.1
Sykesville .....	28.45	39.97	31.81	33.41	16	53	23	52.00	27	9	27	16.67	5.5
DISTRICT OF COLUMBIA—													
Washington .....	33.13	41.44	36.74	37.10	23	58	16	53.67	27	17	27	22.23	5.4
VIRGINIA—													
Alexandria .....	33.66	42.19	36.55	37.47	16	62	16	55.67	27	14	27	19.00	5.1
Ashland .....	28.87	38.97	32.13	33.32	15	62	14	58.67	26	2	26	8.67	5.7
Crichton's Store (f) .....	39.28	44.72	46.82	43.61	16	67	16	65.67	27	23	27	28.33	5.9
Lewisburg .....	30.84	43.42	35.13	36.46	23	61	23	50.33	27	14	26	17.67	6.6
Smithfield .....				41.27	15	64	15	62.00	20	19	27	27.50	
Winchester .....	30.42	42.03	33.52	35.32	2	g 60	23	50.33	27	c 10	31	18.67	5.6
NORTH CAROLINA—													
Chapel Hill .....	37.42	51.13	41.94	43.50	16	h 69	16	63.67	11	i 22	26	27.67	4.2
SOUTH CAROLINA—													
All Saints .....	46.26	56.58	46.48	49.77	25	72	17	66.67	11	27	11	36.00	5.7
Camden .....	39.58	53.74	44.52	45.95	16	72	16	66.33	11	19	11	30.67	6.2
Charleston .....	49.19	57.48	53.00	53.22		68	17			32	27		
GEORGIA—													
Savannah .....	47.70	58.10	51.70	52.50	25	74	25	67.90	27	32	26	38.30	6.6
Sparta .....	40.81	53.65	44.84	46.43	23	70	16	64.60	26	20	26	28.33	6.2
							23						

a Observations taken at sunrise, 2 p. m., and sunset.

b Same temperature on the 16th.

c Same temperature on the 31st.

d Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 31.45.

e But few observations on the thermometer after the 9th of the month.

f Observations taken at 8½ a. m., noon, and 6½ p. m.

g Same temperature on the 9th and 24th.

h Same temperature on the 23d.

i Same temperature on the 21st and 27th.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
GEORGIA—Continued.	°	°	°	°		°		°		°		°	
The Rock (a) -----				45.14				64.00				26.00	
Whitemarsh Island -----	46.97	57.65	52.26	52.29	17	b 68	25	65.33		30	26	37.33	6.
FLORIDA—													
Cedar Keys -----	57.42	64.48	61.06	60.99	15	c 70	24	67.67	11	40	26	49.67	4.8
Jacksonville -----	54.42	65.19	57.54	59.05	24	b 78	24	71.67	11	34	11	42.33	4.6
							25						
Key West -----	70.26	75.97		73.11	18	d 82	18	80.00	11	54	11	57.00	5.2
Warrington -----	53.06	59.45	58.03	56.85	16	78	16	72.67	26	23	26	33.33	6.4
ALABAMA—													
Auburn -----	44.51	54.90	48.30	49.24		67	23	64.33		17	26	25.33	
MISSISSIPPI—													
Columbus -----				43.04	?	67			?	14			
Jackson -----	42.10	51.48	46.35	46.64	17	74	14	64.33	26	12	26	21.33	2.2
Oxford -----	36.29	47.42	39.77	41.16	13	69	13	59.00	26	8	25	14.67	4.1
LOUISIANA—													
New Orleans -----	48.77	58.33	54.02	53.71	22	72	15	66.83	26	26	25	36.67	6.6
TEXAS—													
Austin -----	37.42	58.71	47.29	47.81	21	79	8	70.00	26	7	25	17.33	5.5
New Wied -----	43.16	60.31	50.06	51.18	12	77	8	71.33	26	13	24	23.67	5.8
TENNESSEE—													
Glenwood -----	33.50	43.87	36.82	38.06	1	62	14	57.23	26	3	26	12.87	5.8
KENTUCKY—													
Danville -----	35.84	45.94	38.16	39.98	1	65	14	56.33	26	9	26	14.00	4.8
Millersburg -----	32.22	38.59	31.33	34.05	1	58	8	48.67	26	3	26	11.67	5.1
Springdale -----	29.18	40.42	35.76	35.12	1	61	14	55.00	26	— 6	26	7.00	5.8
OHIO—													
Bellefontaine -----	24.02	28.23	24.97	25.74	2	50	2	45.00	26	— 6	26	— 2.00	
Cheviot -----	28.13	39.71	32.94	33.59		61	1	50.00		— 6	26	5.67	
Cincinnati, [Harper] -----	30.16	40.55	33.39	34.70	22	55	14	51.00	26	— 2	26	10.67	6.9
Cincinnati, [Telegraph] (e) -----	32.32	39.55	35.06	35.64	1	60	14	51.33	26	3	26	8.33	5.5
Cincinnati, [Lea] -----				34.40			22	50.50			26	7.00	
Cleveland -----	27.79	33.06	28.43	29.76	1	53	1	45.67	27	1	26	9.00	7.1
Gallipolis -----	29.84	41.19	32.81	34.61	16	58	2, 16	49.33	31	5	26	11.33	
Germanstown -----	25.68	34.45	27.72	29.28	14	52.5	14	49.17	26	— 7	26	— 2.20	6.7
Granville -----	28.74	37.84	30.77	32.45	1	64	1	50.67	26	1	26	3.67	5.7
Hillsborough -----	28.23	36.23	30.18	31.55	1	56	14	47.67	26	— 3	26	2.50	5.4
Oberlin -----	28.23	34.03	29.00	30.42	1	54	1	46.33	27	5	26	9.33	5.8
Perrysburg (f) -----	28.35	33.94	30.10	30.80	1	63	1	53.67	26	3	25	9.67	
Savannah -----	26.52	35.41	28.38	30.10	6	57	2	46.00	27	0	26	6.33	6.3
Unionville -----	28.65	33.68	28.97	30.43	1	52	1	43.33	26	g 6	26	11.33	7.4
Urbana -----	25.13	34.16	27.13	28.81	1	54	1	46.00	26	— 5	26	0.67	6.5
Zanesville -----	28.13	38.68	30.97	32.59	2	57	22	49.33	27	2	26	8.00	7.4
MICHIGAN—													
Ann Arbor, [Winchell] -----	22.70	27.37	23.39	24.49	1	53	1	46.13	27	— 4	26	3.53	6.5
Ann Arbor, [Woodruff] -----	22.47	29.74	24.56	25.59	1	54	1	46.33	27	— 3	26	4.17	6.6
Battle Creek -----	24.67	30.81	25.68	27.05	1	61	1	51.00	27	2	30	8.67	7.0
Detroit -----	26.26	31.74	27.23	28.41	1	53	1	46.67	27	3	26	8.33	6.8
Eagle River (h) -----				18.44	8	i 33	14	37.33	28	— 6	2	0.00	
Flint -----	21.60	30.80	23.90	25.43	1	54			27	j 0	26	6.00	
Grand Rapids -----	23.10	28.39	24.45	25.31	1	56	1	51.33	24	k 5	24	6.33	6.1
Monroe, [Whelpley] -----													5.9
St. James -----	22.88	25.59	21.98	23.48	1	46	1	44.67	28	2	24	3.67	8.1
											27		
Saugatuck -----	29.22	34.35	30.71	31.43	1	59	1	54.00	25	10	24	13.67	8.0
INDIANA—													
Milton -----	26.38	34.02	28.65	29.68	15	55	14	47.85	26	— 8	26	0.66	5.8
New Harmony -----	29.45	39.35	32.58	33.79	1	61	1	51.33	26	— 2	26	8.00	5.6

a Observations taken morning, 2 p. m., and evening.

b Same temperature on the 25th.

c Same temperature on the 16th.

d Same temperature on the 30th and 31st.

e Observations taken at 6 a. m., 1 p. m., and 9 p. m.

f Observations taken at 7 a. m., 1 p. m., and 9 p. m.

g Same temperature on the 27th.

h Observations taken at 9 a. m., 3 p. m., and 9 p. m.

i Same temperature on the 15th.

j Same temperature on the 26th.

k Same temperature on the 25th and 29th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—	°	°	°	°		°		°		°			
Athens .....	21. 64	33. 45	25. 19	26. 76	1	63	1	52. 67	26	—20	25	— 7. 00	5. 4
Augusta .....	18. 99	30. 22	22. 80	24. 00	1	64	1	51. 67	30	—16	25	— 6. 00	4. 9
Manchester (a) .....	20. 92	34. 05	24. 33	26. 43	1	64	1	51. 33	26	—17	26	—11. 00	5. 6
Ottawa .....	22. 25	31. 67	23. 66	25. 86	1	63	2	56. 33	—	—10	24	— 3. 00	4. 6
Upper Alton .....	24. 42	36. 00	29. 57	30. 00	1	62	1	52. 67	26	— 8 b	24	0. 33	3. 5
MISSOURI—													
St. Louis .....	27. 60	37. 20	31. 37	32. 06	1	64	1	54. 17	30	— 4	25	2. 50	4. 9
WISCONSIN—													
Beloit .....	18. 61	26. 61	21. 00	22. 07	1	57	1	50. 67	24	—15	24	— 9. 33	4. 0
Janesville .....	15. 06	25. 10	20. 13	20. 10	1	57	1	45. 67	23	—18	24	—11. 33	4. 4
Milwaukee, [Winkler] .....	18. 69	26. 21	20. 71	21. 87	1	55	1	47. 67	24	—14	24	— 8. 67	5. 5
Milwaukee, [Pomeroy] .....	19. 00	26. 39	19. 39	21. 59	1	55	1	41. 33	24	—14	24	— 7. 00	—
Platteville .....	15. 19	23. 55	16. 74	18. 49	1	50	8	45. 67	24	—22	23	—14. 67	6. 1
Superior .....	8. 35	18. 40	11. 30	12. 68	1	42	1	37. 67	24	—25	24	—17. 00	5. 8
IOWA—													
Dubuque .....	18. 83	25. 24	20. 81	21. 63	1	55	8	46. 67	23	—13 c	23	— 9. 33	5. 4
Fairfield .....				22. 00		56				—16			
Fort Madison (d) .....	18. 39	28. 94	24. 74	24. 02	1	60	8	51. 00	30	—18	23	— 7. 00	8. 4
Muscatine .....	17. 52	27. 16	19. 00	21. 23	—	60	1	45. 67	—	—19	23	— 9. 00	5. 8
Pella .....	13. 48	23. 87	15. 90	17. 75	1	54	8	46. 33	29	—16	24	—11. 33	—
Poultney .....	13. 03	23. 39	16. 06	17. 49	1	51	8	41. 33	30	—18	23	—13. 67	6. 3
Quasqueton .....	13. 30	22. 99	15. 00	17. 10	1	52	8	44. 10	30	—17	23	—13. 50	5. 8
MINNESOTA—													
Red Wing .....	6. 25	17. 90	9. 04	11. 06	1	45	1	39. 56	24	—28	24	—20. 00	4. 4
Lac qui Parle .....	6. 35	14. 13	5. 97	8. 82	4	42	7	35. 33	23	—22 e	23	—19. 33	3. 6
MEXICO—													
Mirador (f) .....				62. 96	—		—	70. 04	—			50. 54	—
WEST INDIES—													
Up Park Camp, Jamaica (g) ..	80. 72	85. 14	—	82. 93	16	89½	28	86. 25	13	75	13	76. 25	4. 9
EASTERN CONTINENT—													
Mosul, Mesopotamia .....	—	—	—	53. 65	—	68	—	—	—	34	—	—	—

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 30th.

c Same temperature on the 24th.

d Observations taken at 6 a. m., noon, and 7 p. m.

e Same temperature on the 29th.

f Hours of observation not given.

g Observations taken at 9½ a. m. and 3½ p. m.

## No. 26.—PSYCHROMETER, JANUARY, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
St. Martin .....	.084	.125	.100	7	.218	15	.010	91	89	92	34	59	59
St. Martin (a) .....	.095	.137	.108	7	.236	14	.020	91	89	91	84	70	80
Toronto (b) .....													
VERMONT—													
Burlington .....	.095	.108	.095	7	.272	12	.000 <sup>c</sup>	68	60	69	00	00	46
MASSACHUSETTS—													
Amherst .....	.133	.150	.135	22	.386	14	.053	93	85	91	74	54	61
Nantucket .....	.168	.168	.175	7	.341	14	.040	76	65	77	46	33	45
New Bedford .....	.159	.186	.164	7	.362	4	.036	95	82	91	84	62	15
Newburyport .....	.122	.134	.128	7	.343	14	.003	65	61	66	04	04	15
North Attleboro' .....	.147	.162	.147	15	.411	11	.031	83	74	85	40	38	44
Princeton .....	.110	.119	.116	2	.401	1	.000 <sup>d</sup>	81	83	78	00	38	00
Westfield .....	.119	.138	.117	22	.325	14	.008	79	77	76	40	12	34
Williamstown .....	.130	.154	.129	22	.348	10	.050	91	87	87	57	44	36
Worcester .....	.092	.131	.097					54	73	61	00	00	00
CONNECTICUT—													
Pomfret .....	.133	.173	.141	22	.403	14	.048	93	89	93	78	62	76
NEW YORK—													
New York city .....	.144	.150	.144	7	.315	14	.026	76	77	80	39	33	55
Penn Yan (e) .....		.132		4	.272	23	.080		72			50	
NEW JERSEY—													
Bloomfield .....	.148	.157	.149	7	.361	14	.037	85	72	84	45	42	57
PENNSYLVANIA—													
Lima .....	.156	.163	.157	7	.437	24	.044	85	70	85	52	35	34
Norristown .....	.134	.150	.127	4	.248	23	.042	77	69	70	36	44	44
Philadelphia .....	.159	.167	.162	7	.429	14	.052	84	72	79	55	35	54
MARYLAND—													
Frederick .....	.151	.170	.162	7	.414	24	.070 <sup>f</sup>	87	71	82	61	39	47
DISTRICT OF COLUMBIA—													
Washington .....	.168	.188	.189	7	.436	14	.071	88	72	87	40	35	54
VIRGINIA—													
Alexandria .....	.163	.202	.174					89	76	82	71	47	00
NORTH CAROLINA—													
Thornbury .....	.178	.199	.201	7	.490	23	.058	80	50	72	38	19	29
SOUTH CAROLINA—													
Aiken .....	.228	.281	.293	5	.577	17	.000	80	58	77	40	00	43
All Saints .....	.251	.290	.298	7	.537	23	.045	82	59	83	45	16	40
Camden .....	.214	.270	.246	7	.516	25	.088	87	59	78	53	31	49
Charleston (g) .....													
GEORGIA—													
Augusta .....	.251	.314	.276	7	.612	14	.042	83	72	75	31	36	10
Savannah .....	.266	.286	.299	5	.526	27	.080	79	53	74	46	18	35
FLORIDA—													
Jacksonville .....	.331	.446	.375	7	.641	31	.097	85	74	89	58	39	89
ALABAMA—													
Auburn .....	.233	.272	.339	8	.626	30	.047	75	53	85	28	08	32
Tuscaloosa .....	.242	.326	.262	21	.512	29	.061	83	54	73	49	25	36
MISSISSIPPI—													
Oxford .....	.227	.258	.239	5	.556	30	.063	87	70	78	55	28	35
LOUISIANA—													
New Orleans .....	.331	.341	.355	5	.662	14	.026	83	60	78	10	26	27
TEXAS—													
Austin .....	.240	.247	.277	5	.563	22	.000 <sup>h</sup>	83	47	80	45	00	34
New Wied .....	.268	.366	.279	6	.595 <sup>h</sup>	16	.000	78	61	76	37	00	05

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c, see table of the thermometer for this month.

a These values are derived from the same observations as the preceding, by using the reductions of the observer, which were made by means of a different set of tables.

b Mean force of vapor for the month, .125; mean humidity, 82.

c Same amount on the 14th.

d Same amount on the 15th and 24th.

e Observation taken only at 2 p. m.

f Same amount on the 27th.

g Mean force of vapor for the month, .292, computed approximately from the mean dew point.

h Same amount on the 1st.



## No. 26.—PSYCHROMETER, JANUARY, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>TENNESSEE—</b>	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches.</i>						
Glenwood.....	.187	.192	.202	10	.445	26	.043	80	58	77	41	14	44
Knoxville.....	.199	.218	.231	11	.411	12	.071	88	68	85	62	14	46
<b>KENTUCKY—</b>													
Springdale.....	.157	.201	.195	5	.374	30	.045	85	75	81	54	34	49
<b>OHIO—</b>													
Gallipolis.....	.163	.222	.187	6	.464	27	.045	84	74	81	76	44	57
Germantown.....	.135	.157	.143	6	.373	13	.047	90	72	82	50	43	40
Hillsborough.....	.156	.185	.165	12	.376	27	.054	90	82	89	56	41	58
Zanesville.....	.138	.176	.152	12	.391	27	.022	78	71	80	35	30	38
<b>MICHIGAN—</b>													
Ann Arbor, [Winchell].....	.116	.130	.128	8	.325	22	.035	90	79	87	70	52	60
<b>INDIANA—</b>													
Madison.....	.168	.220	.184	6	.559	31	.065	89	84	86	64	58½	60
New Harmony.....	.176	.204	.203	6	.448 <sup>a</sup>	22	.058	93	79	94	55	46	63
<b>ILLINOIS—</b>													
Manchester.....	.146	.192	.160	6	.420	23	.036	94	88	94	63	56	60
Upper Alton (b).....	.253	.373	.286	2	.549	20	.143	89	92	86	73	85	72
<b>MISSOURI—</b>													
St. Louis.....	.144	.169	.157	5	.390	22	.041	77	63	73	49	23	39
<b>IOWA—</b>													
Dubuque.....	.114	.119	.117	2	.297	22	.022	89	70	85	58	11	39
<b>CALIFORNIA—</b>													
Sacramento, [Logan] (c).....					.294		.167						
Sacramento, [Hatch] (d).....					.336		.134						

<sup>a</sup> Same amount on the 12th.<sup>b</sup> Incomplete.<sup>c</sup> Mean force of vapor, .230, computed approximately from the mean dew point for the month.<sup>d</sup> Mean force of vapor, .221; mean humidity, 73; max., 89; min., 55. The means are computed approximately from the mean dew point for each day.

## No. 27.—PSYCHROMETER, FEBRUARY, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			Date	MAXIMUM.		MINIMUM.	MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.		Amt.	Date.		7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
St. Martin .....	.063	.102	.078	18	.212	7	.002	85	85	88	22	63	46
St. Martin (a) .....	.071	.112	.090	18	.226	7	.003	83	85	89	29	58	78
Toronto (b) .....													
VERMONT—													
Burlington .....	.064	.077	.071	15	.241	4	.000c	52	50	60	00	00	00
MASSACHUSETTS—													
Amherst .....	.095	.114	.104	15	.254	7	.020	95	81	93	81	50	68
Nantucket .....	.113	.106	.120	15	.276	11	.000d	59	54	74	00	00	59
New Bedford .....	.100	.126	.105	15	.228	7	.024	85	75	83	59	51	60
Newburyport .....	.075	.084	.085	15	.237	7	.000	59	54	61	11	15	04
North Attleboro' .....	.080	.093	.091	15	.256	15	.000	50	67	77	00	30	47
Princeton .....	.079	.083	.068	16	.211	24	.000	84	71	65	00	26	14
Westfield .....	.075	.089	.085	16	.228	11	.000	65	64	67	00	35	04
Williamstown .....	.093	.103	.093	15	.208	11	.000	54	86	94	60	53	74
Worcester .....	.139	.220	.181	15	.248	3	.000e	45	56	49	00	00	00
CONNECTICUT—													
Pomfret .....	.100	.122	.099	15	.238f	26	.045	95	87	90	76	53	76
NEW YORK—													
New York city .....	.098	.113	.100	15	.226	3	.006	77	72	70	36	35	10
Penn Yan (g) .....		.119		14	.260	4	.045		68			50	
NEW JERSEY—													
Bloomfield .....	.093	.112	.105	15	.239	0	.005	79	56	77	57	28	17
PENNSYLVANIA—													
Lima .....	.097	.105	.106	14	.299	3	.029	78	62	75	46	23	44
Norristown .....	.087	.099	.090	14	.278	6	.000h	62	53	59	50	02	00
Philadelphia .....	.102	.116	.113	14	.305	0	.013	77	64	72	45	23	44
MARYLAND—													
Frederick .....	.107	.120	.113	14	.258	10	.030	81	66	74	64	39	41
DISTRICT OF COLUMBIA—													
Washington .....	.113	.112	.103	14	.403	27	.039i	78	55	77	28	37	46
VIRGINIA—													
Alexandria .....	.069	.152	.131	14	.373	10	.018	81	82	79	26	58	63
NORTH CAROLINA—													
Thorubury .....	.130	.116	.127					78	49	56	37	00	35
SOUTH CAROLINA—													
Aiken .....	.184	.224	.213	8	.537	26	.076	77	52	59	45	19	40
All Saints .....	.199	.226	.228	8	.572	3	.090j	71	57	79	50	24	28
Camden .....	.158	.182	.180	8	.420j	9	.048	84	47	71	13	10	38
Charleston (k) .....													
GEORGIA—													
Augusta (l) .....	.230	.322	.248	8	.487	12	.035	80	50	73	10	50	32
Savannah .....	.209	.203	.221	8	.551	27	.068	75	44	63	43	16	29
FLORIDA—													
Jacksonville .....	.282	.380	.320	8	.678	1	.148	86	70	88	66	51	71
ALABAMA—													
Auburn .....	.158	.159	.167	8	.491	12	.054	68	41	57	40	08	22
Greene Springs .....	.200	.237	.198	23	.570	28	.087	81	54	69	58	07	34
Tuscaloosa .....	.182	.180	.179	7	.526	3	.041	79	45	66	56	12	43
MISSISSIPPI—													
Oxford .....	.160	.178	.183	22	.429	28	.071	85	57	73	61	30	40
LOUISIANA—													
New Orleans .....	.266	.264	.301	23	.612	26	.120	86	57	81	58	31	46

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Mean force of vapor for the month, .088; mean humidity, 80.

c Same amount on the 5th, 6th, 22d, and 24th.

d Same amount on the 17th.

e Same amount on the 6th, 7th, 24th, 25th, 26th, and 27th.

f Same amount on the 16th.

g Observation taken only at 2 p. m.

h Same amount on the 7th.

i Same amount on the 28th.

j Same amount on the 3th.

k Mean force of vapor, .224, computed approximately from the

mean dew point.

For the first 14 days of the month only.



## No. 27.—PSYCHROMETER, FEBRUARY, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
TEXAS—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Austin .....	.220	.263	.286	22	.529	26	.103	90	54	85	58	18	48
New Wied .....	.240	.341	.319	5	1.024	26	.029	79	62	87	25	13	28
TENNESSEE—													
Glenwood .....	.136	.133	.144	7	.413	26	.059	83	54	67	42	26	26
Knoxville .....	.139	.149	.135	8	.399	3	.053	78	51	67	37	25	10
KENTUCKY—													
Springdale .....	.114	.154	.152	13	.322	26	.033	85	79	84	60	42	62
OHIO—													
Gallipolis .....	.107	.163	.125	13	.443	24	.000	82	81	80	64	00	53
Germantown .....	.094	.110	.102	13	.244	26	.038	91	71	83	76	49	51
Hillsborough .....	.108	.130	.136	7	.289 <sup>a</sup>	26	.048	100	84	97	87	47	67
Cincinnati, [Hurt] .....	.080	.108	.110	11	.214	7	.017	68	60	68	41	10	29
MICHIGAN—													
Ann Arbor, [Winchell] .....	.081	.097	.083	13	.221	6	.023	96	83	92	77	59	64
INDIANA—													
Madison .....	.130	.154	.148	12	.316 <sup>a</sup>	27	.054	88	79	87	74	52	65
New Harmony .....	.131	.154	.148	7	.377	26	.054	95	68	94	61	30	70
ILLINOIS—													
Manchester .....	.108	.138	.135	21	.262	4	.028	93	85	100	31	49	100
MISSOURI—													
St. Louis .....	.114	.121	.127	12	.298	25	.041	80	57	74	55	25	47
IOWA—													
Dubuque .....	.079	.102	.090	12	.199	26	.033	90	74	88	66	44	62
CALIFORNIA—													
Sacramento, [Logan] (b) .....					.381		.098						
Sacramento, [Hatch] (c) .....					.437		.102						

<sup>a</sup> Same amount on the 13th.<sup>b</sup> Mean force of vapor, .261, computed approximately from the mean dew point for the month.<sup>c</sup> Observations taken at sunrise, 3 p. m., and 10 p. m.; mean force of vapor, .266; mean humidity, 66; max., 92; min., 36. The means are computed approximately from the mean dew point for each day.

## No. 28.—PSYCHROMETER, MARCH, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
St. Martin .....	.091	.156	.111	31	.302	1	.034	85	82	84	56	38	26
St. Martin (a) .....	.102	.167	.107	5	.312	1	.040	85	79	82	70	56	53
Toronto (b) .....													
VERMONT—													
Burlington .....	.088	.101	.103	2	.174	31	.016	58	51	67	43	04	46
MASSACHUSETTS—													
Amherst .....	.133	.139	.136	7	.268	1	.060	86	69	81	63	33	62
Nantucket .....	.141	.139	.161	31	.261	25	.074	88	56	78	45	32	46
New Bedford .....	.138	.173	.150	31	.255	1	.052	79	68	84	53	51	66
Newburyport .....	.122	.131	.134	6	.217	1	.054	70	53	72	52	25	32
North Attleboro' .....	.108	.113	.115	29	.250	30	.037	68	49	67	47	07	39
Princeton .....	.096	.103	.093	26	.181	20	.031	58	56	62	43	24	24
Westfield .....	.099	.112	.115	30	.221	24	.034	56	50	65	38	24	30
Williamstown .....	.131	.154	.140	5	.261	1	.059	92	82	87	56	48	64
Worcester .....	.099	.139	.116	15	.261	25	.004	62	64	63	05	19	11
CONNECTICUT—													
Pomfret .....	.124	.155	.134	31	.242	1	.057	83	70	81	52	42	67
NEW YORK—													
New York city .....	.135	.152	.140	31	.224	1	.013	72	56	69	15	35	29
Penn Yan (c) .....		.125		30	.190	7	.064		61			29	
NEW JERSEY—													
Bloomfield .....	.118	.151	.147	16	.263	11	.054	67	58	72	36	22	41
PENNSYLVANIA—													
Lima .....	.137	.136	.146	15	.305	10	.053	71	52	69	31	24	35
Norristown .....	.149	.182	.166	31	.491	26	.030	76	67	75	08	14	44
Philadelphia .....	.143	.152	.162	15	.298	1	.066	71	53	65	47	27	43
Pottsville (d) .....		.132		31	.256	4	.036		57			15	
MARYLAND—													
Frederick .....	.139	.159	.152	15	.310	20	.000	71	56	65	23	00	36
DISTRICT OF COLUMBIA—													
Washington .....	.166	.159	.191	6	.383	29	.044	72	51	75	24	11	34
VIRGINIA—													
Alexandria .....	.181	.215	.209	5	.433	3	.046	80	68	82	36	39	56
NORTH CAROLINA—													
Thornbury .....	.208	.187	.205	15	.532	10	.046	76	42	62	43	12	29
SOUTH CAROLINA—													
Aiken .....	.260	.246	.269	15	.621	28	.038	74	41	57	47	09	19
All Saints .....	.290	.309	.307	17	.638	9	.081	82	53	75	49	18	17
Camden .....	.249	.267	.266	17	.612	9	.073	79	46	65	50	11	35
Charleston (e) .....													
GEORGIA—													
Augusta (d) .....	.333	.325	.264	6	.733	25	.071	86	68	66	56	26	15
Savannah .....	.298	.277	.313	17	.633	2	.061	74	40	58	37	11	24
FLORIDA—													
Jacksonville .....	.381	.523	.402	16	.942	21	.000	81	69	82	00	44	49
ALABAMA—													
Auburn .....	.236	.220	.244	15	.652	27	.030	64	32	50	29	07	15
Greene Springs .....	.260	.311	.282	15	.798	25	.058	72	47	60	31	16	21
Tuscaloosa .....	.248	.234	.260	16	.627	1	.064	72	36	58	42	12	25
MISSISSIPPI—													
Oxford (d) .....	.242	.318	.272	11	.799	2	.019	78	55	70	12	31	34
LOUISIANA—													
New Orleans .....	.368	.343	.367	17	.752	27	.103	84	52	72	48	16	35
TEXAS—													
Austin .....	.286	.263	.375					84	37	84	43	00	42
New Wied (d) .....	.297	.569	.435	7	1.173	1	.076	72	50	84	28	24	33

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Mean force of vapor for the month, .132; mean humidity, 81.

c Observations taken only at 2 p. m.

d Incomplete.

e Mean force of vapor, .295; computed approximately from the mean dew point.



## No. 28.—PSYCHROMETER, MARCH, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
TENNESSEE—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches</i>						
Glenwood .....	.172	.173	.201	12	.506	28	.051	70	42	62	24	14	29
Knoxville .....	.185	.197	.199	---	---	---	---	77	41	60	33	16	00
Lebanon .....	.161	.176	.194	---	---	---	---	55	44	62	00	20	00
KENTUCKY—													
Springdale .....	.162	.210	.206	11	.435	1	.057	84	72	78	55	37	50
OHIO—													
Gallipolis .....	.181	.205	.181	7	.342	1	.063	81	62	73	62	15	45
Germantown .....	.139	.167	.144	13	.320	1	.059	82	54	76	48	26	46
Hillsborough .....	.162	.177	.164	11	.348	19	.070	89	69	77	49	30	40
MICHIGAN—													
Ann Arbor, [Winchell] .....	.115	.129	.122	2	.228	24	.049	81	67	77	38	37	38
INDIANA—													
Madison .....	.180	.219	.202	11	.464	1	.082	81	75	79	67	51	52
New Harmony .....	.150	.197	.205	12	.556	1	.071	89	60	88	52	32	39
ILLINOIS—													
Manchester .....	.158	.203	.194	11	.469	1	.062	90	77	93	06	52	68
MISSOURI—													
St. Louis .....	.146	.168	.171	11	.440	20	.040	71	52	65	44	20	37
IOWA—													
Dubuque .....	.127	.157	.150	6	.802	24	.096	82	69	84	60	31	60
CALIFORNIA—													
Sacramento, [Logan] (a) .....	---	---	---	---	.500	---	.181	---	---	---	---	---	---
Sacramento [Hatch] (b) .....	---	---	---	---	.478	---	.120	---	---	---	---	---	---
WESTERN AFRICA—													
Nengenenge .....	.874	.987	.928	3	1.128	24	.744	91	88	90	78	68	72

a Mean force of vapor, .301; computed approximately from the mean dew point.

b Mean force of vapor, .342; mean humidity, 73; max., 93; min., 39. The means are computed approximately from the mean dew point for each day.

## No. 29.—PSYCHROMETER, APRIL, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
St. Martin.....	.160	.241	.190	24	.489	2	.047 <sup>a</sup>	81	72	75	46	44	55
St. Martin (b).....	.181	.272	.204	24	.421	2	.062	86	74	84	71	49	65
Toronto (c).....													
VERMONT—													
Burlington.....	.171	.188	.173	24	.436	28	.025	67	48	63	42	09	40
MASSACHUSETTS—													
Amherst.....	.211	.235	.217	19	.503	2	.066	87	65	81	53	26	49
Nantucket.....	.196	.193	.216	19	.350	2	.060	82	54	80	22	35	20
New Bedford.....	.221	.276	.244					84	70	89	71	43	00
Newburyport.....	.172	.191	.191	18	.325	7	.063	69	57	73	32	15	38
North Attleboro'.....	.172	.165	.181	25	.388	28	.005	64	46	66	20	02	24
Princeton.....	.155	.163	.165					66	53	71	00	13	38
Westfield.....	.168	.214	.184	25	.576	2	.051	71	55	65	40	15	35
Williamstown.....	.202	.246	.246	18	.460	4	.056	87	73	86	39	17	66
Worcester.....	.168	.214	.197	18	.472	7	.000	69	59	72	25	24	00
CONNECTICUT—													
Pomfret.....	.209	.262	.217	18	.529	2	.074	88	69	81	57	41	48
NEW YORK—													
New York city.....	.218	.237	.218	19	.488	1	.040	75	61	70	36	22	18
Penn Yan (d).....		.238		18	.563	27	.079		56			21	
Spencertown.....	.202	.247	.181	16	.473	2	.019 <sup>e</sup>	77	69	67	45	35	06
NEW JERSEY—													
Bloomfield.....	.203	.268	.263	19	.667	14	.051	73	61	77	12	19	47
PENNSYLVANIA—													
Lima.....	.254	.261	.255	24	.482	3	.064	76	52	73	39	12	39
Norristown.....	.271	.328	.304	24	.671	11	.105	80	72	80	37	22	42
Philadelphia.....	.246	.281	.281	18	.557	2	.072	72	54	67	44	23	34
Pottsville.....	.193	.235	.229	18	.510	1	.051	68	52	72	35	02	29
MARYLAND—													
Frederick.....	.250	.280	.280	18	.648	3	.060	71	46	66	32	22	37
DISTRICT OF COLUMBIA—													
Washington.....	.271	.292	.297					75	48	66	26	00	37
VIRGINIA—													
Alexandria.....	.313	.397	.354	24	.668	2	.063	84	66	77	33	18	44
NORTH CAROLINA—													
Thornbury.....	.277	.291	.304	18	.604	3		73	38	62	27	11	33
SOUTH CAROLINA—													
Aiken.....	.364	.384	.381	30	.772	11	.112 <sup>f</sup>	66	43	58	34	19	28
All Saints.....	.431	.452	.447	19	.759	11	.114	84	61	78	59	21	59
Camden.....	.367	.366	.405	17	.574	3	.100	73	41	65	34	19	30
Charleston (g).....													
GEORGIA—													
Savannah.....	.441	.440	.471	22	.664	12	.176	77	48	75	55	25	47
FLORIDA—													
Jacksonville.....	.542	.664	.583	19	.997	9	.185	82	70	88	15	52	62
ALABAMA—													
Auburn.....	.358	.286	.328					64	31	48	21	00	15
Greene Springs.....	.486	.554	.484	15	.882	11	.168	75	52	68	39	36	38
MISSISSIPPI—													
Oxford.....	.415	.463	.401	18	.891	21	.123	69	53	61	30	19	18
LOUISIANA—													
New Orleans.....	.526	.491	.567	30	.778	12	.242	88	51	78	45	24	49
TEXAS—													
Austin.....	.505	.443	.505	19	.658 <sup>h</sup>	6	.225	89	41	75	66	22	41
New Wied.....	.578	.776	.587	23	1.296	7	.181	80	67	83	75	20	60

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

<sup>a</sup> Same amount on the 3d.

<sup>b</sup> For note on this place see table No. 26.

<sup>c</sup> Mean force of vapor for the month, .308. Mean humidity, 75.

<sup>d</sup> Observations taken only at 2 p. m.

<sup>e</sup> Same amount on the 9th.

<sup>f</sup> Same amount on the 13th.

<sup>g</sup> Mean force of vapor, .491; computed approximately from the mean dew point.

<sup>h</sup> Same amount on the 30th.



## No. 29.—PSYCHROMETER, APRIL, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>TENNESSEE—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Glenwood .....	.321	.313	.329	14	.567	2	.093	72	41	60	45	19	28
Knoxville .....	.312	.264	.307	16	.512	1	.000	68	39	59	26	00	24
<b>OHIO—</b>													
Gallipolis .....	.300	.382	.331	18	.731	7	.096	69	51	67	43	13	48
Germantown .....	.277	.269	.297	30	.543	2	.029	72	40	73	26	18	35
Hillsborough .....	.279	.274	.266	30	.556	0	.016	73	43	59	44	04	31
<b>MICHIGAN—</b>													
Ann Arbor, [Winchell] .....	.234	.241	.248	30	.556	2	.069	73	49	68	46	22	37
<b>INDIANA—</b>													
Madison .....	.316	.352	.345	---	---	---	---	75	52	67	45	24	00
New Harmony .....	.319	.342	.379	13	.644	2	.100	75	47	75	42	26	41
<b>ILLINOIS—</b>													
Manchester .....	.312	.474	.355	29	.884	2	.130	79	61	74	58	34	43
Ottawa .....	.333	.618	.385	18	1.228	2	.106	90	86	94	47	65	79
Upper Alton .....	.368	.607	.386	30	.942	22	.000	78	74	70	02	44	25
<b>MISSOURI—</b>													
St. Louis .....	.259	.292	.292	19	.586	2	.069	53	40	53	31	17	32
<b>IOWA—</b>													
Dubuque .....	.267	.249	.297	17	.662	9	.047	71	39	62	37	12	28
Muscataine .....	.256	.370	.305	30	.719	10	.061	72	51	73	34	28	32

## No. 30.—PSYCHROMETER, MAY, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches.</i>						
St. Martin .....	.257	.403	.286	24	.710	10	.147	78	50	71	53	28	41
St. Martin (a) .....	.286	.431	.308	24	.692	10	.167	82	54	75	68	42	59
Toronto (b) .....													
MAINE—													
Gardiner .....	.313	.339						50	61		36	45	
VERMONT—													
Burlington .....	.225	.286	.231	16	.543	7	.077	57	43	52	24	23	31
MASSACHUSETTS—													
Amherst .....	.300	.287	.292	24	.590	10	.115	81	44	71	56	22	33
Nantucket .....	.271	.252	.288	25	.420	10	.097	71	55	82	39	14	56
New Bedford .....	.332	.373	.330	13	.571	27	.163	87	67	91	52	26	73
Newburyport .....	.258	.278	.285	24	.570	10	.121	69	52	73	35	19	23
North Attleboro' .....	.243	.223	.240	24	.534	7	.076	62	38	70	25	13	28
Princeton .....	.213	.228	.234	24	.504	11	.051	62	45	63	32	09	22
Westfield .....	.243	.255	.272	30	.485c	10	.105	68	38	64	47	17	34
Williamstown (d) .....	.286	.310	.302	25	.502	10	.153	85	64	74	64	40	49
Worcester .....	.239	.270	.261	16	.627	3	.029	62	46	67	25	05	39
CONNECTICUT—													
Pomfret .....	.307	.373	.300	24	.666	9	.164	84	63	83	58	43	50
NEW YORK—													
New York city .....	.305	.305	.308	24	.657	9	.129	68	50	67	43	25	31
Penn Yan (f) .....		.275		18	.496	6	.149		48			14	
Spencertown .....	.272	.303	.247	19	.639	9	.103	72	52	73	52	22	38
NEW JERSEY—													
Bloomfield .....	.296	.361	.340	24	.698	11	.149	70	52	75	40	22	33
PENNSYLVANIA—													
Lima .....	.310	.279	.321	24	.672	4	.058	70	42	67	39	10	36
Norristown .....	.285	.295	.284					74	47	62	45	12	00
Philadelphia .....	.326	.321	.340	24	.704	5	.124	68	43	50	41	16	41
Pottsville .....	.240	.276	.274	24	.650	21	.052	63	42	66	32	16	52
MARYLAND—													
Frederick .....	.313	.339	.345	24	.684	8	.092	62	41	61	33	18	50
DISTRICT OF COLUMBIA—													
Washington .....	.376	.372	.403	24	.785	4	.137	78	46	68	44	21	39
VIRGINIA—													
Alexandria .....	.385	.451	.415	24	.937	11	.221	75	57	73	47	32	54
SOUTH CAROLINA—													
Aiken .....	.508	.548	.500	24	.836	5	.221	77	55	62	54	34	44
All Saints .....	.555	.572	.565	24	.873	9	.194	81	63	78	48	32	46
Camden .....	.491	.502	.502	23	.751	8	.216	74	50	68	49	31	31
Charleston (g) .....													
GEORGIA—													
Savannah .....	.582	.547	.586	23	.856	9	.217	50	47	74	42	30	53
FLORIDA—													
Jacksonville .....	.681	.791	.713	24	1.197	12	.325	84	67	88	59	45	61
ALABAMA—													
Auburn .....	.501	.356	.440					69	32	55	49	00	28
Greene Springs .....	.598	.588	.621					76	44	68	54	00	53
MISSISSIPPI—													
Oxford .....	.600	.624	.546	12	.990	10	.150	67	61	73	37	33	20
LOUISIANA—													
New Orleans .....	.669	.641	.705	29	.851	5	.340	89	53	79	53	39	64
TEXAS—													
Austin .....	.608	.549	.605	16	.863	3	.371	88	43	68	56	27	52
New Wied .....	.732	.893	.684	18	1.805	2	.464	85	58	82	76	33	56

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Mean force of vapor for the month, .258. Mean humidity, 65.

c Same amount on the 31st.

d Incomplete.

e Same amount on the 10th.

f Observations taken only at 2 p. m.

g Mean force of vapor, .6.2; computed approximately from the mean dew point.



## No. 30.—PSYCHROMETER, MAY, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>TENNESSEE—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Glenwood.....	.439	.473	.483	22	.723	11	.154	84	54	78	46	21	58
Knoxville.....	.434	.430	.440	24	.730	5	.119	76	47	70	53	17	48
<b>KENTUCKY—</b>													
Springdale.....	.390	.587	.515	24	1.366	8	.155	92	65	78	76	34	41
<b>OHIO—</b>													
Gallipolis.....	.419	.500	.534	23	.813	4	.181	73	56	74	53	24	43
Germantown.....	.365	.366	.377	22	.746	9	.134	74	45	77	36	20	40
Hillsborough.....	.381	.427	.361	22	.792	4	.149	81	56	69	58	28	40
<b>MICHIGAN—</b>													
Ann Arbor, [Winchell].....	.265	.275	.265	30	.575	6	.115	59	40	60	28	18	32
<b>INDIANA—</b>													
Madison.....	.434	.481	.474	22	.881	8	.175	77	56	71	43	35	46
New Harmony.....	.444	.492	.495	22	.874	8	.164	79	55	82	49	13	61
<b>ILLINOIS—</b>													
Manchester.....	.430	.573	.441	22	1.029	8	.170	82	67	82	64	43	48
Ottawa.....	.466	.727	.448	22	1.445	9	.169	87	85	91	54	44	52
Upper Alton.....	.465	.660	.512	21	1.111	7	.169	89	82	83	75	49	54
<b>MISSOURI—</b>													
St. Louis.....	.416	.463	.448	22	.814	8	.065	71	54	71	44	09	50
<b>WISCONSIN—</b>													
Madison.....	.266	.268	.250	22	.691	7	.035	45	39	40	23	09	10
<b>IOWA—</b>													
Dubuque.....	.314	.346	.336	21	.789	26	.099	62	45	58	28	21	16
Muscatine.....	.332	.476	.359	21	.850	9	.120	78	61	73	53	32	45
<b>WESTERN AFRICA—</b>													
Nèngènége.....	.880	1.004	.963	7	1.151	15	.732	93	87	91	78	65	73

## No. 31.—PSYCHROMETER, JUNE, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			Date	MAXIMUM.		MINIMUM.	MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.		Amt.	Date.		7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
St Martin .....	.410	.525	.427	30	1.074	16	.194	83	71	81	56	35	49
St Martin (a) .....	.420	.537	.445	29	.940	17	.243	85	72	85	61	47	64
Toronto (b) .....													
MAINE—													
Gardiner .....	.553	.630						92	79		71	47	
VERMONT—													
Burlington .....	.425	.507	.421	30	.860	12	.221	76	64	75	57	35	54
MASSACHUSETTS—													
Amherst .....	.493	.513	.496	30	.852	17	.242	89	65	86	50	36	61
Nantucket .....	.425	.451	.444	29	.704	21	.190	72	65	86	29	42	75
New Bedford .....	.527	.549	.542	30	.819	18	.269	87	73	91	54	46	70
Newburyport .....	.437	.444	.430	28	.729	17	.191	76	57	75	43	24	50
North Attleboro' .....	.434	.431	.441	28	.747	17	.152	73	55	80	43	18	59
Princeton .....	.384	.395	.408	30	.699	6	.173	76	58	78	35	26	36
Westfield .....	.419	.451	.442	30	.657	4	.222	85	58	78	56	33	56
Worcester .....	.430	.495	.423	30	.954	19	.133	73	65	74	33	39	43
CONNECTICUT—													
Pomfret .....	.488	.555	.494	30	.915	8	.282	89	76	89	70	53	50
NEW YORK—													
New York city .....	.485	.497	.494	28	.854	8	.217	75	61	75	51	24	44
Penn Yan (c) .....		.400		30	.718	10	.159		53			20	
Spencertown (d) .....	.420	.506	.444	22	.856	1	.216	82	75	84	37	48	37
NEW JERSEY—													
Bloomfield .....	.482	.569	.517	28	.843	13	.269	83	64	85	58	35	52
PENNSYLVANIA—													
Lima .....	.525	.549	.545	29	.921	13	.258	82	63	89	50	39	69
Norristown .....	.459	.489	.482	29	.860	14	.234	77	59	72	42	32	36
Philadelphia .....	.523	.537	.576	30	1.059	12	.260	75	57	73	55	34	53
Pottsville .....	.422	.453	.471	29	.851	9	.000	73	53	79	00	25	31
MARYLAND—													
Frederick .....	.516	.555	.543	29	.937	4	.185	72	59	79	46	27	38
DISTRICT OF COLUMBIA—													
Washington .....	.551	.562	.597	29	.895	14	.270	83	60	81	59	27	48
VIRGINIA—													
Alexandria .....	.582	.656	.609	24	1.030	13	.303	82	69	85	58	42	68
SOUTH CAROLINA—													
Aiken .....	.627	.634	.626	19	.915	4	.323 <i>e</i>	80	58	73	61	37	44
All Saints .....	.684	.718	.702	21	.904	14	.340	82	74	79	59	50	45
Camden .....	.603	.631	.621	23	.895	5	.270	75	56	78	32	37	62
Charleston (f) .....													
GEORGIA—													
Augusta (g) .....	.752	.895	.851	20	1.101	14	.403	86	83	82	67	43	59
Savannah .....	.690	.672	.688	24	.879	4	.295	79	56	78	57	31	52
FLORIDA—													
Jacksonville .....	.821	.889	.802	18	1.366	4	.537	89	79	90	71	50	81
ALABAMA—													
Auburn .....	.562	.488	.554	7	.827	4	.157	72	43	64	49	16	29
Greene Springs .....	.668	.690	.650	28	.891	2	.345	79	55	76	58	34	54
MISSISSIPPI—													
Oxford .....	.639	.642	.651	22	1.017	2	.309	84	63	84	41	40	59
LOUISIANA—													
New Orleans .....	.737	.739	.758	15	1.165	3	.296	88	62	82	51	30	35
TEXAS—													
Austin .....	.600	.564	.624	17	.772 <i>h</i>	2	.349 <i>i</i>	75	51	68	51	28	49
New Wied .....	.777	.922	.775	19	1.382	8	.447	83	63	89	60	29	60
TENNESSEE—													
Glenwood .....	.557	.568	.592	28	.849	4	.311	90	61	85	74	33	64
Knoxville .....	.517	.507	.519	17	.744 <i>j</i>	4	.205	78	52	76	65	27	53

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Mean force of vapor for the month, .406; mean humidity, 78.

c Observations taken only at 2 p. m.

d For the first 25 days of the month only.

e Same amount on the 14th.

f Mean force of vapor .775, computed approximately from the mean dew point.

g Incomplete.

h Same amount on the 18th.

i Same amount on the 9th.

j Same amount on the 23th.



## No. 31.—PSYCHROMETER, JUNE, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
KENTUCKY—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Springdale .....	.487	.709	.613	26	1.242	3	.225	96	71	85	81	53	57
OHIO—													
Gallipolis .....	.554	.634	.640	28	.923 <sup>a</sup>	3	.295	82	71	78	68	56	42
Germantown .....	.531	.550	.522	28	.825	3	.233	85	63	87	67	44	61
Hillsborough .....	.533	.587	.529	29	.913	12	.272	95	74	90	75	46	65
Zanesville .....	.520	.565	.582	29	1.078	13	.287	95	66	96	62	37	73
MICHIGAN—													
Ann Arbor, [Winchell] .....	.431	.442	.428	29	.832	11	.135	78	61	85	42	25	51
INDIANA—													
Madison .....	.549	.638	.598	30	1.074	2	.265	87	73	82	66	53	55
New Harmony .....	.605	.604	.606	27	.942	2	.338	82	62	84	58	45	66
ILLINOIS—													
Manchester .....	.540	.647	.569	28	1.051	13	.261	81	65	85	38	46	64
Ottawa .....	.633	.815	.615	16	1.427	1	.289 <sup>b</sup>	94	90	95	79	77	87
Upper Alton .....	.568	.782	.575	17	1.269	3	.309	89	81	84	76	31	59
MISSOURI—													
St. Louis .....	.528	.526	.538	18	.860	10	.213	75	53	75	57	34	20
IOWA—													
Dubuque .....	.459	.478	.481	27	.921	3	.163	73	53	74	49	20	52
Muscatine .....	.531	.653	.536	28	1.005	2	.175	85	69	86	50	39	57
WESTERN AFRICA—													
Nèngenènge .....	.851	.964	.925	8	1.101	2	.745	93	90	92	90	87	87

<sup>a</sup> Same amount on the 29th.<sup>b</sup> Same amount on the 3d.

## No. 32.—PSYCHROMETER, JULY, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
St. Martin (a).....	.550	.637	.579	16	.814 <sup>b</sup>	8	.326	82	61	86	59	44	67
St. Martin.....	.548	.621	.582	16	.876	8	.317	81	59	84	65	41	63
Toronto (c).....													
MAINE—													
Gardiner.....	.721	.765						95	74		81	49	
VERMONT—													
Burlington.....	.584	.625	.571	17	.956	8	.336	81	61	81	65	42	55
MASSACHUSETTS—													
Amherst.....	.646	.701	.647	18	.944	8	.401	94	73	91	84	48	62
Nantucket.....	.586	.589	.571	5	.958	9	.358	81	66	87	53	45	74
New Bedford.....	.629	.677	.635	19	.904	8	.398	88	80	93	66	56	79
Newburyport.....	.571	.585	.591	25	.762	9	.357	84	65	82	58	41	58
North Attleboro'.....	.603	.628	.571	17	.886	30	.134 <sup>f</sup>	81	65	84	56	42	17
Princeton.....	.552	.569	.539	18	.817	8	.280	85	68	84	62	45	51
Westfield.....	.568	.577	.587	18	.873	22	.344	86	64	86	75	40	67
Worcester.....	.527	.574	.527	26	1.081	8	.276	71	62	70	45	32	45
CONNECTICUT—													
Pomfret.....	.655	.729	.649	17	1.038	8	.413	95	82	95	85	65	77
NEW YORK—													
New York city.....	.650	.671	.663	26	.881	8	.344	79	67	81	47	43	58
Penn Yan (d).....		.573		30	.868	7	.274		62			39	
NEW JERSEY—													
Bloomfield.....	.688	.722	.692	25	.915	8	.424	87	66	89	72	42	68
PENNSYLVANIA—													
Lima.....	.601	.608	.601	24	.961	8	.397	86	66	90	60	46	77
Norristown.....	.694	.688	.673	2	1.074	3	.331	85	65	82	74	24	68
Philadelphia.....	.714	.712	.740	25	.975	8	.395	80	62	74	55	43	57
Pottsville.....	.578	.605	.615	17	.923	8	.255	71	52	86	43	27	47
MARYLAND—													
Frederick.....	.691	.704	.710	24	.938	8	.381	78	59	81	61	42	63
DISTRICT OF COLUMBIA—													
Washington.....	.717	.721	.763	19	1.045	8	.309	83	60	82	63	39	61
VIRGINIA—													
Alexandria.....	.760	.799	.780	25	1.025	8	.320	86	68	86	58	55	53
SOUTH CAROLINA—													
Aiken.....	.764	.735	.754	25	.886	8	.610	83	60	79	71	48	60
All Saints.....	.848	.868	.847	16	.996	8	.617	86	77	85	77	62	73
Camden.....	.765	.742	.775	19	.859	8	.558	81	57	79	70	44	64
Charleston (e).....													
GEORGIA—													
Savannah.....	.804	.791	.809	15	.941	9	.581	82	57	80	70	42	67
FLORIDA—													
Jacksonville.....	.901	.947	.884	27	1.060 <sup>f</sup>	12	.313	89	78	90	79	60	79
ALABAMA—													
Greene Springs (g).....	.786	.827	.817	30	.997	5	.693	85	63	85	74	41	68
MISSISSIPPI—													
Oxford.....	.757	.774	.791	12	.931	6	.541	85	64	86	60	47	62
LOUISIANA—													
New Orleans.....	.808	.797	.830	14	.918	10	.664	90	72	86	78	47	64
TEXAS—													
Austin.....	.669	.559	.661	31	1.785	2	.385	84	42	68	53	31	52
New Wied (g).....	.836	.988	.858	23	.619	11	.585	85	62	92	56	39	67
TENNESSEE—													
Glenwood.....	.708	.766	.757	30	1.266	5	.484	91	68	87	79	43	76
KENTUCKY—													
Springdale.....	.642	1.089	.851	16	1.647	5	.418	97	86	94	81	47	72

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Same amount on the 17th.

c Mean force of vapor for the month, .530; mean humidity, 79.

d Observations taken only at 2 p. m.

e Mean force of vapor, .967; computed approximately from the mean dew point.

f Same amount on the 30th.

g Incomplete.



## No. 32.—PSYCHROMETER, JULY, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
OHIO—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Gallipolis .....	.715	.819	.783	17	1.070	8	.497	84	73	85	76	56	76
Germanstown .....	.647	.677	.674	25	.897	7	.372	87	63	87	71	36	71
Hillsborough .....	.701	.753	.701	22	.918	8	.433	96	73	92	83	55	66
Zanesville .....	.700	.740	.735	18	.992	7	.423	96	64	95	80	37	67
MICHIGAN—													
Ann Arbor, [Winchell] .....	.578	.633	.589	18	.960	7	.316	83	67	89	65	41	72
INDIANA—													
New Harmony .....	.801	.834	.799	15	1.005	4	.547	86	67	87	75	51	60
ILLINOIS—													
Manchester .....	.681	.924	.722	8	1.242	1	.452	87	76	89	64	44	64
Ottawa .....	.728	.996	.712	18	1.459	1	.518	94	88	94	78	79	88
Upper Alton .....	.735	1.010	.752	16	1.296	1	.491	94	86	91	85	59	75
MISSOURI—													
St. Louis .....	.681	.683	.729	17	.904	1	.342	79	54	78	50	30	53
IOWA—													
Dubuque .....	.530	.562	.601	15	.839	1	.35	78	53	78	54	32	55
Muscataine .....	.626	.759	.642	31	1.283	4	.367	86	67	87	71	29	68
WESTERN AFRICA—													
Nèugenènge .....	.748	.891	.840	<i>at</i>	1.065	17	.62	91	90	91	90	82	82

*a* Same amount on the 8th.

## No. 33.—PSYCHROMETER, AUGUST, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches</i>						
St. Martin (a) -----	.413	.552	.447	16	.804	30	.165	85	59	79	64	36	58
St. Martin -----	.434	.567	.474	16	.787	28	.192	85	63	84	70	44	70
Toronto (b) -----													
MAINE—													
Gardiner (c) -----	.548	.580						93	70		70	37	
VERMONT—													
Burlington -----	.458	.546	.461	9	.800	30	.229	81	63	76	62	38	50
MASSACHUSETTS—													
Amherst -----	.542	.543	.513	16	.827	12	.233	92	65	87	72	31	47
Nantucket -----	.505	.488	.487	17	.749	5	.182	70	59	74	35	25	37
New Bedford -----	.517	.542	.527	23	.819	18	.231	86	68	86	62	46	36
Newburyport -----	.451	.485	.493	17	.774	30	.170	81	55	79	59	25	57
North Attleboro' -----	.461	.484	.470	17	.774	31	.200	80	55	86	57	30	64
Princeton -----	.441	.448	.415	2	.762	30	.179	80	58	75	60	33	45
Westfield -----	.448	.517	.491	1	.907	27	.254	87	59	85	56	38	50
Worcester -----	.420	.566	.409	17	.950	31	.181	71	55	66	47	39	48
CONNECTICUT—													
Pomfret -----	.519	.612	.525	4	.856	31	.272	91	75	92	75	45	75
NEW YORK—													
New York city -----	.537	.553	.557	26	.742	31	.231	73	62	76	46	37	40
Penn Yan (d) -----		.498		3	.735	30	.220		59			36	
Spencertown -----	.493	.586	.518	1	.996	31	.215	84	71	87	69	48	50
NEW JERSEY—													
Bloomfield -----	.544	.581	.555	1	.895	29	.289	86	50	85	62	32	54
PENNSYLVANIA—													
Lima -----	.577	.611	.578	9	.866	31	.273	86	67	83	58	40	61
Norristown -----	.548	.609	.571	23	.802	31	.255	82	67	82	57	49	56
Philadelphia -----	.603	.616	.619	17	.886	31	.297	75	62	72	55	39	49
Pottsville -----	.455	.503	.521	20	.800	25	.176	70	53	84	29	33	55
MARYLAND—													
Frederick -----	.609	.670	.650	2	.958	18	.343	80	65	88	57	47	63
DISTRICT OF COLUMBIA—													
Washington -----	.649	.645	.666	16	.911	19	.331	87	59	80	56	39	46
VIRGINIA—													
Alexandria -----	.714	.755	.713	16	.943	20	.365	88	72	88	54	53	55
SOUTH CAROLINA—													
Aiken -----	.763	.782	.761	14	.935	20	.483	85	65	80	78	53	62
All Saints -----	.824	.869	.834	25	1.016	20	.509	88	76	84	59	50	56
Camden -----	.767	.768	.754	13	.950	19	.451	85	60	81	73	43	59
Charleston (e) -----													
GEORGIA—													
Savannah -----	.814	.811	.820	26	.989	19	.560	84	61	80	76	42	67
FLORIDA—													
Jacksonville -----	.913	1.012	.931	12	1.135 <sup>f</sup>	10	.745 <sup>g</sup>	91	80	91	70	56	83
ALABAMA—													
Auburn -----	.688	.666	.668	1	.826	19	.476	80	60	76	55	38	61
Greene Springs -----	.794	.817	.821	11	1.097	18	.595	87	68	83	65	48	56
MISSISSIPPI—													
Oxford (h) -----	.853	.835	.842	2	1.033	8	.631	91	68	90	78	43	79
Port Gibson (h) -----	.851	.869	.828	25	1.017	22	.545	87	71	77	77	45	47
LOUISIANA—													
New Orleans -----	.839	.807	.853	14	.958	19	.623	93	67	84	75	46	66
TEXAS—													
Austin -----	.713	.589	.660	1	.856	17	.449	85	46	65	69	27	43
New Wied -----	.886	1.047	.915	8	1.723	31	.731	89	71	94	74	44	58

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Mean force of vapor for the month, .444; mean humidity, 74.

c Incomplete.

d Observations taken only at 2 p. m.

e Mean force of vapor, .911; computed approximately from the mean dew point.

f Same amount on the 26th.

g Same amount on the 29th.

h Incomplete.



## No. 33.—PSYCHROMETER, AUGUST, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
TENNESSEE--	<i>Inches</i>	<i>Inches.</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches.</i>						
Glenwood (a) -----	.731	.805	.770	1	1.199	29	.619	92	77	90	83	51	75
KENTUCKY--													
Springdale -----	.603	.878	.760	12	1.597	19	.305	97	76	87	94	38	69
OHIO--													
Gallipolis -----	.692	.775	.731	12	1.138	17	.383	86	73	85	71	42	69
Germantown -----	.605	.680	.652	12	.854	18	.327 <sup>b</sup>	89	68	94	70	50	81
Hillsborough -----	.612	.711	.657	12	.884	19	.348	95	76	96	89	52	84
Zanesville -----	.572	.613	.665	2	.904	18	.164	92	58	91	30	29	56
MICHIGAN--													
Ann Arbor, [Winchell] ----	.511	.574	.533	8	.822	24	.254	85	66	94	49	47	82
INDIANA--													
New Harmony -----	.702	.809	.758	13	1.135	17	.352	89	73	92	70	54	85
ILLINOIS--													
Manchester -----	.670	.796	.686	2	1.188	17	.296	94	78	95	77	58	53
Ottawa -----	.607	.915	.637	3	1.301	18	.349	93	90	94	70	82	87
Upper Alton -----	.638	.862	.661	3	1.228	19	.334	94	88	92	81	66	74
MISSOURI--													
St. Louis -----	.642	.682	.685	3	.989	17	.322	86	65	85	69	38	65
IOWA--													
Dubuque -----	.579	.663	.611	15	1.163	17	.315	84	60	80	61	43	69
Muscatine -----	.615	.769	.606	3	1.657	17	.282	86	69	88	66	49	68
WESTERN AFRICA--													
Nèngenènge -----	.744	.839	.835	24	.785	7	.668	92	90	91	86	82	86

<sup>a</sup> Incomplete.<sup>b</sup> Same amount on the 19th.

## No. 34.—PSYCHROMETER, SEPTEMBER, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Horton .....	.313	.347	.322	2	.654	23	.099	79	62	76	47	40	43
Montreal .....	.359	.386	.377	12	.691	19	.138	75	58	71	46	41	52
St. Martin .....	.357	.451	.383	12	.806	19	.105	88	52	81	55	35	50
St. Martin (a) .....	.333	.477	.390	12	.776	19	.182	87	68	85	76	49	68
Toronto (b) .....													
VERMONT—													
Burlington .....	.366	.455	.389	9	.936	21	.173	80	62	76	53	43	55
MASSACHUSETTS—													
Amherst .....	.417	.463	.451	12	.743	20	.194	95	63	88	76	45	70
Nantucket .....	.407	.400	.420	13	.668	5	.090	69	55	77	32	12	40
New Bedford .....	.421	.485	.430	9	.805	19	.191	88	67	87	61	38	63
Newburyport .....	.377	.400	.391	2	.708	19	.166	81	56	77	55	30	43
North Attleboro' .....	.368	.371	.382	13	.704	20	.120	77	46	79	50	23	60
Princeton .....	.381	.376	.355	1	.641	19	.163	77	57	78	31	32	54
Westfield .....	.378	.410	.440	12	.786	19	.163 <sup>c</sup>	87	54	84	66	22	70
Worcester .....	.413	.502	.367	12	.872	5	.094	71	63	70	44	11	54
CONNECTICUT—													
Pomfret .....	.421	.512	.435	12	.819	19	.212	90	73	90	70	58	72
NEW YORK—													
New York city .....	.442	.484	.475	8	.835	20	.183	71	58	74	54	42	54
Penn Yan (d) .....		.438		1	.706	28	.144		50			37	
Spencertown .....	.377	.450	.427	12	.704	20	.148	84	63	86	65	39	73
NEW JERSEY—													
Bloomfield .....	.442	.526	.477	12	.779	20	.203	86	59	86	64	34	58
PENNSYLVANIA—													
Lima .....	.476	.527	.509	13	.773	19	.202	90	52	88	73	38	73
Norristown .....	.442	.506	.464	13	.745	19	.190	84	64	78	52	38	44
Philadelphia .....	.515	.551	.563	13	.850	20	.260	79	61	76	63	45	54
Pottsville .....	.402	.512	.520	3	1.375	19	.153	76	59	92	41	32	72
MARYLAND—													
Frederick .....	.538	.650	.609	12	.894	29	.275	93	75	92	50	62	79
DISTRICT OF COLUMBIA—													
Washington .....	.548	.574	.621	11	.886 <sup>e</sup>	28	.175	81	61	86	50	44	50
VIRGINIA—													
Alexandria .....	.593	.676	.627	11	1.082	14	.222	91	75	89	76	63	77 <sup>f</sup>
SOUTH CAROLINA—													
Aiken .....	.696	.675	.642	15	.856	28	.396	86	59	70	72	47	52
All Saints .....	.733	.770	.742	17	1.114	24	.451	89	73	81	69	56	63
Camden .....	.663	.694	.695	16	.887	28	.352	84	58	79	68	44	52
Charleston (f) .....													
GEORGIA—													
Augusta .....	.763	.808	.756	14	1.160	1	.452	80	67	75	61	51	44
Savannah .....	.773	.762	.799	19	.926	24	.514	89	63	84	77	40	73
FLORIDA—													
Jacksonville .....	.902	.966	.891	14	1.135 <sup>g</sup>	24	.732	92	81	91	87	65	83
ALABAMA—													
Auburn .....	.668	.611	.643	15	.990	27	.319	76	52	72	63	29	47
MISSISSIPPI—													
Oxford .....	.752	.797	.767	21	1.336	27	.420	87	75	93	75	49	55
LOUISIANA—													
New Orleans .....	.830	.805	.849	25	.958	14	.536 <sup>h</sup>	93	73	83	77	39	67
TEXAS—													
Austin .....	.669	.638	.686	14	.785	29	.371	90	52	74	49	37	60
New Wied (i) .....	.829	1.052	.858	3	1.432	28	.677	90	75	94	77	58	87

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Mean force of vapor for the month, .406; mean humidity, 79.

c Same amount on the 20th.

d Observations taken only at 2 p. m.

e Same amount on the 12th.

f Mean force of vapor, .851, computed approximately from the mean dew point.

g Same amount on the 15th.

h Same amount on the 27th.

i Incomplete.



## No. 34.—PSYCHROMETER, SEPTEMBER, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 a. m.	7 a. m.	2 p. m.	9 p. m.
TENNESSEE—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Glenwood .....	.692	.709	.723	19	.864	26	.285	93	69	92	83	40	79
KENTUCKY—													
Springdale .....	.610	.710	.714	9	1.024	28	.267	97	72	88	88	54	62
OHIO—													
Gallipolis .....	.631	.736	.672	3	.969	28	.322	88	75	85	81	53	62
Germantown .....	.598	.652	.591	2	.866 <sup>a</sup>	28	.239	93	74	93	73	44	57
Hillsborough .....	.606	.682	.632	21	.870	28	.278	99	82	98	95	61	81
Hiram .....	.498	.589	.512	8	.931	27	.234	79	77	76	71	61	54
Zanesville .....	.541	.579	.557	9	.809	20	.229	85	64	80	39	41	44
MICHIGAN—													
Ann Arbor, [Winchell] .....	.491	.560	.487	7	.789	28	.235	91	72	91	73	33	69
INDIANA—													
New Harmony .....	.695	.796	.736	19	.997	27	.348	93	76	91	79	65	70
ILLINOIS—													
Manchester .....	.607	.758	.639	18	1.060 <sup>a</sup>	30	.285	97	81	94	80	59	80
Ottawa .....	.602	.769	.597					97	87	92	73	00	74
Upper Alton .....	.624	.867	.620	12	1.114	28	.285	94	89	89	85	74	53
MISSOURI—													
St. Louis .....	.639	.674	.654	18	.935	30	.271	89	65	84	75	42	69
IOWA—													
Dubuque .....	.510	.522	.514	17	.808	26	.244	87	66	81	68	40	63
Muscatine .....	.604	.731	.600	17	1.174	27	.191	92	79	91	79	54	52
WESTERN AFRICA—													
Nèngenènge .....	.780	.882	.860	15	1.030 <sup>b</sup>	5	.706 <sup>c</sup>	92	90	90	90	79	82

<sup>a</sup> Same amount on the 9th.<sup>b</sup> Same amount on the 22d.<sup>c</sup> Same amount on the 7th and 8th.

## No. 35.—PSYCHROMETER, OCTOBER, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Horton .....	.312	.350	.317	4	.595	30	.129	86	71	85	61	41	57
Montreal .....	.270	.298	.301	2	.549 <sup>a</sup>	31	.129	82	71	87	41	40	50
St. Martin .....	.247	.325	.284	6	.632	31	.142	93	75	89	69	38	66
St. Martin (b) .....	.274	.344	.294	6	.634	31	.153	94	78	90	79	51	73
Toronto .....	.228	.262	.251	5	.482	12	.127	85	69	83	69	34	58
VERMONT—													
Burlington .....	.260	.273	.258	3	.532	16	.051	79	69	72	53	32	19
MASSACHUSETTS—													
Amherst .....	.317	.348	.327	6	.671	25	.177	96	74	89	73	42	56
Nantucket .....	.358	.361	.363	6	.566	29	.156	78	66	83	47	26	51
New Bedford .....	.333	.383	.354	11	.639	25	.144	84	73	86	50	41	61
Newburyport .....	.301	.333	.313	3	.528	18	.101	88	72	85	55	26	51
North Attleboro' .....	.282	.299	.303	11	.624	30	.099	81	54	80	54	23	31
Princeton .....	.270	.282	.275	6	.578	29	.099	84	67	79	57	44	42
Westfield .....	.272	.305	.309	11	.644	25	.122 <sup>c</sup>	86	66	87	63	36	59
CONNECTICUT—													
Pomfret .....	.306	.372	.322	11	.662	25	.155	93	79	89	73	51	53
NEW YORK—													
New York city .....	.293	.335	.308	1	.647	26	.140	74	66	74	38	41	49
Penn Yan (d) .....		.264		5	.471	12	.122		52			39	
Spencertown .....	.265	.305	.282	1	.586	10	.117	87	71	83	79	32	68
NEW JERSEY—													
Bloomfield .....	.309	.318	.308	1	.702	18	.116	86	53	82	60	17	56
PENNSYLVANIA—													
Lima .....	.289	.322	.307	5	.685	26	.131	89	65	85	50	34	63
Norristown .....	.279	.333	.299	6	.612	25	.113	84	65	79	62	33	61
Philadelphia .....	.324	.348	.342	6	.701	25	.146	82	61	78	56	42	60
Pottsville .....	.242	.296	.267	11	.662	17	.042	78	66	89	12	32	58
MARYLAND—													
Frederick .....	.278	.330	.286	11	.812	26	.126	87	62	78	49	39	53
DISTRICT OF COLUMBIA—													
Washington .....	.308	.340	.342	5	.720	25	.123	87	61	84	51	29	54
VIRGINIA—													
Alexandria .....	.312	.402	.325	6	.778	26	.140	94	76	87	74	57	63
SOUTH CAROLINA—													
Aiken .....	.362	.360	.371	1	.918	12	.086	84	46	66	57	14	43
All Saints .....	.419	.496	.474	1	.886	13	.138	83	64	78	46	39	45
Camden .....	.324	.395	.364	6	.718	25	.142	82	51	79	57	27	52
Charleston (e) .....													
GEORGIA—													
Augusta .....	.421	.509	.468	8	.658	20	.190	79	73	82	63	61	60
Savannah .....	.413	.420	.441	6	.784	28	.146	81	48	75	64	26	46
FLORIDA—													
Jacksonville .....	.516	.666	.560	1	.989	25	.251	89	78	91	59	65	77
Warrington .....	.658	.759	.712	11	1.057	25	.394	93	88	89	75	59	75
ALABAMA—													
Auburn .....	.296	.298	.327	22	.759	6	.042	64	39	60	10	12	34
MISSISSIPPI—													
Oxford .....	.380	.523	.411	31	.826	25	.153	96	78	90	83	52	53
LOUISIANA—													
New Orleans .....	.462	.460	.482	5	.791	25	.152	85	63	78	39	34	45
TEXAS—													
Austin .....	.416	.453	.464	26	.816	6	.074	90	50	83	68	12	15
New Wied .....	.467	.652	.558	1	1.410	24	.177	86	68	86	56	33	42
ARKANSAS—													
Camden (f) .....	.399	.479	.422	4	.745	8	.208	81	65	78	65	42	58

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

<sup>a</sup> Same amount on the 4th.

<sup>b</sup> For note on this place see table No. 26.

<sup>c</sup> Same amount on the 26th and 29th.

<sup>d</sup> Observation taken only at 2 p. m.

<sup>e</sup> Mean force of vapor, .457, computed approximately from the mean dew point.

<sup>f</sup> For the first 12 days of the month only.



## No. 35.—PSYCHROMETER, OCTOBER, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
TENNESSEE—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches.</i>						
Glenwood.....	.309	.330	.333	4	.565	25	.118	88	51	84	60	26	38
KENTUCKY—													
Springdale.....	.255	.366	.361	1	.612	27	.131	94	63	76	70	38	20
OHIO—													
Cincinnati, [Hurt].....	.335	.385	.382	10	.927	27	.008	82	66	80	67	02	52
Gallipolis.....	.291	.344	.309	4	.662	13	.071	88	61	81	71	17	51
Germantown.....	.243	.289	.272	10	.504	25	.123	91	57	88	67	36	41
Hillsborough.....	.281	.326	.308	8	.566	14	.129	96	67	90	72	27	47
Hiram.....	.294	.371	.301	10	.617	26	.130	68	68	62	45	44	39
Zanesville.....	.228	.310	.271	9	.551	31	.077	79	63	77	31	26	30
MICHIGAN—													
Ann Arbor, [Winchell].....	.233	.257	.248	10	1.210	25	.345	83	64	87	62	36	42
INDIANA—													
New Harmony.....	.293	.378	.336	14	.685	25	.135	95	65	88	65	39	51
ILLINOIS—													
Manchester.....	.269	.396	.299	10	.704	25	.129	92	70	88	62	40	62
Ottawa (a).....	.271	.524	.323	18	.958	6	.164	99	89	95	90	75	63
Upper Alton.....	.246	.421	.319	29	.666	25	.105	83	77	84	65	59	51
MISSOURI—													
St. Louis.....	.253	.283	.284	19	.563	22	.105	78	49	70	41	24	31
IOWA—													
Dubuque.....	.214	.205	.214	9	.436	23	.070	79	48	66	44	17	14
Muscatine.....	.201	.301	.229	14	.572	25	.059	79	53	76	53	31	34
WEST INDIES—													
Up Park Camp, Jam'a (b & a)	.767	.796	-----	6	.910	3	.681	77	61	-----	71	56	-----
Up Park Camp, Jam'a (c & a)	.779	.820	-----	5	.959	3	.677	76	70	-----	65	54	-----
WESTERN AFRICA—													
Néngenège.....	.818	.946	.589	26	1.065	1	.758	92	88	91	90	79	79

a For changes in hours of observation, &c., see table of the thermometer for this month.

b According to tables used by the observer.

c According to the Smithsonian tables.

## No. 36.—PSYCHROMETER, NOVEMBER, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
Horton .....	.181	.209	.194	8	.574	24	.063	82	72	78	51	46	49
Montreal .....	.168	.185	.173	1	.348	21	.008	87	78	85	52	55	75
St. Martin .....	.149	.199	.159	9	.454	20	.043	92	78	88	75	40	57
St. Martin (a) .....	.166	.213	.180	7	.385	20	.048	93	80	89	87	64	71
Toronto .....	.188	.196	.186	7	.375	28	.073	82	69	78	66	43	58
VERMONT—													
Burlington .....	.153	.177	.158	1	.336	20	.043 <sup>b</sup>	73	65	71	49	37	40
MASSACHUSETTS—													
Amherst .....	.192	.225	.209	16	.419	30	.061	87	70	85	53	43	52
Nantucket .....	.251	.244	.262	1	.460	30	.087	76	66	81	50	38	55
New Bedford .....	.226	.244	.239	1	.466	24	.084 <sup>c</sup>	84	71	84	50	37	60
Newburyport .....	.187	.200	.202	8	.420	29	.031	83	65	82	52	30	51
North Attleboro' .....	.184	.205	.200	1	.475	24	.041	77	60	76	32	25	37
Princeton .....	.169	.173	.164	1	.375	24	.038	81	70	74	45	30	31
Westfield .....	.189	.201	.212	1	.349 <sup>d</sup>	20	.054	84	64	86	58	07	45
CONNECTICUT—													
Pomfret .....	.204	.261	.222	1	.523	24	.075	88	81	88	45	53	70
NEW YORK—													
Blackwell's Island .....	.201	.210	.203	2	.390	26	.000	69	57	52	35	00	19
New York city .....	.215	.242	.220	1	.455	29	.069	76	68	70	47	41	47
Penn Yan (e) .....		.211		1	.354	24	.094		94			52	
Spencertown (f) .....	.223	.244	.231	1	.420	20	.067	91	80	82	61	39	59
NEW JERSEY—													
Bloomfield (g) .....	.219	.253	.237	1	.467	19	.070	78	65	75	50	39	37
PENNSYLVANIA—													
Lima .....	.233	.256	.239	3	.462	29	.093	83	64	83	51	33	52
Norristown .....	.214	.253	.219	3	.466	30	.062	74	66	71	39	31	33
Philadelphia .....	.247	.266	.253	3	.493	29	.079	79	60	73	56	28	44
Pottsville .....	.224	.228	.221	16	.435	29	.059	82	66	84	47	30	58
MARYLAND—													
Frederick .....	.238	.260	.249	3	.487	29	.084	52	64	78	50	34	50
DISTRICT OF COLUMBIA—													
Washington .....	.267	.282	.291	16	.618	29	.084	87	64	82	48	25	38
VIRGINIA—													
Alexandria .....	.300	.344	.303	16	.562	30	.123	97	79	89	72	55	72
SOUTH CAROLINA—													
Aiken .....	.400	.417	.431	8	.662	30	.123	89	59	82	63	30	58
All Saints .....	.398	.468	.438	3	.691	22	.146	89	68	85	67	36	57
Camden .....	.339	.395	.365	12	.617	19	.101	85	60	77	66	18	45
Charleston (h) .....													
GEORGIA—													
Savannah .....	.442	.493	.435	8	.752	22	.150	85	55	82	50	32	57
FLORIDA—													
Jacksonville .....	.557	.696	.600	8	.904	30	.225	93	87	93	65	68	58
ALABAMA—													
Auburn .....	.353	.376	.372	7	.612	30	.107	74	59	67	43	24	32
MISSISSIPPI—													
Oxford .....	.362	.464	.389	16	.868	26	.032	89	79	85	71	07	28
LOUISIANA—													
New Orleans .....	.514	.542	.541	3	.839	22	.195	89	76	86	59	35	55
TEXAS—													
Austin .....	.356	.310	.375	2	.706 <sup>i</sup>	3	.000 <sup>j</sup>	80	42	83	52	00	56
New Wied .....	.435	.506	.448	4	.927	26	.176	91	58	86	74	29	54
ARKANSAS—													
Camden .....	.320	.392	.358	4	.745 <sup>k</sup>	17	.034	80	50	74	61	34	07

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Same amount on the 24th.

c Same amount on the 25th and 30th.

d Same amount on the 8th.

e Observations taken only at 2 p. m.

f For the first 19 days of the month only.

g Incomplete.

h Mean force of vapor for the month .462, computed approximately from the mean dew point.

i Same amount on the 4th and 6th.

j Same amount on the 10th.

k Same amount on the 16th.



## No. 36.—PSYCHROMETER, NOVEMBER, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>TENNESSEE—</b>	<i>Inches</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches</i>						
Glenwood.....	.310	.313	.303	4	.600	19	.097	82	58	76	42	27	48
<b>KENTUCKY—</b>													
Springdale.....	.279	.321	.309	15	.608	22	.103	92	71	78	71	38	54
<b>OHIO—</b>													
Cincinnati, [Hurt].....	.289	.326	.287	16	.604	29	.099	89	75	85	65	44	59
Gallipolis.....	.267	.333	.276	11	.655	29	.111	84	67	78	61	29	57
Germantown.....	.241	.264	.247	6	.527	29	.083	89	69	85	71	34	52
Hillsborough.....	.258	.301	.259	1	.708	29	.109	92	71	85	61	36	49
Perrysburg.....	.228	.272	.237	12	.556	29	.111	84	73	81	61	50	65
Zanesville.....	.217	.251	.232	15	.489	15	.489	77	65	76	58	39	43
<b>MICHIGAN—</b>													
Ann Arbor, [Winchell]....	.194	.216	.201	15	.501	29	.077	88	71	83	72	39	68
Detroit (a).....	.203	.245	.220	10	.489	29	.075	86	81	83	68	56	46
<b>INDIANA—</b>													
New Harmony.....	.286	.291	.308	15	.568	22	.110	82	65	88	66	41	51
<b>ILLINOIS—</b>													
Manchester.....	.236	.309	.236	15	.658	21	.094b	96	80	92	69	44	56
Upper Alton (c).....	.296	.382	.324	16	.658	19	.153	88	80	86	69	59	66
<b>MISSOURI—</b>													
St. Louis.....	.226	.236	.242	15	.592	19	.000	80	57	72	00	25	43
<b>IOWA—</b>													
Dubuque (c).....	.174	.185	.191	11	.432	20	.018	74	60	68	52	28	17
Muscatine.....	.158	.236	.162	10	.618	12	.000	70	76	69	00	42	05
<b>WEST INDIES—</b>													
Up Park Camp, Jamaica (d) -	.769	.755	-----	1	.925	26	.550	76	67	-----	51	53	-----
Up Park Camp, Jamaica (e) -	.783	.771	-----	1	.976	26	.503	75	67	-----	61	47	-----

a For the last 20 days of the month only.

b Same amount on the 22d.

c Incomplete.

d According to the tables used by the observer. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e According to the Smithsonian tables. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

## No. 37.—PSYCHROMETER, DECEMBER, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Horton .....	.139	.150	.138	10	.372	27	.041	80	64	76	41	39	52
Montreal .....	.116	.131	.129	2	.297	29	.020	81	76	82	56	55	55
St. Martin .....	.000	.123	.113	2	.272	29	.010	93	84	93	80	55	75
St. Martin (a) .....	.112	.139	.123	2	.290	29	.014	90	80	88	82	60	74
Toronto .....	.121	.127	.124	9	.272	29	.027	81	70	80	55	46	61
VERMONT—													
Burlington .....	.091	.110	.093	16	.212	13	.000 <sup>b</sup>	61	60	56	50	23	00
MASSACHUSETTS—													
Amherst .....	.130	.144	.143	9	.337	29	.058	90	74	87	60	41	53
Nantucket .....	.186	.152	.193	2	.369	12	.051	77	66	77	40	37	50
New Bedford .....	.156	.153	.175	9	.419	29	.051	84	64	82	58	27	46
Newburyport (c) .....	.128	.138	.140	9	.371	27	.000	84	88	87	00	36	63
North Attleboro' .....	.124	.119	.148	16	.361	31	.039	75	55	77	46	24	51
Princeton .....	.121	.113	.122	16	.316	12	.041	84	70	78	49	30	47
Westfield .....	.113	.122	.142	9	.326	31	.026	82	61	88	55	25	52
CONNECTICUT—													
Pomfret (c) .....	.150	.175	.168	9	.403	12	.070	90	77	85	66	46	63
NEW YORK—													
New York city .....	.117	.147	.133	9	.389	26	.005	58	59	56	16	26	09
Penn Yan (d) .....		.153		16	.274	29	.071		75			38	
NEW JERSEY—													
Bloomfield (e) .....	.145	.160	.187	9	.412	11	.041	76	58	79	50	25	50
PENNSYLVANIA—													
Lima .....	.144	.171	.160	16	.447	31	.046	85	64	82	44	33	49
Nazareth .....	.138	.167	.150	23	.298	1	.025	98	85	95	77	09	70
Norristown .....	.116	.130	.130	22	.362	26	.039	73	58	70	49	15	38
Philadelphia .....	.161	.182	.176	16	.471	27	.060	78	66	74	52	40	42
Pottsville .....	.123	.146	.129	9	.370	28	.020	83	69	81	40	30	20
MARYLAND—													
Frederick .....	.142	.165	.150	9	.426	13	.000	79	62	74	47	37	00
DISTRICT OF COLUMBIA—													
Washington .....	.166	.190	.185	16	.466	27	.063	83	66	81	45	31	37
VIRGINIA—													
Alexandria .....	.199	.237	.194	9	.483	1	.011	93	82	82	65	55	06
SOUTH CAROLINA—													
Aiken .....	.283	.322	.296	16	.608	12	.000	88	66	80	52	25	00
All Saints .....	.305	.366	.342	25	.745	26	.095	89	75	88	61	32	51
Camden .....	.239	.290	.267	15	.591	11	.103	87	66	83	57	34	48
Charleston (f) .....													
GEORGIA—													
Augusta .....	.304	.368	.297	16	.586	27	.142	87	80	80	70	58	51
Savannah .....	.314	.368	.351	25	.670	11	.078	83	69	82	56	22	28
FLORIDA—													
Jacksonville .....	.406	.551	.449	24	.827	11	.175	91	86	90	78	70	47
ALABAMA—													
Auburn .....	.231	.241	.235					69	54	62	23	00	24
MISSISSIPPI—													
Oxford .....	.213	.283	.228	13	.543	26	.065	91	80	87	68	42	50
LOUISIANA—													
New Orleans .....	.365	.388	.389	23	.708	26	.099	87	74	88	44	36	52
TEXAS—													
Austin .....	.228	.265	.304	8	.685	25	.059	88	54	83	53	07	40
New Wied .....	.258	.391	.322	8	.731	25	.000 <sup>g</sup>	73	65	79	00	19	06
TENNESSEE—													
Glenwood .....	.168	.166	.180	8	.454	26	.050	80	57	75	43	14	29

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a For note on this place see table No. 26.

b Same amount on the 15th.

c Incomplete.

d Observations taken only at 2 p. m.

e For the first 24 days of the month only.

f Mean force of vapor for the month, 313, computed approximately from the mean dew point.

g Same amount on the 26th and 30th.



## No. 37.—PSYCHROMETER, DECEMBER, 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
KENTUCKY—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Springdale .....	.162	.208	.192	14	.407	26	.035	93	81	88	62	43	65
OHIO—													
Cincinnati, [Hurt] .....	.179	.222	.197	14	.433	26	.051	80	75	76	52	41	29
Gallipolis .....	.157	.202	.172					85	75	82	71	42	54
Germantown .....	.136	.142	.137	14	.351	26	.027	89	68	82	60	31	46
Hillsborough .....	.162	.171	.160	14	.388	26	.038	94	78	88	73	39	49
Perrysburg .....	.139	.152	.148	21	.283	27	.034	85	76	85	59	39	46
Zanesville (a) .....	.160	.152	.152	3	.186	2	.118	87	53	72	53	39	43
MICHIGAN—													
Ann Arbor, [Winchell] .....	.121	.141	.122	1	.755	26	.107	91	85	88	67	59	71
Detroit .....	.145	.155	.146	9	.300	27	.050	93	83	90	61	46	61
INDIANA—													
New Harmony .....	.163	.183	.170	8	.423	31	.055	88	71	86	44	42	51
ILLINOIS—													
Manchester .....	.130	.183	.143	1	.403	26	.021	88	85	95	78	51	67
MISSOURI—													
St. Louis .....	.142	.138	.143	14	.390	26	.033	82	58	74	51	16	40
IOWA—													
Dubuque .....	.096	.117	.098	8	.342	24	.002	65	56	61	27	24	11
Muscatine .....	.096	.162	.104					84	71	80	47	00	42
WEST INDIES—													
Up Park Camp, Jamaica (b) ..	.738	.773	-----	12	.955	23	.559	73	66	-----	59	46	-----
Up Park Camp, Jamaica (c) ..	.734	.780	-----	12	.992	23	.530	70	65	-----	53	42	-----

a For the first 8 days of the month only.

b According to tables used by the observer. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c According to the Smithsonian tables for changes. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
St. Martin .....	0	41	1	11	2	13	6	19	0	93										
MAINE—																				
Carmel .....	0	14	0	11	4	6	3	25	4	67	0	8	0	8	4	5	1	12	38	
Fryeburg .....	11	17	9	5	1	15	4	21	0	83	0	1	0	0	1	18	8	5	33	
Gardiner .....	4	31	1	24	2	20	2	7	0	91	0	3	0	5	3	15	1	1	27	
Oldtown .....	5	6	6	7	4	8	13	14	2	65	2	2	5	4	2	8	16	9	48	
Perry .....	9	10	1	9	2	25	13	24	0	93	2	9	5	10	6	32	4	9	77	
Steuben .....	3	32	2	10	3	22	5	15	1	93	1	7	2	3	0	16	13	5	47	
NEW HAMPSHIRE—																				
Concord .....	4	29	2	3	1	20	1	33	0	93										
Exeter .....	14	6	3	6	8	16	17	13	0	83	10	5	3	3	1	7	14	4	47	
Great Falls .....	5	26	0	4	3	21	3	26	6	88	0	0	0	0	0	1	1	3	12	
Londonderry .....	1	14	5	11	0	8	7	20	27	93	2	0	0	0	4	7	4	1	18	
Manchester .....	17	5	13	5	7	8	11	23	1	90	12	4	11	4	4	0	31	6	72	
Salmon Falls .....	6	19	2	4	4	2	13	24	19	93	0	0	0	1	0	1	3	7	12	
VERMONT—																				
Brandon .....	13	0	4	5	40	7	8	10	1	93	0	0	0	2	11	8	10	7	38	
Burlington .....	20	2	2	6	36	14	0	13	0	93	0	0	0	0	2	2	1	0	5	
Castleton .....	24	7	0	0	32	11	4	0	15	93	2	0	0	1	0	2	0	0	5	
St. Johnsbury .....	0	0	0	1	2	33	7	50	0	93	0	0	0	2	0	32	1	18	58	
MASSACHUSETTS—																				
Amherst .....	11	4	1	25	0	6	3	40	1	91	0	0	1	3	0	5	1	0	21	
Boston .....	16	6	3	5	5	6	1	12	0	62										
Mendon .....	6	19	3	1	4	14	10	31	0	93	0	18	5	5	4	15	6	34	93	
Nantucket .....	5	11	6	17	8	13	7	19	7	93										
New Bedford .....	7	12	1	14	3	20	8	28	0	93										
Newburyport .....	1	5	6	2	18	7	31	20	0	90										
North Attleboro' .....	24	8	3	4	10	16	11	17	0	93	15	7	6	5	12	8	13	4	70	
Princeton .....	0	12	22	4	4	8	24	19	0	93	0	0	1	1	0	0	15	6	23	
Richmond .....	2	12	0	15	0	24	0	40	0	93	0	12	0	18	0	25	0	27	84	
Southwick .....	1	20	1	2	7	5	2	5	1	44	1	0	1	2	1	1	1	4	20	
Springfield .....	11	14	0	3	6	6	3	18	32	93	4	2	0	0	9	2	1	18	36	
Westfield .....	10	16	6	3	9	7	13	8	0	72										
Williamstown .....	2	0	16	14	20	7	9	18	7	93	1	1	1	12	11	6	5	4	41	
Worcester .....	0	22	2	4	0	25	0	40	0	93										
RHODE ISLAND—																				
Providence .....	2	18	4	2	9	16	4	22	0	77										
CONNECTICUT—																				
Pomfret .....	6	25	4	2	9	19	7	21	0	93	0	19	4	1	1	19	10	9	69	
Saybrook .....	11	16	7	6	8	6	17	16	3	90	1	3	4	3	5	6	12	9	43	
NEW YORK—																				
Angelica .....	0	7	3	25	17	27	9	5	0	93	0	2	1	4	10	27	20	5	69	
Baldwinsville .....	5	3	10	7	4	17	21	23	0	90	1	0	1	0	0	4	41	15	62	
Beverly .....	4	13	1	13	6	30	2	20	1	90	1	1	5	15	10	23	15	4	75	
Canton .....	4	23	0	0	3	45	2	14	2	93	2	16	0	0	0	39	1	9	67	
Fishkill .....	15	12	3	0	6	18	6	0	33	93										
Gouverneur .....	11	15	0	1	9	34	15	8	0	93	8	17	0	0	9	28	18	5	86	
Lodi .....	3	0	2	35	9	12	12	17	3	93	0	0	1	0	3	8	10	5	27	
Lowville .....	4	2	1	15	26	15	6	23	0	92	1	1	0	5	1	15	8	11	47	
New York city .....	2	27	4	6	1	10	17	26	0	93	0	8	2	4	1	13	35	19	76	
Ogdensburg .....	3	11	4	5	8	12	4	4	0	51	1	0	0	0	0	4	0	0	5	
Oswego .....	5	10	3	17	15	7	14	6	16	93										
Penn Yan .....	4	6	2	0	39	10	20	12	0	93										
Sag Harbor .....	4	22	4	15	4	21	5	18	0	93	3	6	4	8	5	33	12	9	80	
Smithville .....	0	20	5	4	27	10	26	1	0	93	6	5	0	0	9	37	22	2	81	
Spencertown .....	17	2	0	7	28	17	7	13	0	91	7	0	0	4	19	13	11	11	65	
Wampsville .....	1	0	16	11	17	3	44	1	0	93	1	0	18	9	14	6	44	1	93	
NEW JERSEY—																				
Bloomfield .....	19	14	0	5	3	27	0	21	0	89										
Burlington .....	6	25	1	0	5	13	28	2	10	90	0	4	0	0	4	1	7	0	16	
Lambertville .....	2	25	4	3	1	11	7	24	0	77										



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>PENNSYLVANIA—</b>																			
Bedford .....	0	0	0	9	0	31	7	33	0	86	0	0	0	9	0	23	9	24	65
Easton .....	5	10	2	4	2	3	15	24	7	72									
Gettysburg .....	10	18	1	0	11	18	11	17	6	92	0	0	0	1	7	14	25	16	63
Harrisburg .....	6	1	19	16	4	0	1	33	0	80	2	0	0	0	1	0	1	16	20
Lima .....	5	21	7	1	0	4	4	26	25	93	0	0	0	7	1	16	11	9	44
Morrisville .....	10	26	8	3	1	9	7	21	8	93	3	12	12	4	0	9	11	13	64
Moss Grove .....	2	1	4	8	26	26	9	1	0	77	0	1	1	5	8	13	25	1	54
Norristown .....	0	14	11	7	1	10	31	7	0	81	0	2	17	7	0	9	29	2	66
Philadelphia .....	8	30	1	5	1	12	15	21	0	93	0	2	0	0	0	4	7	3	16
Pittsburg, [M. H.] .....	2	0	31	4	9	36	25	1	16	124									
Pocopson .....	10	4	3	6	3	11	28	23	0	88	0	1	0	1	0	0	1	3	6
Pottsville .....	3	3	20	6	1	4	12	38	6	93	2	2	5	6	2	6	13	29	65
Randolph .....	0	2	1	22	12	18	12	10	9	86	0	1	0	3	3	12	21	8	48
West Haverford .....	2	4	13	0	1	4	9	17	12	62	0	1	0	0	1	1	4	13	20
<b>MARYLAND—</b>																			
Bladensburg .....	0	1	16	1	1	9	10	10	0	48									
Frederick .....	13	10	2	1	7	24	11	14	9	91	1	0	1	3	4	9	25	3	46
Sykesville .....	3	0	2	7	0	15	42	18	0	93	0	0	10	0	2	7	57	2	84
<b>VIRGINIA—</b>																			
Alexandria .....	21	0	4	7	13	11	2	29	0	93									
Ashland .....	5	0	0	0	10	29	3	4	42	93	1	0	0	1	4	22	7	1	36
Crichton's Store .....	13	11	2	4	23	26	12	1	1	93	5	8	2	0	8	33	20	0	76
Lewisburg .....	0	0	0	0	1	2	0	0	0	3	2	0	2	0	12	3	23	0	42
Montcalm .....	4	7	0	0	5	0	0	1	0	17	1	1	0	1	4	0	0	0	7
Winchester .....	0	0	1	1	5	1	20	5	60	93	0	0	0	0	0	0	10	3	13
<b>NORTH CAROLINA—</b>																			
Chapel Hill .....	11	21	2	8	6	13	22	10	0	93	1	3	1	6	7	16	8	1	43
Thornbury .....	7	5	13	3	6	20	24	5	8	91	3								

No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
KENTUCKY—Continued																				
Springdale .....	1	4	9	11	12	25	11	0	19	93										
OHIO—																				
Acrola .....	0	1	10	12	26	21	15	7	1	93	1	1	7	10	23	18	17	5	82	
Cincinnati .....	11	8	8	4	5	12	7	7	0	62										
Cincinnati, [Hurt] .....	12	8	14	10	11	20	9	6	0	99	11	8	13	12	4	8	6	4	66	
Gallipolis .....	11	1	3	0	22	14	11	11	0	68										
Germantown .....	2	6	4	8	1	47	5	20	0	93	1	7	1	0	0	47	4	15	81	
Granville .....	2	8	4	0	2	31	21	2	12	82	0	0	0	0	1	13	8	1	23	
Hillsborough .....	0	7	2	8	2	30	1	12	0	62	0	0	0	0	0	0	0	1	1	
Jackson .....	7	2	11	3	10	13	31	3	13	93	1	0	0	0	3	6	28	11	49	
Marietta .....	3	0	0	2	1	10	17	1	4	38	1	0	0	2	1	10	19	1	34	
Mount Vernon .....	1	3	1	5	8	4	31	1	32	86	0	0	0	1	5	6	28	2	42	
Newark .....	2	0	4	10	0	17	11	10	19	73	0	0	1	5	5	7	6	5	29	
New Lisbon .....	0	2	5	12	14	29	14	15	0	91										
Norwalk .....	2	7	2	6	13	32	4	12	0	78	1	0	1	0	3	11	13	8	37	
Oberlin .....	0	5	4	7	16	31	0	12	4	88	0	0	2	0	2	8	39	4	55	
Urbana .....	0	0	1	5	1	18	33	7	0	65	0	4	2	11	13	22	16	5	73	
Zanesville .....	0	8	0	14	5	39	5	22	0	93										
MICHIGAN—																				
Ann Arbor, [Woodruff] ..	1	11	3	21	7	32	7	9	1	92	0	4	1	4	1	16	27	8	61	
Ann Arbor, [Winchell] ..	15	6	7	17	12	26	1	7	2	93	6	5	5	7	10	24	22	5	84	
Battle Creek .....	4	5	15	7	16	21	17	4	0	89	4	5	10	3	2	31	28	5	88	
Cooper .....	1	4	21	1	3	3	39	4	17	93	1	0	24	6	1	2	40	0	80	
Detroit .....	0	21	9	4	3	42	7	7	0	93										
Flint .....	4	5	5	12	21	18	15	10	0	90										
Grand Rapids .....	2	14	17	5	7	16	14	4	12	91	2	0	1	1	0	4	5	0	13	
Monroe, [Whelpley] .....	0	20	2	15	6	4	3	43	0	93	0	20	3	14	5	3	3	44	92	
Monroe, [Perkins] .....	5	8	1	1	2	28	9	39	0	93										
St James .....	8	10	6	8	4	22	0	33	2	93	4	3	3	0	3	22	0	13	48	
INDIANA—																				
Madison .....											1	5	6	14	4	35	16	12	93	
Milton .....	4	13	0	5	9	16	6	7	33	93	0	1	0	0	2	5	3	1	12	
New Harmony .....	5	3	8	11	7	7	14	7	0	62	0	0	2	1	1	2	0	0	0	
ILLINOIS—																				
Athens .....	2	3	4	21	5	19	6	29	0	89	1	1	0	3	0	6	23	17	51	
Angusta .....	0	9	4	12	14	16	19	19	0	93	0	3	0	6	9	7	0	3	36	
Manchester .....	14	0	11	8	22	8	8	13	0	93	6	1	1	2	3	16	6	14	49	
Ottawa .....	1	10	8	5	21	12	25	10	1	93	0	1	0	0	2	2	2	3	14	
Upper Alton .....	2	10	1	13	7	18	23	21	0	95										
MISSOURI—																				
Hannibal .....	11	1	9	9	22	9	16	16	0	93	8	0	1	1	7	6	8	2	33	
St. Louis .....	5	5	6	23	8	13	24	9	0	93										
MINNESOTA—																				
St. Joseph's .....	29	2	1	4	6	4	6	27	11	90	0	0	0	0	1	1	4	5	20	
WISCONSIN—																				
Beloit .....	2	1	3	2	10	5	1	3	0	27	1	1	3	2	10	6	1	3	27	
Cresco .....	5	12	0	6	7	26	12	6	1	75										
Janesville .....	8	5	4	17	20	5	18	12	4	93										
Milwaukee .....	6	11	4	20	1	22	14	15	0	93										
Platteville .....	10	1	3	24	14	4	23	14	0	93	11	2	3	9	10	6	23	10	74	
IOWA—																				
Dubuque .....	12	6	1	6	17	9	4	20	17	92	1	3	0	2	0	5	3	12	26	
Fort Madison .....	4	3	2	22	15	12	1	34	0	93	1	0	2	1	1	18	20	8	51	
Keokuk .....	21	1	17	2	20	2	19	4	6	92	14	0	2	0	4	0	11	3	34	
Muscataine .....	4	5	4	13	15	13	10	29	0	93	0	0	5	3	3	12	0	0	23	
Pella .....	4	1	0	13	25	8	18	24	0	93										
Poultney .....	12	0	9	15	9	9	15	12	6	93	3	1	1	4	3	7	9	4	32	
Quasqueton .....	11	5	2	16	5	14	15	17	0	85	0	0	0	0	0	6	4	1	11	
CALIFORNIA—																				
Sacramento, [Logan] .....	7	8	4	19	5	9	2	39	0	93										
Sacramento, [Hatch] .....	11	11	3	46	3	12	4	34	0	124										
EASTERN CONTINENT—																				
Mozul, Mesopotamia .....	4	0	9	7	3	0	1	2	3	29										



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
St. Martin .....	1	25	0	2	0	24	10	22	0	84										
MAINE—																				
Carmel .....	2	11	0	2	1	8	3	36	11	72	0	7	0	1	0	7	3	14	32	
Fryeburg .....	15	9	1	3	0	16	10	18	0	72	1	0	0	0	0	6	16	9	32	
Gardiner .....	19	31	2	4	3	7	2	15	1	84	1	2	0	0	0	7	1	4	15	
Oldtown .....	13	12	2	6	6	0	3	39	2	83	6	7	1	7	0	9	28	58		
Perry .....	4	26	1	9	0	3	3	38	0	84	3	14	1	0	0	9	7	6	40	
Steuben .....	11	41	5	1	0	5	5	14	1	83	2	7	1	1	0	8	16	1	36	
NEW HAMPSHIRE—																				
Concord .....	0	20	0	0	0	3	0	61	0	84										
Exeter .....	13	8	5	0	0	0	23	35	0	84	11	8	5	0	0	0	26	11	61	
Great Falls .....	1	15	0	2	1	11	7	45	0	82	0	1	0	0	0	3	0	7	11	
Londonderry .....	1	9	1	6	0	0	3	46	18	84	4	1	0	0	0	2	3	11	21	
Manchester .....	21	14	0	2	4	0	4	37	2	84	9	13	0	2	0	1	16	18	59	
Salmon Falls .....	22	6	4	0	0	1	6	38	7	84	1	0	0	1	0	0	4	8	14	
VERMONT—																				
Brandon .....	22	1	3	4	14	3	7	27	3	84	2	0	0	0	3	1	1	7	14	
Burlington .....	27	10	1	2	16	1	9	18	0	84	0	0	0	0	1	2	1	0	4	
Castleton .....	24	4	5	2	6	10	19	0	8	84	0	0	0	2	0	1	0	2	5	
MASSACHUSETTS—																				
Amherst .....	8	4	3	0	1	4	7	46	0	82	1	0	0	0	0	1	11	14	27	
Boston .....	7	2	2	2	0	1	3	11	0	28										
Mendon .....	2	13	5	1	0	20	11	32	0	84	6	12	5	2	0	20	11	28	84	
Nantucket .....	9	5	2	4	1	9	2	45	5	83										
New Bedford .....	9	11	2	4	0	13	9	36	0	84										
Newburyport .....	20	3	3	4	2	1	17	30	0	80										
North Attleboro' .....	18	7	2	2	4	7	17	27	0	84	15	5	6	1	3	4	12	11	57	
Princeton .....	3	17	11	0	0	2	23	28	0	84	1	3	1	0	0	0	17	13	35	
Southwick .....	4	11	0	0	4	2	6	14	4	45	0	1	0	0	0	3	3	7	14	
Springfield .....	11	9	0	2	0	4	2	43	13	84	5	6	0	1	0	3	1	25	41	
Taunton .....	5	10	4	8	0	2	29	25	0	84	1	10	3	7	0	1	16	7	45	
Westfield .....	6	14	2	2	0	2	15	21	0	62										
West Stockbridge .....	1	29	0	0	1	10	0	42	1	84	3	18	0	1	2	0	3	25	61	
Williamstown .....	16	0	7	7	2	3	17	16	15	83	0	0	2	10	1	0	0	1	14	
Wood's Hole .....	28	8	4	0	3	7	21	11	2	84										
Worcester .....	1	20	0	0	0	6	0	57	0	84										
RHODE ISLAND—																				
Providence .....	2	12	2	2	0	6	6	52	0	82										
CONNECTICUT—																				
Pomfret .....	4	15	2	2	1	6	3	51	0	84	4	12	1	0	1	8	1	24	51	
NEW YORK—																				
Angelica .....	0	5	7	9	5	18	38	2	0	84	0	0	0	2	2	17	43	12	76	
Baldwinsville .....	5	3	5	10	0	1	12	46	0	82	0	0	0	0	0	0	17	42	61	
Beverly .....	0	23	1	4	1	29	4	14	0	82	0	11	0	1	3	25	9	18	67	
Canton .....	1	14	0	1	1	33	9	11	6	76	1	5	0	0	0	36	7	8	57	
Fishkill .....	3	36	0	3	0	24	12	0	6	84										
Gouverneur .....	0	41	0	3	0	17	3	20	0	84	3	37	0	3	0	16	2	17	78	
Lodi .....	1	1	11	2	4	21	31	6	83	1	0	0	0	2	0	9	4	16		
Lowville .....	5	2	0	3	11	16	11	36	0	84	0	0	0	0	0	1	4	5	10	
New York city .....	6	13	3	0	0	2	19	41	0	84	3	5	1	1	0	10	25	17	62	
Oswego .....	8	7	9	3	10	3	25	9	10	84										
Penn Yan .....	9	4	0	3	12	22	28	6	0	84										
Sag Harbor .....	11	15	6	5	0	6	11	30	0	84	3	6	3	0	2	7	11	24	56	
Smithville .....	8	17	3	3	11	10	25	7	0	84	2	6	0	0	2	12	52	4	78	
Spencertown .....	26	1	2	5	7	1	11	31	0	84	10	1	0	1	4	5	11	16	48	
Wampsville .....	0	0	12	5	5	3	59	3	0	87	0	0	13	5	4	3	59	2	86	
NEW JERSEY—																				
Bloomfield .....	4	16	0	2	1	17	27	17	0	84										
Burlington .....	17	19	2	2	1	6	24	8	0	82	1	2	0	0	0	0	13	1	19	
Lambertville .....	2	19	1	0	1	4	1	50	0	78										
PENNSYLVANIA—																				
Bedford .....	0	0	0	10	0	9	4	49	0	72	0	0	0	11	0	7	6	40	64	

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1855.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.
PENNSYLVANIA—Continued.																		
Easton	8	7	4	2	0	1	21	25	16	84	4	0	2	0	0	21	20	27
Gettysburg	9	8	0	0	8	8	12	37	2	84	0	0	0	0	0	1	18	28
Harrisburg	13	5	1	5	6	0	0	53	0	83	1	1	0	0	2	0	0	25
Lima	12	14	3	0	1	2	1	39	12	84	6	1	0	0	0	0	13	18
Morrisville	7	11	1	3	0	8	21	26	7	84	0	10	2	0	0	7	23	14
Northstown	0	7	6	0	0	5	29	25	0	72	0	2	5	3	0	8	33	7
Philadelphia	5	12	0	0	1	10	18	38	0	84	0	0	0	0	0	0	9	5
Pittsburg, [M. H.]	0	0	16	0	4	40	30	5	17	112								
Pocopson	12	9	1	2	1	5	12	41	0	83	0	0	0	0	0	0	3	4
Pottsville	9	0	11	3	0	1	1	56	3	84	4	0	0	2	0	0	3	54
Randolph	3	1	0	9	2	15	23	17	13	83	2	0	0	2	0	6	18	7
West Haverford	3	8	2	0	0	1	4	27	12	57	2	3	0	0	0	0	4	19
MARYLAND—																		
Bladensburg	4	5	0	0	0	1	8	24	0	42								
Frederick	10	8	0	0	4	7	10	38	7	84	0	1	0	0	1	2	31	11
Sykesville	3	6	0	0	0	4	48	23	0	84	7	5	0	0	0	0	54	2
VIRGINIA—																		
Alexandria	25	6	3	4	11	4	3	28	0	84								
Lewisburg	2	0	0	0	0	2	5	0	0	9	1	0	0	0	0	0	18	5
Winchester	0	0	0	0	0	0	26	17	39	82	0	0	0	0	0	0	12	3
NORTH CAROLINA—																		
Chapel Hill	11	9	3	0	3	10	29	19	0	84	1	0	0	1	0	16	14	3
Thornbury	11	3	0	1	3	18	23	19	5	83	0	0	0	0	0	3	21	1
SOUTH CAROLINA—																		
All Saints	16	3	3	3	11	30	11	7	0	84	6	0	0	1	3	14	12	3
Camden	17	7	0	1	3	11	23	20	2	84	4	2	0	0	3	5	17	7
Charleston	2	19	1	4	0	11	7	12	0	56								
GEORGIA—																		
Augusta	0	0	0	3	2	19	14	1	0	39								
Savannah	16	0	7	1	6	13	15	26	0	84	0	0	0	0	1	1	4	0
Sparta	5	2	1	9	3	14	6	38	0	78	0	2	0	0	0	5	10	8
The Rock	2	2	0	4	0	4	0	12	0	24								
Whitemarsh island	3	9	1	3	6	21	11	13	17	84	1	4	0	0	1	8	7	8
FLORIDA—																		
Cedar Keys	16	13	3	2	7	9	7	21	6	84	5	1	1	0	3	7	8	9
Jacksonville	12	14	0	2	2	21	9	22	1	83	4	5	1	1	2	12	4	4
Key West	8	10	5	8	3	4	5	13	0	56								
Knox Hill	7	8	6	3	2	9	22	22	0	70	3	4	0	2	0	11	12	5
Warrington	10	10	1	6	5	16	6	26	4	84	2	0	0	1	2	16	5	31
ALABAMA—																		
Auburn	4	5	0	4	2	18	21	30	0	84	0	2	0	2	1	16	8	6
Greene Springs	7	1	3	7	1	4	16	11	24	74	3	1	0	0	0	0	7	5
Tuscaloosa	8	8	4	8	6	9	6	23	5	77	0	0	0	0	0	1	5	1
MISSISSIPPI—																		
Garlandsville	0	1	0	18	0	15	6	43	1	84	1	1	0	18	0	15	2	18
Oxford	7	8	1	2	8	14	22	22	0	84	3	3	0	0	4	7	13	3
LOUISIANA—																		
New Orleans	15	21	6	8	12	6	5	10	1	84	1	1	2	0	1	0	10	1
TEXAS—																		
Austin	24	2	1	11	5	9	9	20	3	84	10	1	0	0	8	9	5	20
New Wied	41	1	10	3	0	5	5	6	13	84	2	1	1	1	0	0	0	2
TENNESSEE—																		
Glenwood	9	7	0	2	7	12	15	19	13	84	3	2	0	0	1	6	22	15
Knoxville	21	3	2	1	22	18	5	12	0	84								
KENTUCKY—																		
Ballardsville	2	0	0	3	15	25	30	9	0	84	0	0	0	0	0	0	3	3
Danville	14	3	1	2	7	16	15	26	0	84	5	1	0	0	1	10	22	15
Millersburg	11	0	4	0	3	1	3	25	37	84								
Springdale	12	2	2	0	2	26	7	8	22	81								
OHIO—																		
Cincinnati, [Hurt]	2	6	7	2	0	14	37	5	1	74	0	4	12	2	0	13	28	3
Cincinnati	8	7	6	0	0	20	8	7	0	56								



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1855.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.
<b>OHIO—Continued.</b>																		
Gallipolis .....	9	6	4	1	3	17	11	26	0	77	1	11	0	6	0	26	3	15
Germantown .....	2	10	0	9	0	25	9	28	0	83	1	11	0	6	0	26	3	15
Granville .....	2	6	5	1	1	11	33	2	19	80	0	1	1	0	1	2	14	1
Hillsborough .....	2	7	0	6	3	18	2	18	0	56	0	0	0	0	0	0	0	1
Jackson, [Crookam] .....	18	6	13	3	2	6	21	9	6	84	9	2	0	0	1	0	20	8
Madison .....	2	11	4	10	8	25	24	3	0	87	3	9	5	9	9	17	14	2
Marietta .....	11	0	1	0	6	5	16	10	35	84	3	0	0	0	0	1	18	7
Mount Vernon .....	5	1	4	1	5	5	39	3	0	63	0	0	1	0	1	3	38	4
Newark .....	9	6	2	3	0	6	13	19	9	67	3	1	0	0	0	2	4	19
New Lisbon .....	4	2	6	6	2	25	21	18	0	84	0	2	5	1	2	13	24	22
Oberlin .....	4	4	4	3	8	18	17	10	5	73	1	0	0	1	1	4	18	0
Urbana .....	0	5	6	5	1	16	20	9	0	62	0	2	0	1	1	9	22	15
Zanesville .....	10	13	1	4	0	11	21	24	0	84	1	13	1	4	0	11	21	24
<b>MICHIGAN—</b>																		
Ann Arbor, [Woodruff] ..	11	3	7	3	1	21	7	22	6	81	4	0	1	2	0	4	17	18
Ann Arbor, [Winchell] ..	13	4	5	6	0	20	4	26	6	84	29	1	1	2	0	9	6	25
Battle Creek .....	7	3	7	5	4	17	12	20	9	84	4	2	7	0	3	10	26	25
Cooper .....	2	0	26	0	0	8	36	5	7	84	5	0	23	0	0	2	41	1
Detroit .....	5	21	0	1	2	29	8	18	0	84	1	21	0	1	2	29	8	18
Flint .....	9	1	1	9	5	12	9	28	0	74	1	1	1	9	5	12	9	28
Grand Rapids .....	1	13	7	1	0	5	27	4	20	78	1	0	0	0	0	1	6	1
Monroe, [Whelpley] .....	0	8	1	11	0	0	5	59	0	84	0	7	1	11	0	1	1	62
Monroe, [Perkins] .....	11	12	3	0	0	26	15	17	0	84	11	12	3	0	0	26	15	17
St. James .....	5	5	7	6	2	12	20	25	2	84	0	0	1	0	0	15	7	20
Saugatuck .....	8	5	22	2	5	1	12	29	0	84	8	5	22	2	5	1	12	29
<b>INDIANA—</b>																		
Madison .....	4	5	4	4	2	7	16	16	26	84	1	10	3	4	2	28	16	20
Milton .....	4	5	4	4	2	7	16	16	26	84	0	0	0	0	2	1	1	0
New Harmony .....	9	3	2	6	2	5	18	11	0	56	9	3	2	6	2	5	18	11
<b>ILLINOIS—</b>																		
Athens .....	1	9	1	11	2	9	0	44	0	77	0	2	0	0	0	0	5	20
Augusta .....	7	5	2	7	4	8	18	27	6	84	3	0	0	0	1	2	4	6
Manchester .....	29	10	5	4	13	1	3	19	0	84	10	0	1	0	0	1	7	10
Ottawa .....	14	13	3	4	6	7	17	18	2	84	1	2	0	0	0	0	1	4
Upper Alton .....	17	3	1	8	1	17	12	24	0	83	17	3	1	8	1	17	12	24
<b>MISSOURI—</b>																		
Hannibal .....	27	5	5	2	7	2	16	14	3	81	27	5	5	2	7	2	16	14
St. Louis .....	6	3	6	13	2	9	21	24	0	84	6	3	6	13	2	9	21	24
<b>WISCONSIN—</b>																		
Beloit .....	29	17	1	5	7	5	12	8	0	84	29	17	1	5	7	5	12	8
Ceresco .....	5	9	4	3	0	8	20	11	3	63	5	9	4	3	0	8	20	11
Janesville .....	25	4	3	9	4	6	20	7	6	84	25	4	3	9	4	6	20	7
Milwaukee, [Winkler] ..	6	15	1	12	1	7	9	33	0	84	6	15	1	12	1	7	9	33
Platteville .....	9	9	10	3	1	25	21	0	84	9	9	10	3	1	25	21	0	84
<b>IOWA—</b>																		
Dubuque .....	26	9	8	5	5	3	1	11	15	83	26	9	8	5	5	3	1	11
Fort Madison .....	11	9	2	13	4	3	2	40	0	84	11	9	2	13	4	3	2	40
Muscataine .....	6	11	4	7	3	3	20	30	0	84	6	11	4	7	3	3	20	30
Pella .....	2	1	2	2	21	1	26	29	0	84	2	1	2	2	21	1	26	29
Poultney .....	14	10	7	10	1	8	10	20	8	82	14	10	7	10	1	8	10	20
Quasqueton .....	13	14	2	7	0	6	7	27	0	76	13	14	2	7	0	6	7	27
<b>MINNESOTA—</b>																		
Lac qui Parle .....	15	3	9	1	15	1	7	33	0	84	15	3	9	1	15	1	7	33
St. Joseph's .....	28	3	4	4	11	8	5	17	2	82	28	3	4	4	11	8	5	17
<b>CALIFORNIA—</b>																		
Sacramento, [Logan] .....	13	1	1	18	6	15	0	30	0	84	13	1	1	18	6	15	0	30
Sacramento, [Hatch] .....	11	7	1	22	17	13	3	38	0	112	11	7	1	22	17	13	3	38
<b>EASTERN CONTINENT—</b>																		
Mosul, Mesopotamia .....	4	4	4	3	2	1	3	4	1	26	4	4	4	3	2	1	3	4

No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
St. Martin .....	0	17	0	4	2	40	9	21	0	93										
MAINE—																				
Carmel .....	1	6	0	2	0	8	11	48	5	81	0	2	0	3	0	4	2	22	33	
Fryeburg .....	5	15	2	3	2	28	7	23	0	85	1	0	0	0	4	5	10	20	40	
Gardiner .....	1	21	0	13	2	22	5	20	9	93	1	2	0	1	3	21	4	1	33	
Oldtown .....	8	9	5	4	6	9	10	39	0	90	1	2	2	2	3	4	13	27	54	
Perry .....	7	15	0	0	2	10	42	11	0	93	3	7	0	1	3	7	11	4	36	
Steuben .....	0	22	1	6	1	25	9	24	5	93	0	4	1	0	0	20	21	6	52	
NEW HAMPSHIRE—																				
Concord .....	1	8	0	0	0	30	1	53	0	93										
Exeter .....	7	2	2	1	2	18	32	27	0	91	6	2	2	1	0	14	26	13	64	
Great Falls .....	2	11	0	0	1	24	16	28	0	82	0	1	0	0	0	8	3	0	18	
Londonderry .....	0	2	2	2	2	5	6	47	27	93	0	0	0	0	0	2	7	13	22	
Manchester .....	3	8	1	2	5	12	28	31	0	90	0	0	1	2	6	3	29	12	59	
Salmon Falls .....	1	12	0	0	0	6	24	34	0	86	1	1	0	0	0	1	6	13	22	
VERMONT—																				
Brandon .....	19	0	0	4	30	3	18	12	7	93	0	0	0	0	5	0	13	20	38	
Burlington .....	22	5	1	4	26	4	13	18	0	93	0	0	0	0	0	2	0	1	3	
Castleton .....	12	7	0	6	15	32	8	0	13	93	0	0	0	0	0	4	2	0	0	
St. Johnsbury .....	0	0	3	3	0	15	1	69	0	91										
MASSACHUSETTS—																				
Amherst .....	2	4	3	17	1	10	1	53	0	91	1	0	0	1	2	2	5	22	33	
Barnstable .....	13	6	3	3	2	24	21	14	7	93										
Boston .....	1	6	0	1	0	5	2	13	2	30										
Mendon .....	9	11	9	2	0	40	0	14	0	93	10	10	9	2	0	40	7	15	93	
Nantucket .....	11	8	3	3	2	21	11	22	10	91										
New Bedford .....	7	8	2	5	3	26	5	36	1	93	3	2	2	2	0	4	3	10	26	
Newburyport .....	13	4	3	11	9	5	28	14	0	87										
North Attleboro' .....	20	1	3	3	14	11	23	18	0	93	4	3	3	3	4	11	30	13	71	
Princeton .....	3	6	0	2	2	9	41	21	6	99	1	2	4	0	1	4	32	8	52	
Richmond .....	1	10	1	12	1	13	0	52	0	90	4	5	0	0	4	9	6	27	64	
Southwick .....	4	9	1	2	12	1	4	10	2	45	1	0	0	1	0	6	6	3	17	
Springfield .....	21	4	0	3	5	0	2	28	21	93	10	5	0	2	2	5	2	20	46	
Westfield .....	6	11	2	3	10	0	23	12	0	80										
Williamstown .....	8	0	2	11	8	3	17	28	11	88	0	1	4	18	1	0	0	2	26	
Worcester .....	0	8	0	1	0	23	1	60	0	93										
RHODE ISLAND—																				
Providence .....	7	7	5	1	3	21	6	43	0	93										
CONNECTICUT—																				
New London .....	11	4	7	0	5	24	11	31	0	93										
Pomfret .....	0	11	1	5	2	19	5	50	0	93	0	5	1	4	2	11	10	24	57	
Saybrook .....	9	3	5	4	1	13	17	10	2	64	1	1	2	1	0	6	10	9	30	
NEW YORK—																				
Angelica .....	1	18	1	5	3	41	22	2	0	93	0	0	0	0	1	15	37	16	69	
Baldwinsville .....	3	0	4	6	0	11	25	42	0	91	0	0	0	0	0	0	34	33	67	
Beverly .....	8	10	0	9	4	33	3	22	4	93	4	3	2	8	1	25	20	10	73	
Canton .....	4	14	0	0	4	53	2	9	2	88	0	5	0	0	2	44	2	1	54	
Fishkill .....	18	6	0	0	18	18	18	6	0	93										
Gouverneur .....	13	10	1	0	5	42	3	13	0	93	4	0	2	2	3	38	2	0	68	
Lodi .....	5	0	2	16	6	20	14	23	7	93	1	0	0	0	2	5	19	5	32	
Lowville .....	2	3	0	0	14	22	20	30	0	93	0	0	0	0	0	4	0	5	15	
New York city .....	5	12	1	4	1	11	26	33	0	93	0	6	1	4	0	14	33	20	78	
Ogdensburg .....	0	0	2	3	0	11	0	3	0	46										
Oswego .....	8	6	7	12	5	13	32	3	0	86										
Penn Yan .....	13	5	4	0	15	22	29	5	0	93										
Sag Harbor .....	8	10	4	5	4	23	12	22	2	90	2	3	2	4	1	25	15	17	57	
Smithville .....	7	13	2	6	15	16	24	8	2	93	9	0	0	1	9	16	46	6	87	
Spencertown .....	25	1	0	0	13	16	10	26	0	91	11	0	0	0	4	12	5	21	53	
Wampsville .....	0	0	9	5	11	8	55	5	0	93	0	0	9	4	10	0	6	87		
NEW JERSEY—																				
Bloomfield .....	3	10	1	2	4	41	13	19	0	93										



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW JERSEY—Continued.																			
Burlington .....	9	15	2	0	1	13	27	10	15	92	1	7	0	1	0	1	2	1	13
Lambertville .....	0	10	2	3	2	21	2	48	0	88									
PENNSYLVANIA—																			
Bedford .....	0	0	0	13	0	13	7	30	18	81	0	0	0	13	0	13	7	30	63
Easton .....	0	6	2	3	2	6	18	23	32	92	1	2	0	0	0	7	20	15	45
Gettysburg .....	10	10	0	1	7	19	17	23	5	92	1	4	0	1	5	4	23	18	56
Harrisburg .....	8	0	8	5	4	0	11	57	0	93	2	0	1	1	2	0	7	26	39
Lima .....	13	20	2	2	7	6	5	36	11	102	1	5	1	0	1	2	18	19	44
Morrisville .....	6	9	2	1	2	28	16	24	5	93	3	3	2	1	1	7	39	16	72
Moss Grove .....	1	0	2	6	5	9	48	5	0	76	0	0	1	3	1	12	44	3	64
Norristown .....	0	4	11	4	2	9	42	9	0	81	0	0	13	1	0	7	34	2	57
Philadelphia .....	7	13	1	3	3	20	12	34	0	93	0	0	0	0	0	3	8	4	15
Pittsburg, [M. H.] .....	0	0	15	1	16	30	41	2	19	124									
Pocopson .....	10	7	1	2	0	14	30	28	0	92	0	0	0	0	0	1	4	2	7
Pottsville .....	7	5	6	3	0	5	9	51	7	93	1	4	2	1	0	3	5	36	52
Randolph .....	0	1	0	13	12	20	19	18	10	93	1	1	0	4	0	4	33	11	54
West Haverford .....	0	5	5	4	0	8	7	24	9	62	1	2	0	0	0	4	8	0	24
MARYLAND—																			
Bladensburg .....	1	2	13	0	0	10	3	12	0	41									
Frederick .....	10	12	1	0	5	11	15	31	7	92	2	3	1	2	0	4	36	7	55
Sykesville .....	1	7	0	3	3	20	46	13	0	93	2	1	11	2	4	8	45	3	76
DISTRICT OF COLUMBIA—																			
Washington .....	0	5	6	2	2	4	14	13	5	51									
VIRGINIA—																			
Alexandria .....	15	16	0	3	24	6	2	25	0	91									
Asbland .....	5	0	0	0	7	30	1	10	44	97	1	0	0	0	0	9	13	2	25
Crichton's Store .....	26	2	1	7	17	22	10	7	1	93	10	1	0	0	1	16	30	11	69
Lewisburg .....	0	0	0	0	0	9	7	0	0	16	0	0	0	0	0	4	32	2	38
Winchester .....	0	0	3	1	7	5	20	5	52	93	0	0	0	0	0	0	4	0	4
NORTH CAROLINA—																			
Chapel Hill .....	17	5	2	3	6	21	20	19	0	93	4	0	0	0	3	20	5	7	39
Thornbury .....	8	7	9	1	5	33	7	16	0	86	0	7	0	0	2	18	9	1	37
SOUTH CAROLINA—																			
All Saints .....	11	5	5	1	7	47	8	9	0	93	4	2	0	0	1	22	11	4	44
Camden .....	7	11	0	3	4	28	19	16	5	93	5	4	0	0	0	13	11	5	38
Charleston .....	5	10	1	4	0	33	0	9	0	62									
GEORGIA—																			
Augusta .....	1	0	0	0	10	15	9	5	0	40									
Savannah .....	12	3	3	8	21	17	10	19	0	93	1	0	1	0	1	1	5	1	10
Sparta .....	2	10	1	4	3	34	7	29	0	90	0	2	0	0	0	16	11	8	37
The Rock .....	0	1	0	3	5	4	1	9	0	23									
Whitemarsh island .....	6	10	0	4	14	22	6	17	14	93	0	4	0	0	0	9	9	6	28
FLORIDA—																			
Cedar Keys .....	10	17	4	10	12	20	6	9	5	93	2	9	1	0	5	4	10	7	38
Jacksonville .....	12	19	1	1	5	34	8	10	2	92	3	2	0	2	0	12	14	1	34
Key West .....	11	3	7	16	2	1	3	19	0	62									
Knox Hill .....	11	9	5	7	5	24	12	14	0	91	2	2	2	5	5	22	15	5	58
Warrington .....	11	15	2	10	5	26	3	18	3	93	2	5	0	0	1	33	2	33	76
ALABAMA—																			
Auburn .....	2	10	4	5	8	29	12	22	1	93	1	0	0	1	0	16	3	6	33
Greene Springs .....	11	3	3	11	2	16	13	12	20	91	1	2	0	0	0	15	14	5	37
Tuscaloosa .....	3	14	2	5	16	11	9	18	3	81	0	0	0	0	0	2	4	4	10
MISSISSIPPI—																			
Garlandville .....	0	13	0	10	0	39	5	26	0	93	0	7	0	5	0	32	6	3	53
Oxford .....	9	5	5	11	8	21	19	15	0	93	2	0	1	1	4	21	19	4	52
LOUISIANA—																			
New Orleans .....	11	21	4	8	15	17	9	6	2	93	4	3	1	0	2	7	7	1	25
TEXAS—																			
Austin .....	43	2	2	9	18	8	4	4	3	93	5	0	0	0	10	10	4	16	54
New Wied .....	37	2	5	14	6	5	12	2	10	93	1	0	2	0	0	2	0	7	12

## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TENNESSEE—																				
Friendship .....	16	1	1	6	5	26	3	27	5	90	3	2	0	0	0	15	15	7	42	
Glenwood .....	19	7	3	6	12	9	7	14	16	93	2	0	1	0	1	18	16	11	48	
Knoxville .....	20	5	5	1	12	27	9	8	0	87										
Lebanon .....	11	5	4	2	16	19	8	18	0	83	0	0	0	0	0	3	0	33	36	
KENTUCKY—																				
Ballardsville .....	3	1	7	1	13	50	9	0	0	93	1	0	0	0	0	5	4	1	11	
Danville .....	7	6	7	5	2	29	18	19	0	93	0	0	1	0	2	18	29	6	56	
Middlesburg .....	15	0	4	1	7	6	9	16	34	92										
Springdale .....	0	5	6	3	6	35	4	12	22	93										
OHIO—																				
Berea .....	2	4	0	10	10	31	18	14	4	93	2	0	0	4	1	20	13	20	66	
Cincinnati .....	1	4	1	0	0	9	7	0	2	31										
Gallipolis .....	2	7	1	0	21	18	9	19	0	77										
Germantown .....	0	4	3	7	0	36	8	32	0	90	0	2	1	6	0	33	3	19	64	
Granville .....	1	0	2	1	1	18	26	4	14	75	0	4	0	0	0	8	15	3	30	
Hillsborough .....	0	9	0	4	1	30	1	18	0	63	0	0	0	0	0	2	0	0	2	
Jackson, [Crookham] .....	4	2	15	0	12	8	29	1	18	89	0	1	3	0	1	5	34	5	49	
Marietta .....	3	1	1	1	8	13	12	12	41	92	0	0	0	1	0	8	22	1	34	
Mount Vernon .....	2	3	1	3	10	16	30	1	26	92	1	1	2	0	0	9	24	3	42	
Newark .....	4	1	3	3	4	11	18	20	29	93	1	2	1	1	1	12	21	14	53	
New Lisbon .....	8	6	1	8	6	34	16	14	0	93										
Oberlin .....	5	7	2	2	11	25	24	8	3	87	0	2	2	1	1	6	29	0	47	
Urbana .....	0	6	0	3	5	30	18	7	0	69	0	0	0	0	1	7	35	9	58	
Zanesville .....	5	0	0	3	2	30	29	24	0	93										
MICHIGAN—																				
Ann Arbor, [Woodruff] ..	1	8	5	0	0	43	6	15	4	90	0	3	1	3	0	6	31	15	59	
Ann Arbor, [Winchell] ..	3	6	3	9	8	10	37	11	6	93	2	1	3	5	1	23	22	14	71	
Battle Creek .....	0	2	0	2	7	33	28	7	6	93	0	2	1	1	0	17	51	8	80	
Cooper .....	1	1	12	0	1	1	65	0	12	93	1	1	11	0	0	0	48	0	64	
Detroit .....	3	12	4	0	2	49	8	15	0	93										
Flint .....	8	3	2	7	14	14	21	15	0	84										
Grand Rapids .....	4	7	7	2	2	25	17	6	16	86	2	1	0	0	1	8	8	1	21	
Monroe, [Whelpley] .....	1	10	9	2	3	7	2	59	0	93	4	8	7	2	3	7	0	57	88	
St. James .....	8	9	2	5	0	39	5	25	0	93	6	1	3	1	1	19	6	18	65	
Saugatuck .....	12	6	13	4	6	10	18	24	0	93	6	1	4	1	2	16	31	29	90	
INDIANA—																				
Madison .....											0	6	5	14	0	25	26	16	92	
Milton .....	2	4	3	3	2	17	18	11	33	93	0	0	1	0	1	4	6	2	14	
New Harmony .....	6	4	4	5	5	10	15	11	0	60										
ILLINOIS—																				
Athens .....	6	9	3	17	3	15	3	34	0	90	2	3	0	0	0	6	26	15	52	
Augusta .....	2	13	0	11	9	11	25	19	3	93	0	3	1	1	2	1	11	8	27	
Manchester .....	13	5	17	4	19	7	9	19	0	93	7	0	4	0	2	13	0	6	32	
Ottawa .....	6	14	2	3	3	24	25	12	4	93	5	2	0	0	0	8	4	10	29	
Upper Alton .....	9	6	0	6	5	15	11	27	13	92										
MISSOURI—																				
Hannibal .....	20	5	8	4	19	11	14	10	2	93	6	1	0	0	0	4	16	6	33	
St. Louis .....	1	6	7	12	7	21	22	17	0	93	1	2	1	0	1	2	20	18	45	
WISCONSIN—																				
Beloit .....	24	7	0	2	20	16	14	10	0	93	4	0	0	0	0	2	3	2	11	
Ceresco .....	6	5	3	3	12	22	27	9	0	87										
Janesville .....	1	10	4	3	17	21	29	6	1	92										
Milwaukee, [Winkler] ..	5	14	6	10	3	13	29	13	0	93										
Platteville .....	2	10	2	6	14	8	35	16	0	93	1	9	0	3	9	9	27	11	69	
IOWA—																				
Dubuque .....	11	8	1	1	7	12	12	22	15	89	1	0	0	0	1	3	0	10	21	
Fort Madison .....	8	5	0	14	7	18	6	35	0	93	1	0	2	0	2	6	27	11	49	
Muscatine .....	3	6	3	0	3	23	11	31	0	93	0	3	0	1	0	18	3	9	34	
Pella .....	4	4	3	3	18	14	28	20	0	94										
Pontiac .....	6	5	2	13	9	9	9	36	1	90	2	2	1	1	0	2	7	6	21	
Quasqueton .....	6	9	2	12	9	18	9	28	0	93	2	0	0	0	0	0	3	4	0	



No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1855.

[illegible]

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1855.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
St Martin.....	3	19	1	0	2	28	6	22	0	90	0	0	0	0	0	1	0	0	1
MAINE—																			
Carmel.....	3	6	0	12	0	11	5	23	10	73	2	5	0	0	0	8	2	0	32
Fryeburg.....	8	5	4	6	7	32	10	14	0	86	1	0	0	0	0	7	7	19	34
Gardiner.....	4	12	1	14	5	23	1	23	7	90	0	0	0	0	2	9	2	8	21
Oldtown.....	4	2	13	11	8	0	11	26	5	89	4	1	7	3	3	5	11	15	49
Perry.....	4	6	3	12	5	22	0	30	0	90	0	2	5	3	0	7	9	5	49
Steuben.....	1	16	2	7	0	39	1	20	3	82	5	7	0	1	0	20	4	14	51
NEW HAMPSHIRE—																			
Concord.....	0	0	0	16	1	39	0	28	0	90	3	8	7	5	2	10	18	0	59
Exeter.....	3	10	7	6	0	33	11	0	85	0	0	0	0	1	6	1	8	16	16
Great Falls.....	0	6	0	0	11	13	12	29	0	77	0	0	0	0	1	6	1	8	16
Londonderry.....	1	1	3	13	7	6	8	27	24	90	0	0	1	3	4	4	8	13	33
Manchester.....	2	3	3	8	16	4	0	27	0	71	2	2	3	4	0	0	16	8	44
VERMONT—																			
Brandon.....	20	0	1	7	30	5	4	10	13	00	2	0	0	0	3	1	7	14	27
Burlington.....	19	2	0	2	42	0	5	20	0	00	0	0	0	0	0	0	0	2	2
Craftsbury.....	0	0	0	0	0	39	1	42	0	89	5	4	1	0	9	1	26	13	59
St Johnsbury.....	0	0	0	0	0	39	1	42	0	89	5	4	1	0	9	1	26	13	59
MASSACHUSETTS—																			
Amherst.....	0	2	4	35	2	0	0	37	0	86	0	0	1	3	3	1	5	18	31
Boston.....	0	10	2	13	2	12	2	21	2	64	0	0	1	3	3	1	5	18	31
Mendon.....	0	22	3	5	1	32	7	20	0	90	0	18	5	4	1	38	7	16	89
Nantucket.....	3	11	4	11	8	23	5	18	7	90	2	2	0	0	5	0	5	11	25
New Bedford.....	2	7	2	15	6	27	5	26	0	90	2	2	0	0	5	0	5	11	25
Newburyport.....	9	4	5	7	16	4	17	23	0	85	3	4	9	0	8	0	16	14	60
North Attleboro'.....	0	6	5	5	27	10	17	14	0	90	1	6	2	4	0	0	18	12	49
Princeton.....	1	9	3	0	1	14	35	21	0	90	1	6	2	4	0	0	18	12	49
Richmond.....	0	10	0	15	0	28	1	35	0	89	1	15	0	15	3	16	0	18	71
Southwick.....	2	8	2	4	11	2	0	8	5	45	1	3	1	1	0	7	4	4	21
Springfield.....	4	5	0	0	11	12	0	27	31	90	2	3	0	0	8	3	1	23	40
Westfield.....	4	5	0	9	5	10	15	16	0	70	1	1	0	6	4	0	1	2	15
Williamstown.....	6	0	0	9	14	4	13	15	0	67	1	1	0	6	4	0	1	2	15
Wool's Hole.....	5	2	0	0	15	26	10	11	6	90	1	1	0	6	4	0	1	2	15
Worcester.....	0	6	2	11	0	21	1	49	0	90	1	1	0	6	4	0	1	2	15
RHODE ISLAND—																			
Providence.....	1	9	7	7	8	20	4	33	0	89	1	9	7	7	8	20	4	33	89
CONNECTICUT—																			
New London.....	0	8	0	10	3	31	3	29	0	90	2	4	3	4	8	13	0	21	61
Pomfret.....	2	7	3	6	14	17	3	38	0	90	1	2	0	1	8	3	8	8	37
Saybrook.....	4	3	0	8	4	15	15	21	7	85	1	2	0	1	8	3	8	8	37
NEW YORK—																			
Angelica.....	2	3	3	2	4	24	35	17	0	90	0	1	0	0	0	0	33	2	45
Baldwinsville.....	0	3	13	3	3	14	15	33	0	84	1	2	3	0	0	2	38	17	63
Beverly.....	6	11	0	9	14	28	2	14	4	88	1	5	1	16	3	11	12	5	54
Canton.....	2	14	0	0	6	53	2	13	0	90	0	8	0	0	5	40	0	0	59
Fishkill.....	9	3	0	0	48	3	6	15	3	90	0	0	0	0	1	3	22	13	39
Gouverneur.....	13	2	0	0	10	58	3	4	0	00	5	1	0	0	4	41	3	4	58
Lodi.....	4	4	2	10	11	16	0	27	7	90	0	0	0	0	1	3	22	13	39
Lowville.....	14	3	4	7	13	14	0	29	0	90	1	1	0	1	0	1	5	5	14
New York city.....	4	15	3	12	1	7	15	33	0	90	2	7	0	2	0	9	27	16	63
Ogdensburg.....	10	1	3	1	4	12	2	0	0	39	0	0	0	0	0	0	0	0	0
Penn Yan.....	6	9	0	0	21	21	31	2	0	90	0	4	1	4	0	16	15	16	56
Sag Harbor.....	3	0	3	10	10	22	0	21	0	87	0	4	1	4	0	16	15	16	56
Smithville.....	4	6	5	0	19	31	15	8	2	90	0	4	0	0	1	24	21	12	71
Spencertown.....	24	0	1	4	22	16	3	18	0	88	13	0	0	1	7	13	7	15	56
Wampsville.....	0	0	8	5	18	8	46	4	1	90	1	0	9	3	15	5	40	5	78
NEW JERSEY—																			
Bloomfield.....	0	1	0	0	0	12	5	0	0	18	1	7	0	0	0	1	2	0	11
Burlington.....	5	15	3	1	5	2	22	0	28	90	1	7	0	0	0	1	2	0	11
Lambertville.....	0	14	1	12	3	14	0	37	0	81	1	7	0	0	0	1	2	0	11



No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
PENNSYLVANIA—																				
Bedford.....	0	0	0	8	0	21	4	42	0	75	1	0	0	1	0	18	5	18	43	
Easton.....	0	2	3	12	6	3	9	26	29	90	3	0	0	2	5	4	11	10	35	
Gettysburg.....	3	8	1	0	5	29	11	25	8	90	1	3	0	0	1	8	28	13	54	
Harrisburg.....	1	1	10	16	10	1	13	34	0	86	0	0	1	5	3	1	2	12	24	
Lima.....	4	17	4	8	9	2	2	22	22	90	4	0	3	0	2	3	21	20	53	
Morrisville.....	3	13	1	2	6	23	14	18	10	90	2	7	0	0	0	7	23	19	58	
Moss Grove.....	6	0	4	3	9	7	24	13	3	69	0	0	0	0	0	5	31	11	47	
Norristown.....	0	6	14	5	1	3	19	27	0	75	0	4	9	1	0	5	18	9	46	
Philadelphia.....	3	18	6	3	5	18	9	23	0	90	0	0	0	0	1	3	6	5	15	
Pittsburg, [M. H.].....	0	0	6	4	7	20	43	1	39	120										
Pocopson.....	7	4	2	0	3	19	30	25	0	90	2	0	0	1	0	0	8	1	12	
Pottsville.....	8	7	6	8	2	12	1	41	5	90	6	0	1	0	1	7	3	33	51	
Randolph.....	1	0	1	11	18	4	9	30	16	90	3	0	0	0	0	4	21	18	46	
West Haverford.....	2	11	0	2	1	22	2	15	5	60	1	0	0	0	0	3	8	13	25	
MARYLAND—																				
Bladensburg.....	2	3	5	0	3	8	1	13	0	35										
Frederick.....	5	5	1	3	11	21	14	21	3	86	1	3	0	0	0	4	28	1	37	
Sykesville.....	5	1	0	4	5	21	45	9	0	90	0	1	0	3	2	6	50	5	67	
DISTRICT OF COLUMBIA—																				
Washington.....	0	11	5	10	4	9	18	7	26	90	0	0	0	0	1	0	1	1	3	
VIRGINIA—																				
Alexandria.....	8	11	4	7	27	5	3	25	5	90										
Ashland.....	1	0	0	0	2	14	2	16	55	90	0	0	0	0	0	1	17	2	20	
Crichton's Store.....	16	3	0	1	39	16	13	2	0	90	3	1	1	0	3	21	38	4	71	
Lewisburg.....	0	0	0	0	0	0	11	0	0	11	0	0	0	0	2	0	22	0	24	
Winchester.....	0	0	0	3	8	1	23	0	55	90	0	0	0	0	0	0	5	0	5	
NORTH CAROLINA—																				
Chapel Hill.....	12	3	6	6	17	13	23	10	0	90	2	0	0	0	6	21	6	3	38	
Thornbury.....	3	3	7	1	9	31	16	7	2	79	1	0	0	0	0	7	10	1	19	
SOUTH CAROLINA—																				
All Saints.....	4	10	10	8	18	34	4	2	0	90	7	8	4	3	1	17	4	2	46	
Camden.....	5	11	4	15	9	27	9	8	2	90	0	1	1	1	0	12	16	8	39	
Charleston.....	0	13	7	13	0	25	1	1	0	60										
GEORGIA—																				
Savannah.....	6	10	9	18	20	13	9	5	0	90	1	0	0	0	1	1	2	1	6	
Sparta.....	4	10	5	16	3	35	1	15	0	89	2	0	1	5	2	10	8	12	40	
The Rock.....	0	3	4	7	3	6	1	5	0	29										
Whitemarsh Island.....	3	21	6	3	24	11	9	1	12	90	2	6	0	4	0	3	5	7	27	
FLORIDA—																				
Cedar Keys.....	10	19	5	3	9	8	27	6	3	90	10	4	4	0	1	2	8	2	31	
Jacksonville.....	2	25	5	5	16	26	3	5	3	90	2	8	5	1	0	9	9	0	34	
Key West.....	9	22	18	3	1	1	4	1	60											
Knox Hill.....	2	8	7	7	4	20	16	5	0	69	1	1	2	7	5	13	11	2	42	
Warrington.....	2	2	2	21	16	28	1	10	8	90	2	1	0	10	1	15	3	31	63	
ALABAMA—																				
Auburn.....	0	4	6	10	7	31	24	8	0	90	1	2	0	4	2	12	8	4	33	
Greene Springs.....	2	2	6	13	3	5	17	5	19	72	0	0	0	0	3	7	8	7	25	
MISSISSIPPI—																				
Garlandville.....	0	1	1	23	3	38	9	13	1	89	0	2	1	16	2	28	19	7	75	
Oxford.....	0	9	14	9	8	20	22	8	0	90	0	3	2	2	2	17	24	5	55	
LOUISIANA—																				
New Orleans.....	6	7	7	27	23	7	6	7	0	90	1	1	0	2	6	4	4	2	20	
TEXAS—																				
Austin.....	6	4	0	37	33	3	0	6	1	90	6	0	1	17	28	18	1	10	81	
New Wied.....	9	2	5	15	29	15	2	3	10	90	0	0	4	0	6	0	2	4	16	
TENNESSEE—																				
Friendship.....	2	9	5	13	2	30	6	14	8	89	1	1	0	0	0	14	22	15	53	
Glenwood.....	10	16	4	13	16	9	3	4	15	90	1	2	0	0	0	16	37	9	65	
Knoxville.....	13	17	1	2	22	21	7	4	0	87										
KENTUCKY—																				
Danville.....	11	22	3	3	4	28	13	6	0	90	3	0	0	1	2	12	24	3	45	
Millersburg.....	5	0	9	3	2	5	11	8	46	89										





NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
St Martin .....	4	21	2	0	0	22	2	33	0	93	3	2	0	0	6	0	0	0	11
MAINE—																			
Carmel .....	0	2	1	7	0	4	0	27	3	44	0	0	0	7	0	3	0	14	24
Fryeburg .....	13	11	4	2	3	12	6	16	0	67	1	1	1	0	0	2	4	18	27
Gardiner .....	3	27	0	15	4	16	2	11	13	91	5	8	0	1	3	7	1	11	36
Oldtown .....	11	13	0	9	13	5	11	9	9	89	13	8	2	5	3	1	12	7	51
Perry .....	2	20	3	20	8	14	1	25	0	93	13	20	1	5	6	5	1	16	67
Steuben .....	1	38	1	10	0	29	2	12	0	93	4	21	1	0	0	9	0	9	50
NEW HAMPSHIRE—																			
Concord .....	7	18	2	17	1	18	0	30	0	93									
Exeter .....	10	12	8	13	1	12	11	17	0	84	10	9	5	8	0	8	5	11	56
Great Falls .....	3	23	0	10	3	19	1	22	0	81	1	5	0	1	0	8	1	10	26
Manchester .....	20	14	3	3	11	14	9	19	0	93	1	9	3	1	4	2	32	15	67
VERMONT—																			
Brandon .....	45	0	3	3	21	1	1	9	8	89	15	1	0	0	1	1	0	11	29
Burlington .....	44	4	0	0	30	1	0	14	0	93	1	2	0	0	1	0	9	3	16
Craftsbury .....	12	23	4	5	22	10	4	13	0	93	9	13	1	0	7	6	12	13	61
St. Johnsbury .....	4	9	0	0	1	13	1	54	0	82									
MASSACHUSETTS—																			
Amherst .....	10	8	3	27	1	5	3	34	0	91	3	6	1	0	1	4	3	17	35
Boston .....	18	11	15	6	6	10	18	9	0	93									
Mendon .....	5	22	16	2	0	37	4	7	0	93	7	20	15	2	0	35	2	12	93
Nantucket .....	8	20	4	4	4	25	5	13	10	93									
New Bedford .....	7	25	0	8	4	27	2	18	2	93	3	7	0	0	0	0	2	11	23
Newburyport .....	21	16	4	10	15	7	10	6	0	89	7	2	0	5	2	0	4	0	20
North Attleboro' .....	26	10	2	3	26	5	4	17	0	93	18	6	2	2	20	2	6	14	70
Princeton .....	12	25	2	6	4	14	18	12	0	93	3	11	1	1	2	4	22	11	55
Richmond .....	0	31	0	9	0	31	0	22	0	93	3	20	0	12	0	16	5	7	63
Southwick .....	5	19	2	1	4	7	5	3	2	48	2	4	0	1	0	8	3	2	20
Springfield .....	13	18	2	0	1	19	1	15	24	93	4	14	0	1	0	7	0	7	

No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
PENNSYLVANIA—																				
Bedford .....	2	1	0	12	0	14	10	39	0	81	0	0	0	6	1	12	6	18	43	
Easton .....	6	4	1	15	4	3	1	32	27	93	11	3	0	1	1	5	4	4	29	
Gettysburg .....	22	12	1	7	6	21	5	17	0	91	6	2	1	4	0	11	11	23	58	
Harrisburg .....	8	2	5	17	7	0	10	44	0	93	2	0	2	5	4	2	0	17	38	
Lima .....	20	22	4	4	8	7	3	11	14	93	9	2	0	2	1	2	9	25	50	
Meaiville .....	5	1	1	8	8	10	3	33	14	83	3	0	0	4	5	10	8	8	38	
Morrisville .....	7	0	3	4	5	25	0	20	11	93	6	6	1	1	0	6	20	17	57	
Moss Grove .....	4	4	13	12	3	4	31	5	0	85	0	0	5	1	1	4	28	0	32	
Norristown .....	4	2	13	5	0	19	14	24	0	81	1	1	6	1	0	9	37	5	60	
Philadelphia .....	4	17	3	3	4	17	5	40	0	93	1	1	0	0	1	4	2	0	18	
Pittsburg, [M. H.] .....	2	1	26	5	12	13	30	4	31	124										
Pocopson .....	15	11	4	2	1	18	15	25	0	91	0	0	1	0	0	1	2	2	6	
Pottsville .....	26	8	3	16	0	12	3	23	2	93	17	0	2	2	0	5	0	19	51	
Randolph .....	4	0	4	0	4	0	5	28	20	89	1	2	0	5	0	2	17	19	46	
West Haverford .....	12	6	1	1	0	12	5	19	0	62	4	5	1	0	0	4	7	11	33	
MARYLAND—																				
Bladensburg .....	3	2	5	1	2	4	4	10	0	31										
Frederick .....	5	0	0	1	4	9	24	10	33	86	4	0	0	1	4	3	24	11	52	
Sykesville .....	3	0	2	1	8	14	49	16	0	93	0	0	4	3	4	2	54	3	70	
DISTRICT OF COLUMBIA—																				
Washington .....	0	19	1	11	2	17	10	22	11	83	5	2	0	0	0	4	4	5	20	
VIRGINIA—																				
Alexandria .....	10	3	3	4	22	9	7	35	0	93	5	2	0	0	8	5	0	0	20	
Ashland .....	14	3	0	0	8	14	0	4	50	93	2	1	0	0	0	0	16	2	30	
Crichton's Store .....	22	2	0	0	29	13	7	5	0	79	11	1	1	0	12	22	27	5	79	
Lewisburg .....	8	0	0	0	0	0	0	5	0	22	5	0	2	0	13	3	20	5	48	
Winchester .....	0	0	1	7	9	8	28	0	40	93	0	0	0	0	0	1	15	2	18	
NORTH CAROLINA—																				
Chapel Hill .....	10	25	5	7	2	6	28	0	0	92	3	7	8	0	5	15	10	7	53	
SOUTH CAROLINA—																				
All Saints .....	6	5	7	12	26	24	8	5	0	93	5	3	6	4	7	10	22	6	63	
Camden .....	4	18	4	0	3	20	20	14	1	93	3	6	2	3	1	15	17	15	62	
Charleston .....	0	4	7	16	0	22	2	11	0	62										
GEORGIA—																				
Augusta .....	0	1	0	2	2	5	2	0	0	12										
Savannah .....	8	5	14	22	19	8	6	11	0	93	0	0	0	1	0	3	4	2	10	
Sparta .....	1	20	10	19	2	19	5	16	0	92	0	7	2	3	0	14	7	10	43	
The Rock .....	0	2	2	4	9	8	0	6	0	31										
Whitemarsh Island .....	3	12	3	13	18	12	5	7	20	93	1	6	4	7	2	5	0	23	48	
FLORIDA—																				
Cedar Keys .....	3	21	4	2	2	8	31	7	1	79	1	9	5	0	3	5	15	4	42	
Jacksonville .....	2	32	7	17	2	25	1	7	0	93	0	7	4	15	0	15	12	5	58	
Key West .....	2	8	17	14	1	1	5	12	2	62										
Knox Hill .....	6	8	8	7	12	23	22	1	0	87	0	4	1	9	11	20	16	4	65	
Warrington .....	5	0	1	22	0	45	0	3	2	93	0	4	0	17	5	31	6	29	92	
ALABAMA—																				
Auburn .....	0	4	3	9	27	19	16	11	0	89	1	1	4	0	17	11	13	4	51	
Greene Springs .....	5	5	23	0	2	4	14	5	23	90	0	1	0	0	3	14	16	14	48	
MISSISSIPPI—																				
Garlandville .....	2	10	0	11	2	27	25	16	0	93	1	5	1	11	0	29	20	13	80	
Oxford .....	2	3	8	24	18	20	0	7	2	93	15	16	7	3	2	8	7	2	00	
LOUISIANA—																				
New Orleans .....	2	0	0	18	13	17	17	0	0	93	1	2	1	0	4	9	17	5	59	
TEXAS—																				
Austin .....	1	21	0	33	22	8	0	8	0	93	3	12	3	19	18	19	5	28	107	
New Wied .....	3	6	4	29	18	22	2	1	8	93	0	0	0	3	2	5	0	0	13	
TENNESSEE—																				
Friendship .....	1	2	2	14	3	24	21	21	5	93	2	0	0	0	0	20	17	16	55	
Glenwood .....	1	12	6	9	12	7	5	4	37	93	3	4	0	0	0	28	30	9	80	
Knoxville .....	16	22	3	1	11	21	11	5	0	90										
KENTUCKY—																				
Millersburg .....	9	2	24	3	9	0	17	0	20	93	10	0	0	5	9	23	0	0	47	
Springdale .....	4	16	7	0	0	20	6	0	29	93										



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
<b>OHIO—</b>																				
Cincinnati .....	0	12	14	14	0	11	8	3	0	62	—	—	—	—	—	—	—	—	—	
Cleveland .....	25	13	0	6	8	7	10	14	1	84	4	2	0	0	4	5	7	1	23	
Gallipolis .....	7	9	18	2	24	18	10	2	0	90	—	—	—	—	—	—	—	—	—	
Germantown .....	8	38	1	5	2	26	3	6	0	89	4	14	1	3	1	28	2	4	57	
Granville .....	6	14	4	1	1	14	5	4	31	80	0	1	0	2	1	6	8	5	23	
Hillsborough .....	0	23	0	8	2	20	1	7	0	61	3	3	1	0	5	3	0	0	15	
Jackson, [Crookham] .....	11	13	8	2	7	5	16	3	25	90	8	1	0	0	4	4	20	4	41	
Jackson, [Gilmor] .....	—	—	—	—	—	—	—	—	—	—	2	0	3	4	3	7	27	24	70	
Marietta .....	7	0	0	7	3	1	4	11	46	79	5	0	0	0	1	4	11	6	27	
Newark .....	21	3	7	3	5	10	2	3	26	80	13	1	3	2	3	12	3	8	45	
New Lisbon .....	24	4	6	4	5	15	12	23	0	93	—	—	—	—	—	—	—	—	—	
Oberlin .....	23	21	4	7	4	8	7	10	8	92	0	5	0	1	0	6	32	1	45	
Savannah .....	9	11	0	7	8	22	11	25	0	93	8	0	0	3	3	15	6	14	51	
Unionville .....	19	14	11	5	9	10	21	4	0	93	7	0	11	3	2	5	27	3	58	
Urbana .....	5	8	3	11	2	18	5	8	0	60	1	5	1	1	1	15	17	5	46	
<b>MICHIGAN—</b>																				
Ann Arbor, [Woodruff] ..	16	30	5	7	5	9	4	2	14	93	6	2	0	2	1	5	21	12	49	
Ann Arbor, [Winchell] ..	14	8	27	7	3	9	11	4	10	93	21	2	1	4	3	5	13	1	50	
Battle Creek .....	12	24	17	9	2	12	7	3	7	93	3	0	3	0	0	13	32	6	57	
Cooper .....	2	1	25	0	1	0	35	2	27	93	0	0	15	2	1	0	10	1	29	
Detroit .....	0	47	22	1	2	14	3	4	0	93	0	3	0	0	0	1	1	0	11	
Flint .....	25	8	4	0	18	17	9	6	0	87	—	—	—	—	—	—	—	—	—	
Grand Rapids .....	1	28	16	5	2	8	7	1	23	91	0	3	0	2	3	3	4	1	16	
Monroe, [Whelpley] .....	3	11	26	19	0	10	1	22	0	92	1	12	25	10	0	5	1	22	76	
St. James .....	0	4	18	11	4	18	2	20	16	93	0	0	1	0	0	17	2	5	25	
Saugatuck .....	24	16	30	6	5	7	1	4	0	93	3	5	3	4	2					

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1855.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Red River Settlement.....	18	12	1	1	15	8	16	7	6	84	15	12	2	3	11	2	14	2	61
St. Martin .....	0	16	2	6	3	46	9	8	0	90									
MAINE—																			
Carmel .....	0	1	2	11	0	22	17	10	10	73	0	1	2	10	0	17	15	4	49
Fryeburg .....	2	8	4	5	5	26	11	11	2	74	0	0	1	1	1	8	11	8	30
Gardiner .....	2	8	0	24	3	25	4	13	11	90	1	1	0	2	5	19	3	17	48
Oldtown .....	0	0	1	2	10	14	20	5	3	55	0	0	2	0	5	16	20	2	45
Perry .....	1	1	2	9	6	45	7	19	0	90	4	0	0	1	0	36	8	6	55
South Thomaston .....	5	2	0	8	10	43	12	6	3	89	3	4	1	1	15	38	10	7	84
Stenben .....	0	9	1	6	1	54	7	12	0	90	0	2	1	0	0	46	19	10	78
NEW HAMPSHIRE—																			
Concord .....	3	0	4	19	2	34	7	21	0	90									
Exeter .....	2	4	5	13	7	18	29	6	0	84	2	4	2	12	6	12	23	2	63
Great Falls .....	0	0	0	12	1	28	7	11	0	65	0	0	0	4	0	18	2	6	30
Manchester .....	5	0	6	12	16	10	30	11	0	90	0	0	5	9	12	0	35	3	70
VERMONT—																			
Brandon .....	8	1	1	3	40	0	8	12	9	88	1	2	0	0	7	14	11	10	45
Burlington .....	17	0	3	3	49	8	4	6	0	90	0	0	0	0	0	1	1	3	5
Craftsbury .....	2	7	2	4	39	15	16	5	0	90	6	1	0	1	31	13	19	5	76
St. Johnsbury .....	0	1	0	1	0	32	4	52	0	90									
MASSACHUSETTS—																			
Amherst .....	3	0	1	25	5	11	3	37	0	85	0	1	0	0	13	11	3	18	46
Boston .....	1	7	2	2	7	17	12	7	5	60									
Mendon .....	0	1	2	2	2	58	9	16	0	90	0	1	2	3	7	51	11	15	90
Nantucket .....	1	6	2	6	10	50	5	4	0	90									
New Bedford .....	1	3	0	13	5	49	4	12	1	88	0	1	0	0	0	5	2	1	0
Newburyport .....	0	5	4	6	31	3	25	12	0	86	0	0	0	0	0	1	0	0	1
North Attleboro' .....	1	6	1	10	26	13	16	17	0	90	1	2	2	0	22	11	18	12	74
Princeton .....	4	5	6	6	4	20	36	9	0	90	1	1	3	1	4	14	33	0	63
Southwick .....	3	7	2	5	12	10	5	7	5	56	0	1	0	2	9	14	7	8	41
Springfield .....	2	1	0	0	4	27	4	19	33	90	1	1	0	0	3	21	5	17	48
Westfield .....	4	3	2	17	4	10	10	13	0	63									
Williamstown .....	5	0	1	3	16	7	0	15	10	66	9	2	5	3	4	1	2	0	26
Worcester .....	0	0	0	13	0	40	0	37	0	90									
RHODE ISLAND—																			
Providence .....	0	8	1	10	9	24	0	26	0	87									
CONNECTICUT—																			
New London .....	1	7	0	12	17	39	3	11	0	90									
Pomfret .....	5	1	1	12	14	21	5	31	0	90	4	0	1	10	12	20	3	19	47
Saybrook .....	4	3	0	7	8	26	12	12	5	83	3	1	2	0	14	5	14	6	45
NEW YORK—																			
Angelica .....	1	1	2	13	4	40	18	11	0	90	0	1	0	5	4	25	17	19	71
Baldwinsville .....	3	0	5	2	2	5	38	29	0	87	1	1	1	1	3	4	35	26	72
Beverly .....	8	4	0	18	10	25	0	19	5	89	0	1	2	15	5	19	22	0	70
Canton .....	2	8	1	3	3	55	2	14	0	88	1	4	0	2	1	53	2	9	72
Fishkill .....	9	0	0	0	36	6	21	0	18	90									
Gouverneur .....	1	14	0	1	0	60	2	12	0	90	0	14	0	0	0	45	8	12	79
Lodi .....	4	1	4	11	9	8	21	24	5	87	1	0	0	0	0	3	28	14	55
Lowville .....	5	4	1	7	15	22	15	21	0	90	0	0	0	0	4	4	3	3	14
Madrid .....	4	13	0	0	1	41	10	1	14	84	2	6	0	0	0	40	16	1	65
New York city .....	1	8	5	19	3	10	35	7	0	88	0	2	6	8	1	14	41	6	78
Ogdensburg .....	5	3	1	0	1	18	0	3	0	31									
Oswego .....	1	4	7	0	5	11	42	1	13	90									
Penn Yan .....	3	12	5	0	17	25	25	3	0	90									
Sag Harbor .....	5	2	3	6	11	33	23	7	0	90	2	1	5	4	4	37	21	5	79
Smithville .....	0	5	1	3	12	48	17	4	0	90	3	7	0	1	7	37	29	7	91
Spencertown .....	24	0	0	2	28	21	0	10	0	85	11	0	1	3	7	22	27	16	87
Wampsville .....	0	0	4	1	12	3	53	14	0	87	0	0	5	1	12	4	54	11	87
NEW JERSEY—																			
Bloomfield .....	1	5	3	3	11	48	13	0	0	90									
Burlington .....	2	3	5	5	6	22	27	4	14	88	1	3	7	0	8	14	8	1	48
Lambertville .....	1	2	0	7	9	23	7	32	0	81									





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NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
KENTUCKY—																				
Danville.....	6	4	3	1	3	44	13	3	0	77	1	0	1	1	2	18	27	6	56	
Millersburg.....	3	0	5	0	5	2	31	14	29	89	—	—	—	—	—	—	—	—	—	
Springdale.....	2	8	4	3	5	32	8	3	25	90	—	—	—	—	—	—	—	—	—	
OHIO—																				
Cincinnati.....	0	3	2	16	0	16	12	11	0	60	—	—	—	—	—	—	—	—	—	
Cleveland.....	6	6	2	2	7	18	11	17	4	73	4	2	5	1	1	9	21	10	53	
Gallipolis.....	0	0	5	0	21	57	7	0	0	90	—	—	—	—	—	—	—	—	—	
Germantown.....	4	2	0	1	0	30	10	37	0	84	2	1	0	4	0	26	11	35	79	
Granville.....	2	4	3	0	0	24	10	5	27	75	1	2	0	0	0	12	12	3	30	
Hillsborough.....	0	2	0	6	2	37	0	12	1	60	—	—	—	—	—	—	—	—	—	
Jackson, [Crookham] .....	9	8	13	1	8	14	24	1	11	86	1	1	0	0	1	13	34	4	54	
Jackson, [Gilmor] .....	—	—	—	—	—	—	—	—	—	—	1	0	1	4	2	10	46	5	69	
Oberlin.....	6	3	3	3	6	27	13	16	13	91	4	1	2	0	2	6	46	6	67	
Savannah.....	4	5	0	3	2	40	20	16	0	90	2	4	0	4	2	34	18	12	76	
Unionville.....	6	5	5	5	11	17	27	10	4	90	1	4	5	3	6	11	44	10	84	
Urbana.....	1	0	0	4	5	28	16	12	0	66	2	0	0	0	3	18	29	21	73	
Zanesville.....	2	0	0	0	1	31	15	41	0	90	—	—	—	—	—	—	—	—	—	
MICHIGAN—																				
Ann Arbor, [Woodruff] ..	8	4	7	6	10	19	7	17	11	89	11	3	3	1	0	10	24	20	67	
Ann Arbor, [Winchell] ..	8	1	11	3	2	19	9	15	22	90	3	3	5	0	0	9	38	18	76	
Battle Creek.....	3	6	8	5	4	17	17	16	14	90	7	1	4	4	0	12	24	26	78	
Cooper.....	1	1	11	4	0	0	44	3	21	85	1	2	19	2	0	3	29	1	57	
Detroit.....	8	16	4	4	12	24	7	15	0	90	—	—	—	—	—	—	—	—	—	
Flint.....	16	3	2	2	21	12	10	20	0	86	11	6	1	1	1	4	9	7	31	
Grand Rapids.....	2	10	7	2	3	18	16	6	25	89	3	17	3	3	1	19	3	48	97	
Monroe, [Whelpley] .....	3	17	0	4	2	13	3	48	0	90	7	0	4	1	1	27	6	2	48	
St. James.....	17	1	12	2	5	41	0	5	7	90	7	2	7	4	5	15	24	13	77	
Saugatuck.....	13	7	20	5	10	11	13	11	0	90	—	—	—	—	—	—	—	—	—	
INDIANA—																				
Madison.....	—	—	—	—	—	—	—	—	—	90	3	4	3	5	6	34	15	17	87	
Milton.....	4	8	1	3	4	17	8	11	34	90	0	0	0	0	0	6	3	7	16	
New Harmony.....	3	0	7	9	6	15	12	8	0	60	—	—	—	—	—	—	—	—	—	
ILLINOIS—																				
Athens.....	4	7	1	19	9	13	3	28	0	84	4	6	2	1	5	7	2	58	85	
Augusta.....	4	8	9	4	8	18	20	6	13	90	2	11	3	1	3	7	10	5	37	
Manchester.....	6	5	0	0	21	14	33	11	0	90	2	0	0	0	4	15	22	16	55	
Ottawa.....	6	12	11	6	9	29	3	21	2	90	4	1	0	1	1	14	8	15	44	
Upper Alton.....	2	6	3	9	22	5	12	42	11	101	—	—	—	—	—	—	—	—	—	
MISSOURI—																				
St. Louis.....	7	3	8	18	11	12	23	8	0	90	—	—	—	—	—	—	—	—	—	
WISCONSIN—																				
Beloit.....	13	18	2	5	23	13	2	9	0	90	11	5	3	2	10	10	3	4	48	
Janesville.....	5	10	7	12	12	19	3	13	9	90	—	—	—	—	—	—	—	—	—	
Milwaukee, [Winkler] .....	5	24	12	20	1	12	10	6	0	90	—	—	—	—	—	—	—	—	—	
Platteville.....	6	3	12	13	17	11	22	8	0	90	—	—	—	—	—	—	—	—	—	
Superior.....	11	13	11	7	8	2	19	10	0	81	12	15	11	8	11	1	22	9	81	
IOWA—																				
Dubuque.....	8	12	0	6	17	7	2	15	21	88	3	4	0	1	11	11	10	24	52	
Fort Madison.....	9	5	8	21	10	10	5	21	1	90	6	1	4	1	2	9	31	12	66	
Muscatine.....	6	5	2	18	6	35	9	9	0	90	0	6	1	2	1	22	3	7	42	
Pella.....	7	1	0	6	36	8	20	12	0	90	—	—	—	—	—	—	—	—	—	
Poultney.....	12	6	3	11	8	19	7	14	9	89	3	1	1	1	5	4	11	11	37	
Quasqueton.....	2	11	3	12	8	15	8	26	0	85	0	0	0	1	1	3	4	18	27	
MINNESOTA—																				
Lac qui Parle.....	2	2	4	7	25	5	4	38	0	87	3	0	3	9	2	7	9	9	42	
EASTERN CONTINENT—																				
Mosul, Mesopotamia.....	6	7	0	0	1	2	0	1	3	20	—	—	—	—	—	—	—	—	—	



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
<b>BRITISH AMERICA—</b>																				
Red River Settlement	23	0	0	2	38	12	13	5	0	93	20	0	1	1	36	8	20	4	90	
St. Martin	0	9	3	10	12	45	3	11	0	93	0	0	0	0	0	0	0	2	0	
<b>MAINE—</b>																				
Carmel	0	1	1	19	7	24	9	4	23	88	0	1	0	15	3	21	5	1	46	
Fryeburg	10	4	3	3	10	26	5	4	0	65	1	4	0	3	0	13	19	9	49	
Gardiner	1	16	1	24	8	26	1	4	11	92	2	3	2	5	4	18	6	5	45	
Oldtown	1	2	1	0	1	1	6	1	2	15	0	0	0	0	0	4	8	0	12	
Perry	3	3	0	12	18	38	3	16	0	93	4	0	0	3	6	5	17	9	47	
Steuben	1	16	0	5	0	62	2	5	2	93	2	1	0	0	0	28	21	4	56	
<b>NEW HAMPSHIRE—</b>																				
Concord	6	5	0	35	3	31	0	13	0	93	3	8	8	19	2	23	11	3	77	
Exeter	2	12	13	26	5	27	7	1	0	93	3	8	8	19	2	23	11	3	77	
Manchester	8	5	10	4	19	11	21	5	0	83	2	5	8	0	7	6	36	3	67	
<b>VERMONT—</b>																				
Brandon	12	1	1	8	39	5	5	10	11	92	5	0	0	0	6	7	22	14	54	
Burlington	22	2	2	2	53	1	4	7	0	93	0	0	0	0	0	2	4	1	7	
Craftsbury	6	9	4	5	48	9	10	2	0	93	7	5	0	2	29	15	17	6	81	
St. Johnsbury	0	0	0	0	0	33	0	59	0	92	0	0	0	0	0	0	0	0	0	
<b>MASSACHUSETTS—</b>																				
Amherst	3	6	1	20	17	13	6	13	2	81	0	7	0	2	4	20	8	11	52	
Boston	0	13	11	7	2	24	2	1	2	62	0	0	0	0	0	0	0	0	0	
Mendon	3	18	7	0	6	50	3	3	3	93	2	17	8	1	5	51	6	3	93	
Nantucket	0	22	4	11	7	37	3	4	5	93	0	0	0	0	0	0	0	0	0	
New Bedford	1	15	5	13	7	35	4	4	3	87	0	3	1	2	0	4	3	4	17	
Newburyport	5	9	12	8	20	20	7	1	1	83	0	0	0	0	0	0	0	0	0	
North Attleboro'	16	14	5	5	37	10	5	1	0	93	10	11	5	0	29	8	18	1	82	
Princeton	1	13	14	9	3	14	32	7	0	93	1	6	12	4	1	5	32	8	69	
Richmond	0	15	0	3	3	55	0	15	2	93	1	8	0	7	2	33	4	15	70	
Southwick	1	15	1	7	13	10	0	5	8	60	0	6	0	5	4	13	7	3	38	
Springfield	4	6	0	0	2	28	4	10	39	93	4	7	0	0	4	28	3	8	54	
Westfield	3	10	3	12	5	7	7	13	0	60	0	0	0	0	0	0	0	0	0	
Williamstown	10	0	5	8	14	9	3	9	14	72	4	3	4	3	0	2	0	3	19	
Worcester	0	7	0	18																

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1855.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
PENNSYLVANIA—																			
Bedford.....	0	0	0	5	1	49	1	22	0	78	0	0	0	1	1	44	4	18	66
Easton.....	5	4	1	16	3	9	13	18	24	93	2	3	3	5	5	5	11	12	46
Gettysburg.....	6	5	1	0	9	40	20	8	2	91	3	8	1	0	2	29	33	5	81
Harrisburg.....	1	1	■	3	19	6	35	8	0	81	0	0	1	0	11	3	23	2	40
Lima.....	6	14	6	7	3	12	7	16	22	93	4	1	3	1	2	19	25	17	72
Morrisville.....	1	11	1	3	13	31	11	2	20	93	2	10	2	1	■	29	31	4	79
Moss Grove.....	0	0	3	4	5	16	18	2	■	48	0	0	0	0	3	17	45	2	67
Norristown.....	0	1	6	15	17	36	13	5	■	93	0	2	13	6	2	18	33	1	75
Philadelphia.....	1	18	■	5	5	38	10	14	0	93	■	2	0	1	■	17	10	4	34
Pittsburg, [M. H.].....	6	1	21	7	29	10	21	6	23	124	---	---	---	---	---	---	---	---	---
Pocopson.....	5	4	2	0	2	35	36	8	0	92	0	0	■	0	■	2	4	1	7
Pottsville.....	4	2	11	5	3	19	8	20	21	93	9	2	8	2	4	24	14	22	85
West Haverford.....	1	7	3	2	2	19	9	12	7	62	2	2	1	1	1	10	17	12	46
MARYLAND—																			
Bladensburg.....	0	5	1	0	2	4	7	3	0	22	---	---	---	---	---	---	---	---	---
Chestertown.....	3	13	3	3	5	43	14	8	■	92	3	5	1	■	1	6	4	3	23
Frederick.....	3	8	■	7	10	39	9	9	5	92	7	2	2	1	5	18	30	5	70
Sykesville.....	0	3	1	2	2	14	62	9	0	93	0	3	1	1	2	■	59	1	76
DISTRICT OF COLUMBIA—																			
Washington.....	0	8	1	9	6	39	7	5	14	89	---	---	---	---	---	---	---	---	---
VIRGINIA—																			
Alexandria.....	10	13	2	12	24	19	2	11	■	93	---	---	---	---	---	---	---	---	---
Ashland.....	1	0	■	0	35	8	0	6	0	50	0	0	0	1	2	14	27	1	45
Crichton's Store.....	13	1	0	1	43	25	7	3	0	93	8	1	1	0	12	38	49	■	115
Lewisburg.....	---	---	---	---	---	---	---	---	---	---	3	0	1	0	1	3	41	5	52
NORTH CAROLINA—																			
Chapel Hill.....	0	■	13	1	12	18	40	3	■	93	2	1	■	1	18	31	9	5	67
SOUTH CAROLINA—																			
All Saints.....	2	3	3	29	14	25	15	2	0	93	3	3	■	21	9	12	19	4	71
Camden.....	0	■	1	12	32	28	11	2	5	93	5	8	1	5	6	34	5	8	72
Charleston.....	1	3	■	15	5	36	1	1	■	62	---	---	---	---	---	---	---	---	---
GEORGIA—																			
Savannah.....	1	3	4	17	43	14	11	0	0	93	1	0	0	1	■	0	0	1	3
Sparta.....	■	11	3	13	9	38	5	14	■	93	0	4	1	2	1	25	1	4	38
The Rock.....	0	1	■	10	■	5	0	14	1	31	---	---	---	---	---	---	---	---	---
Whitemarsh Island.....	1	2	1	12	29	20	13	2	13	93	1	1	■	6	15	10	11	4	54
FLORIDA—																			
Cedar Keys.....	5	8	18	18	1	15	15	5	8	93	6	7	14	23	4	6	■	5	74
Jacksonville.....	2	12	7	35	3	21	1	3	4	88	3	2	■	28	17	10	4	4	74
Key West.....	5	5	35	15	1	0	0	1	0	62	---	---	---	---	---	---	---	---	---
Knox Hill.....	■	7	27	14	10	7	13	2	0	80	0	3	23	15	7	7	14	2	71
Warrington.....	0	4	4	26	8	36	1	12	2	93	1	2	3	27	■	36	1	10	93
ALABAMA—																			
Greene Springs.....	■	0	1	11	8	4	1	2	19	46	1	2	■	4	0	1	1	7	16
MISSISSIPPI—																			
Oxford.....	■	5	11	21	7	34	9	■	■	93	0	3	3	10	13	26	6	2	63
LOUISIANA—																			
New Orleans.....	9	5	13	21	17	8	12	5	3	93	8	4	12	1	10	■	■	1	54
TEXAS—																			
Austin.....	3	2	6	49	11	18	0	4	0	93	■	5	4	27	9	22	0	10	83
New Wied.....	2	1	6	6	32	22	4	3	17	93	1	0	5	1	8	1	■	2	24
TENNESSEE—																			
Friendship.....	1	1	0	■	1	60	18	11	0	92	1	1	0	0	2	31	20	11	66
Glenwood.....	2	3	1	12	13	21	6	0	35	93	1	5	0	1	8	38	28	5	86
KENTUCKY—																			
Danville.....	7	4	■	4	17	50	■	3	0	93	0	2	1	■	3	42	17	2	67
Springdale.....	0	3	■	2	1	33	5	4	43	93	---	---	---	---	---	---	---	---	---
OHIO—																			
Arcola.....	4	14	7	1	17	19	20	3	■	93	4	5	7	1	6	20	26	12	81
Cincinnati.....	0	10	11	7	0	22	4	8	■	62	---	---	---	---	---	---	---	---	---
Cleveland.....	7	11	0	4	16	20	13	5	2	78	5	5	2	3	2	18	22	4	61



	SURFACE CURRENT.									MOTION OF CLOUDS.									
NAME OF STATION.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or varia- ble.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>OHIO—Continued.</b>																			
Gallipolis .....	1	2	6	2	15	18	8	1	0	53	-	-	-	-	-	-	-	-	-
Germantown .....	1	1	0	1	2	42	10	32	1	90	1	1	0	1	1	44	3	26	77
Granville .....	3	1	1	1	1	17	12	0	33	69	3	2	0	0	4	13	11	0	33
Hillsborough .....	1	6	0	7	4	42	0	2	0	62	-	-	-	-	-	-	-	-	-
Jackson, [Crookham] .....	2	7	19	1	7	15	20	1	21	93	1	0	0	1	2	9	47	3	63
Jackson, [Gilmor] .....	-	-	-	-	-	-	-	-	-	-	0	2	0	4	5	8	55	2	76
Oberlin .....	11	8	0	5	12	25	8	7	15	91	4	7	0	1	0	13	51	2	78
Savannah .....	4	4	0	6	1	50	17	11	0	93	2	3	0	4	2	40	15	12	78
Urbana .....	3	2	0	4	3	36	9	7	0	64	1	3	0	3	1	26	29	6	69
Zanesville .....	9	0	0	13	5	40	4	22	0	93	-	-	-	-	-	-	-	-	-
<b>MICHIGAN—</b>																			
Ann Arbor, [Woodruff] ..	2	16	5	7	5	25	8	8	11	87	1	9	3	3	2	19	36	12	85
Ann Arbor, [Winchell] ..	2	11	8	6	15	12	15	1	23	93	0	13	3	4	1	25	33	1	80
Battle Creek .....	4	10	9	4	11	27	15	4	1	85	0	6	7	1	0	20	45	7	86
Cooper .....	0	0	13	1	3	1	39	0	35	92	0	0	29	4	4	1	27	0	65
Detroit .....	2	24	7	6	18	19	15	2	0	93	-	-	-	-	-	-	-	-	-
Flint .....	14	0	5	2	14	26	15	5	0	81	-	-	-	-	-	-	-	-	-
Grand Rapids .....	0	15	10	2	4	35	4	1	22	93	0	1	2	3	0	16	5	0	27
Monroe, [Perkins] .....	0	9	3	21	1	24	1	34	0	93	0	9	3	18	1	27	0	37	95
St. James .....	7	5	6	7	7	35	3	14	9	93	2	4	0	0	0	14	10	8	38
Saugatuck .....	14	9	15	6	13	13	17	6	0	93	5	3	9	0	5	20	26	23	91
<b>INDIANA—</b>																			
Milton .....	0	7	1	3	2	22	10	4	44	93	0	0	0	0	0	9	7	2	18
New Harmony .....	4	1	2	7	6	23	15	5	0	63	-	-	-	-	-	-	-	-	-
<b>ILLINOIS—</b>																			
Athens .....	0	17	0	16	9	18	5	10	0	75	0	13	0	3	3	13	16		

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA--																				
Montreal .....	8	0	0	3	1	6	2	4	0	24										
Red River Settlement .....	29	1	5	0	19	14	14	4	7	93	18	1	2	2	10	7	21	16	77	
St. Martin .....	1	16	0	8	6	33	9	20	0	93										
MAINE--																				
Carmel .....	0	0	1	2	1	7	7	14	10	42	0	0	1	3	0	2	5	1	12	
Fryeburg .....	2	1	4	2	8	15	14	16	0	62	0	0	0	0	2	12	23	15	52	
Gardiner .....	0	4	0	16	4	26	1	27	14	92	1	0	0	1	5	14	1	17	39	
Oldtown .....	6	1	0	4	5	18	28	6	10	78	2	1	0	0	14	31	3	57		
Perry .....	11	0	1	8	7	34	4	28	0	93	4	0	0	0	3	10	24	10	51	
Steuben .....	1	16	0	4	1	46	3	19	3	93	1	4	0	0	0	32	17	8	62	
NEW HAMPSHIRE--																				
Concord .....	1	7	0	25	0	28	0	32	0	93										
Exeter .....	1	6	12	16	1	26	14	16	0	92	0	2	6	8	1	17	12	8	54	
Londonderry .....	1	4	4	13	8	8	5	25	25	93	0	0	0	0	1	8	0	0	18	
Manchester .....	2	2	5	3	18	12	11	15	0	68	2	0	0	1	7	11	19	5	45	
Stratford .....	12	0	0	0	8	1	29	0	1	51										
VERMONT--																				
Brandon .....	15	0	2	0	35	7	9	7	11	92	1	0	0	0	0	9	14	14	38	
Burlington .....	20	2	4	4	43	3	10	7	0	93	0	0	0	0	1	0	4	1	0	
Craftsbury .....	3	8	2	6	38	14	10	12	0	93	2	2	1	0	18	11	19	16	69	
MASSACHUSETTS--																				
Amherst .....	5	1	3	22	12	12	5	25	0	85	1	0	2	1	5	1	7	0	25	
Mendon .....	2	13	3	1	1	44	7	22	0	93	2	14	3	0	1	42	10	21	93	
Nantucket .....	3	27	5	13	6	21	0	0	7	92										
New Bedford .....	8	16	0	9	0	37	0	12	1	93	4	5	0	0	0	5	3	14	31	
Newburyport .....	9	2	10	11	24	11	0	15	0	91	0	0	0	0	0	0	1	0	1	
North Attleboro' .....	12	6	9	2	29	13	14	8	0	93	5	1	7	2	19	14	12	4	64	
Princeton .....	0	0	11	5	4	15	33	12	0	93	0	3	2	1	2	7	45	3	63	
Richmond .....	0	0	1	11	5	46	0	30	0	93	0	0	0	5	3	40	3	27	78	
Southwick .....	2	10	4	3	8	7	1	4	8	47	1	4	0	2	3	4	1	4	19	
Springfield .....	7	2	2	0	9	16	0	16	41	93	3	3	1	1	1	14	1	17	41	
Westfield .....	5	1	3	1	6	12	20	27	0	75										
Williamstown .....	10	1	3	10	16	13	9	11	12	85										
Worcester .....	0	5	2	11	2	35	0	38	0	93	1	2	0	2	1	9	8	2	25	
CONNECTICUT--																				
New London .....	2	12	5	10	8	27	8	21	0	93										
Pomfret .....	6	14	6	5	23	13	8	18	0	93	4	0	2	2	16	11	12	14	70	
Saybrook .....	6	5	0	10	5	7	1	0	3	43	4	1	2	1	1	2	6	2	19	
NEW YORK--																				
Angelica .....	1	2	1	7	1	31	14	18	0	75	0	0	0	0	0	11	17	4	32	
Baldwinsville .....	2	2	4	9	6	18	10	30	0	81	0	0	1	1	1	10	33	17	69	
Beverly .....	8	10	0	11	10	33	1	15	2	90	0	9	1	6	5	22	16	9	68	
Canton .....	5	15	0	1	3	51	5	11	1	92	4	6	0	1	3	42	2	3	61	
Fishkill .....	6	12	0	0	18	30	0	0	12	93										
Gouverneur .....	24	0	0	1	2	33	18	9	0	93	6	1	1	1	0	28	8	3	50	
Lodi .....	6	2	1	17	18	8	13	19	9	93	4	0	1	1	0	18	19	53		
Madrid .....	0	15	0	0	0	31	3	1	23	73	0	0	0	0	1	42	4	0	47	
New York city .....	7	16	5	19	8	8	15	15	0	93	5	0	14	10	1	6	22	19	86	
Ogdensburg .....	8	2	0	1	7	0	3	5	0	32										
Oswego .....	1	12	3	5	24	10	23	2	13	93										
Penn Yan .....	4	21	5	0	25	12	19	7	0	93										
Sag Harbor .....	1	23	5	20	3	17	4	10	0	83	3	13	5	4	2	25	19	8	79	
Smithville .....	3	0	9	2	18	29	24	0	0	94	3	10	0	0	1	27	33	3	77	
Spencertown .....	4	0	0	1	16	24	8	35	0	88	1	0	0	1	2	16	18	39	77	
Wampsville .....	0	3	7	12	23	13	32	3	0	93	0	4	0	8	24	11	30	3	88	
NEW JERSEY--																				
Bloomfield .....	0	13	0	28	0	18	0	24	0	83										
Burlington .....	6	6	2	3	1	11	27	6	31	93	1	5	1	0	2	5	5	2	21	
Lambertville .....	4	16	2	15	11	0	9	17	0	83										
PENNSYLVANIA--																				
Bedford .....	0	0	0	18	0	25	6	21	11	81	0	0	0	12	1	24	6	15	58	
Easton .....	5	8	4	14	2	2	13	20	25	93	0	0	1	17	0	5	9	5	40	



## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
PENNSYLVANIA—Cont'd.																				
Gettysburg.....	13	12	4	1	10	16	18	6	13	93	1	5	4	1	10	21	26	9	77	
Harrisburg.....	0	0	6	31	7	3	22	18	0	87	0	0	2	8	2	0	18	9	39	
Lima.....	5	21	5	8	4	7	4	12	27	93	2	4	4	5	6	14	28	11	74	
Meadville.....	6	1	0	2	13	6	4	17	24	73	3	0	1	1	7	13	17	10	52	
Morrisville.....	5	7	1	5	12	18	10	9	26	93	1	8	1	5	3	17	25	4	64	
Moss Grove.....	2	0	2	0	8	16	41	8	2	79	0	0	1	0	0	19	48	7	75	
Norristown.....	0	5	7	1	4	26	29	4	0	81	0	0	12	3	3	18	24	1	61	
Philadelphia.....	4	22	7	11	6	19	8	16	0	93	1	3	0	0	0	11	10	3	28	
Pittsburg, [M. H.].....	1	0	17	2	16	13	23	4	48	124										
Pocopson.....	9	6	8	2	10	27	24	7	0	93	4	0	2	1	0	0	2	2	11	
Pottsville.....	6	0	12	2	21	7	15	23	7	93	5	0	6	9	10	9	10	28	77	
West Haverford.....	2	10	10	3	4	13	3	10	7	62	1	3	0	2	1	4	16	9	42	
MARYLAND—																				
Bladensburg.....	3	0	5	3	3	5	3	5	0	36										
Chestertown.....	11	11	8	13	7	22	9	5	0	86	7	2	7	3	7	8	17	3	54	
Frederick.....	11	9	3	5	13	22	11	10	5	89	2	5	0	3	9	12	35	7	73	
Sykesville.....	0	6	1	7	3	7	50	19	0	93	0	2	4	5	5	8	53	4	81	
DISTRICT OF COLUMBIA—																				
Washington.....	0	39	2	4	2	25	4	8	8	92										
VIRGINIA—																				
Alexandria.....	6	29	5	13	12	12	0	15	0	92										
Ashland.....	10	0	0	2	21	4	2	3	51	93	4	0	1	0	2	3	25	2	37	
Crichton's Store.....	40	5	1	1	20	22	4	1	1	94	17	4	6	6	4	48	33	2	120	
Lewisburg.....	0	0	0	0	0	1	1	1	0	3	3	1	2	0	8	3	26	1	44	
NORTH CAROLINA—																				
Chapel Hill.....	14	20	8	6	7	9	25	3	0	92	5	5	4	1	6	28	13	3	65	
SOUTH CAROLINA—																				
All Saints.....	5	15	11	10	10	10	30	1	1	93	4	14	3	0	8	14	42	3	88	
Camden.....	0	13	9	5	8	30	15	4	9	93	2	9	4	7	1	19	22	9	73	
Charleston.....	0	10	5	4	0	36	4	3	0	62										
GEORGIA—																				
Savannah.....	5	5	6	15	26	13	17	6	0	93	0	0	0	0	0	1	1	0	2	
Sparta.....	2	30	2	12	3	25	4	6	0	84	0	7	2	5	1	12	4	3	34	
The Rock.....	0	4	0	1	1	4	0	4	0	14										
Whitemarsh Island.....	1	10	4	10	22	17	13	4	12	93	3	7	6	6	3	5	16	6	52	
FLORIDA—																				
Cedar Keys.....	9	5	14	19	6	17	16	3	3	93	4	10	8	16	4	15	3	2	62	
Jacksonville.....	3	20	5	24	7	24	2	5	2	92	3	6	10	13	7	15	5	2	61	
Key West.....	2	9	35	13	2	0	0	1	0	62										
Knox Hill.....	1	17	7	15	8	11	3	1	0	63	0	12	7	14	6	11	2	0	52	
Warrington.....	6	11	2	14	13	31	0	11	5	93	10	13	2	13	5	34	1	13	91	
ALABAMA—																				
Auburn.....	0	11	25	20	13	18	3	3	0	93	0	9	11	7	5	15	6	4	57	
Greene Springs.....	4	3	22	12	5	10	6	0	1	63	0	1	0	0	2	4	2	0	9	
MISSISSIPPI—																				
Oxford.....	1	8	7	2	3	7	3	2	0	33	1	3	5	2	2	6	1	4	24	
Port Gibson.....	0	4	1	2	3	3	1	0	0	14										
LOUISIANA—																				
New Orleans.....	6	16	5	14	23	8	7	5	9	93	5	8	6	4	11	3	5	3	45	
TEXAS—																				
Austin.....	3	11	11	39	5	0	2	13	0	93	4	14	4	29	6	31	3	7	98	
New Wied.....	3	3	7	12	31	16	5	3	13	93	3	0	7	0	4	1	2	5	22	
TENNESSEE—																				
Glenwood.....	0	7	4	2	10	11	2	0	24	64	0	8	4	5	1	17	10	2	47	
KENTUCKY—																				
Springdale.....	1	11	4	1	10	15	6	8	37	93										
OHIO—																				
Cleveland.....	11	8	2	9	27	1	8	12	3	81	4	4	0	0	0	11	17	10	46	
Gallipolis.....	5	3	0	1	5	8	4	6	0	30										
Germantown.....	6	7	0	4	5	29	1	33	1	86	4	4	0	0	1	39	1	28	77	
Granville.....	1	4	2	0	1	12	8	2	48	78	0	2	0	0	1	11	8	2	24	

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued—																				
Hillsborough .....	1	19	0	0	3	20	0	8	2	62	0	0	0	0	0	5	1	0	6	
Jackson, [Crookham] .....	13	10	10	1	4	5	11	5	33	92	4	0	8	1	2	7	25	4	45	
Jackson, [Gilmor] .....											0	0	1	8	1	11	43	8	70	
Oberlin .....	11	7	2	3	12	16	10	10	16	87	2	3	0	0	1	1	62	4	73	
Savannah .....	2	17	1	4	2	27	20	20	0	93	1	0	0	0	1	18	24	15	68	
Urbana .....	0	7	8	7	7	17	6	6	0	53	0	3	1	1	8	18	29	11	66	
Zanesville .....	18	12	0	2	2	5	13	41	0	93										
MICHIGAN—																				
Ann Arbor, [Woodruff] ..	8	11	8	11	13	11	4	8	25	93	5	4	3	5	3	9	34	18	81	
Ann Arbor, [Winchell] ..	4	8	9	6	9	5	10	9	35	93	6	1	4	2	2	14	30	14	73	
Battle Creek .....	2	5	5	2	25	7	13	8	26	93	2	4	1	0	2	6	51	11	77	
Cooper .....	2	0	13	1	1	1	34	1	40	93	2	1	15	3	1	0	28	2	52	
Detroit .....	8	13	8	5	26	14	10	8	0	93										
Flint .....	23	3	0	7	18	17	1	8	0	77										
Grand Rapids .....	0	14	6	5	1	20	5	5	37	93	1	3	1	2	0	13	3	8	31	
Monroe, [Whelpley] .....	0	11	4	15	0	1	1	56	0	88	0	10	3	10	3	8	1	54	89	
St. James .....	7	2	8	10	12	24	1	23	6	93	6	0	1	2	6	13	21	4	53	
Saugatuck .....	6	7	12	6	11	10	22	17	0	91	9	4	0	1	3	11	45	20	93	
INDIANA—																				
Milton .....	2	13	1	1	0	9	7	2	58	93	0	0	0	0	0	3	3	0	6	
New Harmony .....	11	0	7	9	5	14	8	9	0	63										
ILLINOIS—																				
Athens .....	3	10	8	24	6	12	7	12	0	76	2	5	1	3	1	18	20	19	69	
Augusta .....	3	8	8	12	22	9	12	3	16	93	0	3	1	1	6	0	5	0	16	
Manchester .....	12	2	0	3	10	21	23	22	0	93	8	3	0	2	9	13	18	11	64	
Ottawa .....	3	19	5	6	20	12	5	19	4	93	0	3	0	0	3	12	3	8	29	
Upper Alton .....	18	5	0	8	6	29	2	19	0	87	0	0	0	0	1	0	0	0	1	
WISCONSIN—																				
Beloit .....	5	11	15	13	21	11	12	5	0	93	1	0	3	0	5	1	7	2	19	
Janesville .....	7	8	8	8	15	18	9	8	14	93										
Milwaukee, [Winkler] ..	3	27	10	15	5	17	8	8	0	93										
Platteville .....	8	19	10	12	12	8	12	14	0	93	4	4	3	2	4	12	26	24	79	
Superior .....	18	25	7	8	3	4	23	5	0	93	18	24	7	9	2	4	23	6	93	
IOWA—																				
Dubuque .....	11	7	3	8	19	12	3	14	14	92	3	6	3	1	2	4	12	19	50	
Fort Madison .....	10	27	4	35	1	6	2	2	6	93	1	4	1	1	3	2	36	4	52	
Muscatine .....	0	9	0	42	0	35	0	7	0	93	0	4	0	2	0	36	2	3	47	
Pella .....	9	2	1	15	47	1	9	9	0	93										
Poultney .....	8	10	0	10	7	13	8	5	15	08	0	1	0	0	0	2	5	3	11	
MINNESOTA TERRITORY—																				
Lac qui Parle .....	0	4	2	15	32	1	4	35	0	93	1	0	3	4	4	7	8	7	34	
EASTERN CONTINENT—																				
Mosul, Mesopotamia .....	10	2	0	0	1	4	2	5	1	25										



## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1855.

NAME OF STATION.	SURFACE CURRENT										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Horton .....	2	9	2	2	2	12	20	28	13	90	7	0	2	0	0	10	19	23	67	
Montreal .....	18	13	2	11	6	11	2	27	0	90	1	9	0	0	1	16	20	14	67	
Red River Settlement .....	22	0	10	8	31	4	8	2	2	87	14	0	3	11	30	6	6	5	75	
St. Martin .....	1	15	2	18	3	29	3	19	0	90										
MAINE—																				
Carmel .....	0	5	0	14	1	9	4	26	20	81	1	4	0	11	0	5	4	11	36	
Fryeburg .....	4	5	2	2	2	21	13	10	0	59	1	1	0	1	0	13	9	19	44	
Gardiner .....	4	16	0	12	2	23	4	22	7	90	4	4	0	3	0	6	1	17	35	
Perry .....	7	9	1	6	7	24	2	34	0	90	4	1	5	3	8	7	11	20	54	
Steuben .....	0	17	0	1	0	39	0	26	7	90	0	4	0	0	0	13	18	8	43	
NEW HAMPSHIRE—																				
Concord .....	1	5	7	12	0	27	3	35	0	90										
Exeter .....	6	4	13	11	3	25	16	12	0	90	1	4	10	6	4	12	20	2	59	
Londonderry .....	2	2	1	5	7	4	5	27	37	90	0	1	1	1	1	3	6	4	17	
Manchester .....	9	6	6	2	15	13	18	14	1	84	1	3	2	0	6	11	22	4	49	
VERMONT—																				
Brandon .....	23	1	5	4	34	0	4	7	9	87	6	0	0	0	1	6	5	28	46	
Burlington .....	35	2	2	3	35	1	8	9	0	90	0	0	0	0	0	1	2	7	10	
Craftsbury .....	6	7	3	4	31	13	12	14	0	90	8	3	0	1	4	10	20	18	64	
MASSACHUSETTS—																				
Amherst .....	3	5	4	18	7	8	2	30	0	77	0	7	0	0	0	8	2	13	30	
Boston .....	0	8	1	4	0	11	9	25	2	60										
Mendon .....	0	11	0	0	0	43	8	28	0	90	1	10	0	0	1	40	8	30	90	
Nantucket .....	4	20	3	9	2	22	6	10	14	90										
New Bedford .....	8	12	0	7	5	28	4	26	0	90	3	5	0	1	1	4	6	13	33	
Newburyport .....	11	7	8	11	11	6	18	16	0	88										
North Attleboro' .....	21	8	3	0	16	17	15	10	0	90	15	8	3	2	13	12	15	5	71	
Princeton .....	8	16	2	3	2	11	31	17	0	90	2	6	1	2	0	7	27	8	53	
Richmond .....	0	0	0	3	6	39	0	42	0	90	0	0	0	4	2	26	3	25	60	
Southwick .....	2	4	1	4	7	4	0	7	10	39	0	2	0	1	0	11	7	5	26	
Springfield .....	7	10	1	1	10	11	1	18	31	90	8	7	1	1	2	10	1	13	43	
Williamstown .....	7	1	8	10	7	15	12	15	14	89	5	1	1	0	4	13	21	13	58	
Worcester .....	0	5	0	19	0	35	0	31	0	90										
RHODE ISLAND—																				
Providence .....	5	22	1	0	3	16	11	30	0	88										
CONNECTICUT—																				
New London .....	6	6	2	12	6	35	3	19	0	89										
Pomfret .....	7	12	1	8	4	23	5	30	0	90	1	9	0	1	4	17	6	13	51	
Saybrook .....	15	10	2	12	2	22	12	7	4	86	3	6	2	1	3	4	9	10	38	
NEW YORK—																				
Angelica .....	4	11	0	2	0	19	12	18	0	66	1	2	0	1	0	1	14	6	25	
Baldwinsville .....	5	1	18	6	1	11	23	13	0	78	5	0	2	0	0	3	32	9	51	
Beverly .....	12	13	0	14	4	25	0	16	3	87	1	10	0	11	2	15	13	8	60	
Canton .....	6	12	3	6	2	40	2	11	1	83	3	7	2	2	2	27	1	8	52	
Gouverneur .....	14	1	0	0	0	40	26	9	0	90	2	1	0	0	0	35	17	3	58	
Lodi .....	5	6	2	16	12	14	8	14	15	90	4	4	3	2	3	10	15	11	52	
New York city .....	2	18	3	15	1	19	20	12	0	90	1	6	5	5	2	13	26	6	64	
Oswego .....	1	15	8	10	29	6	17	0	4	90										
Penn Yan .....	3	26	0	1	21	25	8	6	0	90										
Sag Harbor .....	2	21	6	9	9	16	8	10	0	81	1	8	1	3	2	12	9	26	62	
Smithville .....	9	17	4	7	18	22	12	1	0	90	4	7	3	0	8	9	37	3	71	
Spencertown .....	11	2	2	4	17	19	7	28	0	90	7	1	0	1	2	13	18	28	70	
Wampsville .....	1	5	1	16	20	11	29	6	0	89	3	3	0	12	13	9	24	4	68	
NEW JERSEY—																				
Bloomfield .....	2	7	1	15	4	8	5	11	0	53										
Burlington .....	5	13	1	4	4	17	8	3	36	91	3	8	1	3	2	4	2	1	24	
Lambertville .....	3	14	2	11	9	18	3	17	0	77										
PENNSYLVANIA—																				
Easton .....	8	1	0	20	5	4	22	17	13	90	0	0	0	2	0	0	11	1	14	
Gettysburg .....	15	14	2	6	7	18	12	10	4	88	0	6	4	1	1	12	19	17	60	
Harrisburg .....	6	3	7	16	12	3	27	15	0	89	4	0	0	3	5	0	15	7	34	
Lima .....	3	18	7	4	5	4	3	12	33	89	5	4	4	4	6	6	13	13	55	

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
PENNSYLVANIA—Continued.																				
Meadville.....	4	7	3	9	10	9	1	10	35	88	8	2	5	4	5	11	13	10	58	
Morrisville.....	8	7	5	2	9	20	9	3	27	90	2	3	2	3	2	13	21	8	54	
Moss Grove.....	5	3	11	1	14	8	23	4	2	71	3	0	6	1	5	15	31	5	66	
Norristown.....	0	5	7	5	4	12	33	9	0	75	0	5	8	2	0	3	23	1	42	
Philadelphia.....	4	18	4	10	2	31	4	17	0	90	0	2	0	0	0	8	7	2	19	
Pittsburg, [M. H.].....	6	0	35	0	15	4	15	5	34	120										
Pocopson.....	5	12	3	5	4	21	29	7	0	87	1	0	1	0	0	0	6	0	14	
Pottsville.....	13	0	14	10	6	8	19	16	4	90	5	4	4	3	11	2	9	15	53	
West Haverford.....	0	15	6	3	0	21	2	10	0	60	1	0	8	1	7	3	9	5	34	
DELAWARE—																				
Newark.....	1	15	5	2	2	10	4	10	0	49	0	0	0	0	1	1	0	1	3	
MARYLAND—																				
Bladensburg.....	1	18	7	3	0	11	3	3	0	46										
Frederick.....	7	17	3	2	10	26	0	8	7	89	5	4	2	2	3	7	32	9	64	
Sykesville.....	1	7	3	4	1	4	55	15	0	90	0	2	5	7	1	0	53	3	74	
DISTRICT OF COLUMBIA—																				
Washington.....	0	25	4	4	1	29	3	9	15	90										
VIRGINIA—																				
Alexandria.....	24	23	4	4	11	0	5	10	0	89										
Ashland.....	6	1	0	1	22	0	2	52	0	90	0	0	0	2	4	7	22	1	36	
Crichton's Store.....	33	7	0	3	11	29	2	1	4	90	21	0	1	1	5	20	23	0	80	
Lewisburg.....	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	3	13	0	19	
NORTH CAROLINA—																				
Chapel Hill.....	15	19	2	4	0	4	33	10	0	89	0	12	0	0	3	16	7	7	45	
SOUTH CAROLINA—																				
All Saints.....	15	21	9	9	11	7	7	8	0	87	13	26	8	3	3	4	10	8	70	
Camden.....	6	24	8	2	5	21	8	3	13	90	4	9	6	4	5	15	5	8	54	
Charleston.....	0	21	8	18	1	0	2	4	0	60										
GEORGIA—																				
Augusta.....	5	17	22	19	13	11	1	2	0	90										
Savannah.....	13	15	0	28	9	5	0	2	0	90	0	0	0	0	1	0	1	0	2	
Sparta.....	4	28	7	16	2	13	6	14	0	90	3	12	5	9	5	4	3	3	45	
The Rock.....	0	6	2	13	1	2	0	2	0	26										
Whitemarsh Island.....	4	20	7	15	4	12	0	3	19	90	2	18	4	18	0	5	4	5	57	
FLORIDA—																				
Cedar Keys.....	12	25	23	4	3	10	9	2	2	90	6	14	16	5	3	2	3	1	51	
Jacksonville.....	1	52	4	5	4	17	0	5	0	88	0	25	8	5	0	19	5	1	63	
Key West.....	8	15	27	2	0	2	2	3	1	80										
Knox Hill.....	0	17	36	15	9	6	2	5	0	90	0	8	29	11	7	5	1	2	64	
Warrington.....	10	15	0	27	12	13	2	3	2	90	5	17	6	36	7	8	0	14	93	
ALABAMA—																				
Auburn.....	0	13	37	26	4	3	1	2	0	80	0	2	11	15	2	5	2	0	37	
MISSISSIPPI—																				
Oxford.....	3	3	8	15	8	7	9	9	4	66	0	2	0	4	15	9	12	3	51	
LOUISIANA—																				
New Orleans.....	2	18	19	22	6	3	8	2	9	89	5	7	6	2	7	4	6	1	39	
TEXAS—																				
Austin.....	3	24	1	24	18	8	3	0	0	90	2	24	2	31	13	14	0	5	91	
New Wied.....	13	5	12	14	13	15	0	2	16	90	1	0	2	0	2	0	0	0	8	
TENNESSEE—																				
Glenwood.....	2	1	6	11	15	11	6	1	36	89	0	1	1	4	8	23	26	2	65	
KENTUCKY—																				
Bowling Green.....	5	1	7	5	23	0	13	2	25	90	2	0	4	7	27	16	18	2	76	
Danville.....	3	20	11	3	5	31	7	13	0	93	1	4	3	2	3	17	21	5	57	
Springdale.....	2	12	4	8	2	17	0	2	43	90										
OHIO—																				
Cincinnati.....	3	16	3	4	1	20	3	10	0	60										
Cleveland.....	7	4	5	19	12	11	0	10	1	69	1	4	3	2	7	11	8	9	45	
Gallipolis.....	8	4	1	0	13	5	0	5	0	36										
Germantown.....											1	15	0	0	1	30	1	14	68	
Granville.....	1	12	3	1	0	22	3	0	26	68	0	3	0	1	0	15	0	2	21	
Hillsborough.....	0	13	5	11	0	29	0	7	0	60	0	2	0	2	0	19	3	3	29	



NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	0 m or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Hiram .....	1	2	3	6	9	14	12	10	30	87	1	1	4	6	1	24	12	14	63
Jackson, [Gilmor] .....	11	1	5	6	8	5	13	5	27	81	10	2	5	7	5	10	29	4	73
Oberlin .....	7	13	5	5	12	18	5	6	13	84	4	5	3	0	4	7	39	2	64
Savannah .....	1	11	5	13	0	32	8	19	0	90	2	9	3	5	1	27	8	14	72
Urbana .....	0	11	3	15	1	22	2	0	0	63	1	8	5	5	4	21	11	10	65
Zanesville .....	26	4	0	24	4	9	5	18	0	90									
MICHIGAN—																			
Ann Arbor, [Woodruff] ..	3	10	9	10	9	18	3	7	21	90	0	3	4	5	5	15	26	0	67
Ann Arbor, [Winchell] ..	1	18	10	2	7	17	10	7	14	86	4	5	7	0	8	16	17	6	64
Battle Creek .....	5	9	12	14	16	9	13	5	7	90	3	8	10	4	6	16	29	0	85
Cooper .....	0	2	25	1	1	2	20	1	38	90	0	3	42	0	1	0	14	0	60
Detroit .....	2	28	15	6	10	23	4	2	0	90									
Flint .....	14	15	0	3	23	11	5	6	0	77									
Grand Rapids .....	2	25	10	8	1	13	3	2	23	87	1	5	1	2	0	9	1	1	20
Monroe, [Whelpley] .....	0	3	1	23	3	27	0	32	0	89	0	4	1	20	0	21	3	36	85
St. James .....	5	10	21	8	5	22	1	12	6	90	4	2	3	2	1	10	12	9	43
Saugatuck .....	5	11	20	10	13	14	11	0	0	90	5	4	12	5	4	18	36	18	102
INDIANA—																			
Milton .....	1	19	0	1	2	10	3	2	52	90	0	0	0	0	0	5	1	0	0
New Harmony .....	8	0	4	18	4	15	5	0	0	60									
ILLINOIS—																			
Athens .....	0	14	3	19	7	14	2	7	0	66	0	16	1	5	2	18	12	4	58
Augusta .....	3	6	18	10	15	14	6	7	11	90	2	5	4	3	8	11	4	3	40
Manchester .....	17	2	0	4	21	22	11	13	0	90	12	4	2	2	21	10	9	4	64
Ottawa .....	8	21	7	8	16	13	0	10	0	81	0	5	1	0	2	13	3	4	28
Upper Alton .....	18	12	0	13	12	20	5	11	0	91	0	2	0	0	1	0	0	0	3
WISCONSIN—																			
Beloit .....	0	23	12	9	31	4	2	9	0	90	0	6	0	0	4	4	0	2	16
Janesville .....	10	14	13	3	19	16	4	1	10	90									
Milwaukee, [Winkler] ..	3	30	13	15	5	8	0	11	0	91									
Platteville .....	6	0	24	28	2	13	7	10	0	90	2	0	26	7	3	10	19	8	75
IOWA—																			
Dubuque .....	4	18	2	12	19	8	3	5	18	89	3	11	4	5	6	15	9	0	62
Fort Madison .....	0	18	2	31	16	15	2	6	0	90	4	4	9	4	5	21	12	4	63
Muscatine .....	0	24	0	31	0	28	0	7	0	90	0	7	0	0	0	29	0	1	37
Pella .....	7	6	4	11	45	1	7	9	0	90									
Poultney .....	6	7	11	14	9	12	4	3	9	75	3	2	2	4	7	9	7	0	37
MINNESOTA—																			
Lac qui Parle .....	2	4	2	26	27	3	3	20	0	87	0	0	16	0	4	1	16	0	43
EASTERN CONTINENT—																			
Mosul, Mesopotamia .....	6	4	0	1	1	3	3	8	2	28									

No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Horton .....	0	1	0	24	4	16	17	11	19	92	1	0	0	20	0	25	18	11	81	
Montreal .....	16	8	1	10	12	23	11	12	0	93	2	8	0	8	6	29	17	0	78	
Red River Settlement .....	21	2	2	5	34	5	5	10	1	86	14	1	0	1	32	6	7	15	78	
St. Martin .....	1	9	1	19	3	36	7	17	0	93	0	0	0	0	0	0	0	1	1	
Toronto .....	1	8	1	13	2	21	7	37	2	92										
MAINE—																				
Carmel .....	1	6	3	16	1	11	3	14	0	61										
Fryeburg .....	4	0	0	5	1	19	0	7	0	59	1	1	2	4	1	0	15	5	35	
Gardiner .....	0	17	1	22	0	21	1	19	9	93	0	0	0	5	3	24	2	11	45	
Perry .....	7	4	0	16	7	27	11	15	0	93	2	0	3	18	13	24	10	8	81	
Portland .....	11	0	0	20	4	0	21	11	0	90	5	1	4	17	5	5	8	5	50	
Steuben .....	3	17	5	0	3	38	3	10	5	93	2	0	1	4	3	27	7	0	53	
NEW HAMPSHIRE—																				
Concord .....	0	3	0	36	0	16	7	31	0	93										
Exeter .....	2	7	7	15	9	14	24	11	0	89	1	7	7	14	7	12	18	5	71	
Londonderry .....	3	7	4	16	3	4	4	23	29	93	1	3	2	10	0	5	9	4	34	
Manchester .....	0	3	0	8	4	2	10	4	2	33	0	3	0	0	4	2	10	0	27	
Stratford .....											1	0	0	0	0	17	18	14	59	
VERMONT—																				
Brandon .....	16	0	4	7	38	5	9	9	5	93	5	0	0	1	0	6	0	20	50	
Burlington .....	23	1	0	2	42	1	18	0	0	93	1	0	0	0	2	0	2	0	5	
Castleton .....	1	4	4	1	7	13	0	10	27	73	0	0	0	0	1	8	0	5	14	
Craftsbury .....	7	9	3	8	27	11	13	15	0	93	4	0	1	0	19	12	15	15	80	
MASSACHUSETTS—																				
Amherst .....	1	1	2	30	4	7	4	36	0	85	0	2	0	2	4	8	5	11	32	
Boston .....	1	7	2	10	1	21	9	10	1	62										
Mendon .....	1	0	0	0	0	39	7	40	0	93	0	6	0	0	0	43	14	30	93	
Nantucket .....	3	0	3	14	0	25	11	15	9	92										
New Bedford .....	4	4	1	13	4	32	0	24	0	88	0	1	1	1	2	9	3	0	23	
Newburyport .....	3	9	10	11	16	8	20	7	0	84	0	0	0	1	0	0	0	0	1	
North Attleboro' .....	10	0	5	9	30	11	15	13	0	93	8	2	1	0	31	12	9	5	74	
Princeton .....	4	8	0	7	1	16	38	11	0	93	1	0	0	2	0	12	25	6	49	
Richmond .....	0	7	0	23	2	32	0	29	0	93	0	0	0	16	1	31	3	22	82	
Southwick .....	1	11	2	4	5	11	3	6	7	50	0	7	0	4	2	17	4	4	38	
Springfield .....	2	8	2	1	3	19	0	19	33	93	2	0	0	1	5	18	9	18	61	
Westfield .....	5	4	1	7	9	12	25	10	0	73										
Williamstown .....	0	2	4	15	11	16	17	16	4	91	1	0	1	10	5	16	14	13	62	
Worcester .....	1	12	0	13	0	28	0	39	0	93										
RHODE ISLAND—																				
Providence .....	2	9	5	9	11	23	3	30	0	92										
CONNECTICUT—																				
New London .....	5	5	10	7	1	35	10	18	0	91										
Pomfret .....	1	0	1	11	10	24	9	28	0	93	0	0	1	13	0	17	4	15	67	
Saybrook .....	13	4	4	10	6	18	11	17	1	84	1	1	3	3	10	4	11	5	38	
NEW YORK—																				
Angelica .....	0	2	0	3	4	42	18	15	0	84	0	0	0	0	0	19	20	10	49	
Baldwinsville .....	4	1	1	8	1	29	17	26	0	87	4	0	0	0	0	5	45	19	73	
Beverly .....	5	18	0	13	6	50	3	12	4	91	2	6	0	9	5	25	11	7	68	
Canton .....	0	19	1	1	2	57	2	9	1	92	0	17	1	1	0	45	2	0	75	
Gouverneur .....	21	0	0	0	0	28	40	4	0	93	13	0	0	0	0	29	23	3	58	
Lodi .....	2	0	2	11	10	21	13	24	4	93	2	1	0	0	3	13	13	14	45	
New York city .....	1	0	3	13	4	13	25	28	0	93	2	8	1	10	7	11	21	11	71	
Ogdensburg .....	12	1	2	0	0	9	4	1	0	34										
Oswego .....	4	7	7	12	22	7	22	8	4	93										
Penn Yan .....	0	0	0	0	23	25	28	9	0	93										
Sag Harbor .....	0	0	4	13	4	31	7	17	1	86	2	5	3	3	11	24	16	12	76	
Smithville .....	9	10	7	4	22	18	16	6	2	94	3	15	2	2	8	17	23	9	79	
Spencertown .....	10	0	2	5	13	21	9	28	0	93	3	0	1	1	4	21	14	33	83	
Wampsville .....	0	2	4	12	20	7	33	15	0	93	0	1	4	12	21	0	33	12	91	
NEW JERSEY—																				
Bloomfield .....	0	0	3	8	11	35	0	14	0	91										
Burlington .....	0	6	0	0	5	14	33	4	23	93	4	5	0	0	0	5	9	3	32	
Lambertville .....	4	10	0	0	4	24	5	31	0	84										



## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
PENNSYLVANIA—																				
Bedford .....	0	0	0	5	0	27	3	20	0	59	0	0	0	4	0	18	6	15	43	
Easton .....	3	3	1	14	5	3	11	41	12	93	0	4	0	1	0	3	0	16	30	
Gettysburg .....	4	7	0	1	13	31	15	20	1	92	2	3	0	0	0	27	8	14	54	
Harrisburg .....	9	4	5	8	12	0	15	31	0	84	4	0	0	3	5	0	5	16	33	
Lima .....	8	7	1	5	5	4	2	32	29	93	1	5	1	1	3	16	15	18	60	
Meadville .....	1	0	0	1	17	10	10	23	30	92	1	0	0	1	4	10	21	19	56	
Morrisville .....	4	5	0	1	7	25	13	12	26	93	4	0	0	0	4	20	18	11	63	
Moss Grove .....	0	0	0	2	9	16	21	6	1	55	0	0	0	0	0	7	45	16	68	
Norristown .....	0	3	2	6	0	6	52	12	0	81	0	1	3	3	0	4	38	5	54	
Philadelphia .....	3	9	0	2	3	35	15	26	0	93	0	2	0	0	2	9	10	3	26	
Pittsburg, [M. H.] .....	1	0	10	7	23	12	32	8	31	124	—	—	—	—	—	—	—	—	—	
Pocopson .....	11	4	2	0	7	14	39	10	0	87	0	0	0	0	1	1	5	1	8	
Pottsville .....	4	7	6	0	9	5	30	30	2	93	4	5	6	0	3	3	16	26	63	
West Haverford .....	1	2	3	2	1	20	13	14	6	62	2	1	2	0	5	5	7	9	31	
DELAWARE—																				
Newark .....	11	3	0	0	3	14	9	14	0	54	0	0	0	1	0	1	0	0	2	
MARYLAND—																				
Chestertown .....	5	8	3	3	2	13	14	19	0	67	1	0	0	2	3	4	10	8	28	
Frederick .....	6	6	2	1	8	24	12	24	10	93	2	0	1	0	5	10	24	13	55	
Sykesville .....	0	2	1	1	0	14	56	19	0	93	1	0	0	5	0	4	47	4	61	
DISTRICT OF COLUMBIA—																				
Washington .....	1	10	0	4	0	13	23	20	22	93	—	—	—	—	—	—	—	—	—	
VIRGINIA—																				
Alexandria .....	15	4	0	3	20	12	16	23	0	93	—	—	—	—	—	—	—	—	—	
Ashland .....	7	0	0	0	10	16	0	6	54	93	2	0	0	0	4	8	9	4	27	
Crichton's Store .....	24	3	0	2	19	20	12	9	4	93	9	4	1	0	3	22	27	0	75	
Lewisburg .....	0	0	0	0	0	0	5	0	0	5	0	0	0	0	1	0	10	3	14	
Winchester .....	0	0	0	0	0	5	37	6	19	67	0	0	0	0	0	4	24	1	29	
NORTH CAROLINA—																				
Chapel Hill .....	14	5	1	3	5	13	32	20	0	93	0	7	1	1	0	22	6	9	46	
SOUTH CAROLINA—																				
All Saints .....	19	8	8	4	12	9	18	17	0	93	1	4	2	1	3	15	18	7	51	
Camden .....	8	7	3	3	3	10	15	26	20	93	1	3	1	0	0	11	9	17	42	
Charleston .....	0	21	2	8	0	15	3	13	0	62	—	—	—	—	—	—	—	—	—	
GEORGIA—																				
Augusta .....	0	15	2	1	0	0	2	4	0	24	—	—	—	—	—	—	—	—	—	
Savannah .....	18	5	8	6	14	7	13	22	0	93	1	0	1	1	1	4	5	4	17	
Sparta .....	5	23	2	9	2	14	3	35	0	93	1	3	1	2	0	4	3	10	24	
The Rock .....	0	0	0	4	0	7	0	12	0	23	—	—	—	—	—	—	—	—	—	
Whitemarsh Island .....	7	6	4	5	5	7	10	15	34	93	1	3	1	0	3	11	7	7	33	
FLORIDA—																				
Cedar Keys .....	21	26	3	6	4	5	15	8	5	93	1	7	2	3	2	7	23	2	47	
Jacksonville .....	7	15	2	0	1	29	2	35	0	91	5	5	0	0	0	32	3	4	49	
Key West .....	8	25	5	9	3	1	4	5	2	62	—	—	—	—	—	—	—	—	—	
Knox Hill .....	7	13	13	9	0	8	19	20	0	89	1	2	0	6	6	8	16	8	47	
Warrington .....	7	15	9	5	4	6	8	29	10	93	1	0	5	4	1	10	9	10	40	
ALABAMA—																				
Auburn .....	2	15	10	19	5	17	7	17	0	92	0	2	0	7	3	11	2	4	29	
Greene Springs .....	8	23	21	0	1	9	9	7	4	82	2	2	0	2	1	6	12	8	33	
MISSISSIPPI—																				
Jackson .....	73	0	0	0	14	0	6	0	0	93	5	0	3	0	4	0	32	0	44	
Oxford .....	2	18	9	10	5	10	13	24	2	93	0	3	4	4	1	3	14	14	43	
LOUISIANA—																				
New Orleans .....	27	14	9	6	6	0	8	5	3	78	1	0	0	1	0	1	6	3	12	
TEXAS—																				
Austin .....	30	12	0	7	18	12	3	11	0	93	16	4	0	5	14	14	9	11	73	
New Wied .....	17	8	8	7	14	0	6	9	24	93	0	0	0	2	4	1	2	0	9	
ARKANSAS—																				
Camden .....	2	0	0	4	3	5	2	8	12	36	0	0	5	6	2	7	1	3	24	
TENNESSEE—																				
Glenwood .....	13	6	1	5	17	12	2	9	28	93	2	0	0	0	4	11	27	13	57	

No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and west.	South.	Between south and west.	West.	Between north and west.	Calm or Variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
KENTUCKY—																				
Bowling Green .....	4	2	2	2	7	23	0	5	39	93	7	1	0	1	8	16	8	8	4	
Millersburg .....	14	0	2	2	10	1	19	3	0	51	—	—	—	—	—	—	—	—	—	
Springdale .....	0	7	2	0	1	32	6	11	34	93	—	—	—	—	—	—	—	—	—	
OHIO—																				
Cheviot .....	2	7	5	12	13	28	13	13	0	93	—	—	—	—	—	—	—	—	—	
Cincinnati, [Hurt] .....	1	0	0	3	0	32	6	37	0	79	1	0	0	0	0	0	1	2	4	
Cincinnati .....	1	6	0	11	0	20	8	16	0	62	—	—	—	—	—	—	—	—	—	
Cleveland .....	11	2	0	2	28	18	0	16	1	87	5	2	0	0	0	11	12	15	45	
Gallipolis .....	6	1	1	0	20	15	4	14	0	61	—	—	—	—	—	—	—	—	—	
Germantown .....	0	5	0	0	0	39	0	37	0	81	0	4	0	0	0	20	0	24	48	
Granville .....	0	6	1	0	1	18	10	4	31	71	0	1	0	0	0	8	9	4	22	
Hillsborough .....	5	4	0	7	1	27	0	18	0	62	0	0	0	0	0	8	2	6	16	
Hiram .....	7	1	0	0	5	15	0	16	37	87	5	0	0	1	1	16	8	26	57	
Jackson, [Gilmor] .....	1	2	0	2	3	5	11	3	30	57	0	0	0	1	1	11	25	5	43	
Oberlin .....	8	1	0	0	17	14	11	24	17	92	3	2	0	2	1	7	31	19	65	
Savannah .....	10	4	0	11	1	19	14	0	0	89	4	1	0	1	0	15	7	21	49	
Unionville .....	—	—	—	—	—	—	—	—	—	—	3	1	0	0	0	14	34	2	80	
Urbana .....	1	0	1	4	7	14	9	20	0	56	1	0	0	1	3	6	15	20	46	
Zanesville .....	4	0	0	0	0	36	9	44	0	93	—	—	—	—	—	—	—	—	—	
MICHIGAN—																				
Ann Arbor, [Woodruff] ..	11	0	0	6	11	17	9	23	15	92	7	0	0	0	2	13	13	19	54	
Ann Arbor, [Winchell] ..	5	3	0	0	8	15	17	24	17	92	5	1	0	1	0	11	22	27	67	
Battle Creek .....	0	0	0	2	19	17	11	20	7	93	0	4	0	0	2	12	21	24	71	
Cooper .....	1	1	17	0	0	0	41	2	31	93	0	2	24	0	0	0	23	0	49	
Detroit .....	15	8	1	0	9	37	0	14	0	93	—	—	—	—	—	—	—	—	—	
Flint .....	19	3	0	1	29	5	12	17	0	86	—	—	—	—	—	—	—	—	—	
Grand Rapids .....	9	9	5	8	1	17	6	3	28	86	0	0	0	0	0	7	2	4	13	
Monroe, [Whelpley] .....	15	12	3	4	12	7	3	37	0	93	14	16	1	1	7	6	6	32	83	
St James .....	16	4	5	6	8	15	4	28	7	93	13	0	0	0	7	12	0	21	52	
Saugatuck .....	8	10	16	6	3	21	19	10	0	93	1	11	2	0	2	14	40	29	99	
INDIANA—																				
Milton .....	7	11	0	4	2	7	6	16	37	90	0	2	0	0	0	4	3	3	12	
New Harmony .....	14	1	1	4	5	21	6	10	0	62	—	—	—	—	—	—	—	—	—	
ILLINOIS—																				
Athens .....	5	9	2	15	8	18	4	22	0	83	1	0	0	4	1	7	7	19	39	
Augusta .....	8	3	8	0	7	21	21	8	0	93	0	2	1	4	2	3	12	5	35	
Manchester .....	13	8	1	3	15	14	20	19	0	93	14	0	0	0	5	9	16	4	48	
Ottawa .....	13	11	1	5	13	11	0	18	1	76	0	1	0	0	1	5	2	9	26	
Upper Alton .....	15	9	0	0	28	0	9	20	0	96	—	—	—	—	—	—	—	—	—	
WISCONSIN—																				
Beloit .....	32	0	0	8	19	14	11	3	0	93	0	0	0	0	1	1	5	0	9	
Janesville .....	17	4	3	7	10	27	9	10	0	93	—	—	—	—	—	—	—	—	—	
Milwaukee, [Winkler] ..	9	7	5	4	5	19	15	29	0	93	—	—	—	—	—	—	—	—	—	
Platteville .....	9	0	3	14	13	8	6	31	0	93	—	—	—	—	—	—	—	—	—	
Superior .....	—	—	—	—	—	—	—	—	—	—	17	13	4	3	1	26	10	19	93	
IOWA—																				
Dubuque .....	18	0	1	10	18	7	6	14	16	90	3	1	0	4	0	7	4	13	32	
Fort Madison .....	0	17	1	20	11	13	4	21	0	93	7	4	0	0	0	4	19	12	46	
Muscatine .....	0	8	1	14	11	25	4	22	0	93	0	1	0	0	0	11	2	8	22	
Pella .....	8	4	0	7	30	0	20	24	0	93	—	—	—	—	—	—	—	—	—	
Poultney .....	7	3	4	5	5	15	6	19	12	76	3	0	0	0	0	1	2	3	0	
Quasqueton .....	0	7	1	8	5	16	0	23	0	72	0	2	0	0	0	0	0	0	2	
WEST INDIES—																				
Up Park Camp, Jamaica..	4	11	4	35	2	0	0	0	0	62	—	—	—	—	—	—	—	—	—	
EASTERN CONTINENT—																				
Mosul, Mesopotamia .....	5	0	0	2	2	3	1	2	5	22	—	—	—	—	—	—	—	—	—	



## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1855.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Horton .....	1	6	1	16	2	18	11	31	4	90	2	7	1	13	2	18	13	18	74
Montreal .....	16	22	0	4	17	12	7	12	0	90	1	0	0	0	3	33	17	7	61
Red River Settlement .....	11	3	3	1	29	12	14	2	0	75	7	5	2	1	21	8	14	4	62
St. Martin .....	1	25	1	16	3	23	2	19	0	90									
Toronto .....	5	11	0	10	0	25	6	22	2	90									
MAINE—																			
Carmel .....	1	6	0	12	5	11	2	28	18	83	1	4	1	8	5	10	1	11	41
Fryeburg .....	7	8	5	3	0	12	12	11	0	58	2	0	0	0	0	2	12	15	31
Gardiner .....	2	24	0	11	1	18	3	20	0	88	0	5	0	3	0	16	2	12	38
Perry .....	8	17	5	6	2	18	8	26	0	90	5	10	6	1	2	10	13	11	58
Portland .....	11	18	2	1	4	10	18	25	1	90	8	2	0	0	2	3	16	0	40
Steuben .....	3	29	1	5	0	23	0	24	5	90	3	10	3	2	2	25	9	10	64
Windham .....	3	13	2	3	0	7	2	28	12	70	0	0	0	0	0	1	1	0	2
NEW HAMPSHIRE—																			
Concord .....	1	18	0	8	1	19	0	43	0	90									
Exeter .....	9	11	5	7	1	11	16	29	0	89	8	13	5	5	1	10	8	16	66
Londonderry .....	2	12	5	6	0	6	4	28	27	90	1	2	2	3	0	2	5	2	17
Manchester .....	2	19	8	2	2	2	21	25	0	81	0	18	8	1	0	2	14	11	54
Stratford .....	13	0	4	0	4	0	20	0	0	41									
VERMONT—																			
Brandon .....	25	0	2	7	31	7	3	11	4	90	3	0	0	0	2	1	10	20	36
Burlington .....	26	2	0	7	37	4	9	5	0	90	0	0	0	0	0	1	1	3	5
Castleton .....	17	1	2	1	18	19	2	12	18	90	6	1	1	1	4	7	1	8	29
Craftsbury .....	4	0	2	14	28	3	14	16	0	90	2	5	0	1	10	3	34	17	72
MASSACHUSETTS—																			
Amherst .....	5	10	0	20	3	4	4	39	2	87	0	2	1	0	1	3	3	17	27
Mendon .....	0	26	1	0	5	22	3	33	0	90	0	25	1	0	4	27	8	30	90
Nantucket .....	11	23	5	2	3	11	7	24	4	90									
New Bedford .....	11	22	4	2	1	16	3	27	2	88	1	1	0	1	0	6	0	8	26
Newburyport .....	14	11	3	5	5	4	20	24	0	86									
North Attleboro' .....	19	15	0	2	0	9	7	29	0	90	13	11	1	1	11	7	13	10	67
Princeton .....	5	19	10	2	4	8	21	21	0	90	4	8	7	1	1	4	22	7	54
Richmond .....	0	6	0	8	0	34	0	42	0	90	0	4	0	9	1	33	0	30	77
Southwick .....	4	22	1	2	6	6	1	7	2	51	0	6	1	2	0	12	1	5	27
Springfield .....	10	7	2	0	1	10	3	23	34	90	9	8	2	0	1	9	9	18	56
Westfield .....	10	12	2	12	4	4	17	24	0	85									
Williamstown .....	3	3	9	11	3	9	18	21	9	86	0	0	2	3	0	11	16	12	44
Worcester .....	2	18	0	13	0	23	4	30	0	90									
RHODE ISLAND—																			
Providence .....	1	30	2	0	5	8	3	33	2	84									
CONNECTICUT—																			
New London .....	13	16	5	1	2	11	1	41	0	90									
Pomfret .....	0	26	2	2	4	16	2	38	0	90	0	24	3	1	4	15	2	18	67
Saybrook .....	12	19	4	4	0	10	10	25	5	89	1	6	9	1	0	3	13	10	43
NEW YORK—																			
Angelica .....	4	3	0	19	8	21	27	6	0	88	0	2	0	1	0	28	28	13	72
Baldwinsville .....	2	4	7	11	8	10	19	21	0	82	0	3	2	1	0	12	29	23	70
Beverly .....	5	23	1	8	0	23	1	15	0	76	3	9	6	7	1	20	10	2	58
Blackwell's Island .....	11	30	4	1	1	15	7	21	0	90	13	16	7	0	0	13	6	20	75
Canton .....	3	16	0	0	3	33	2	16	4	77	3	14	0	0	3	31	2	13	66
Gouverneur .....	17	20	0	3	0	27	13	10	0	90	6	9	0	0	0	16	4	7	42
Lodi .....	3	0	0	19	11	7	10	32	5	87	2	0	0	1	12	9	10	18	52
New York city .....	5	21	2	3	2	6	4	45	0	88	3	13	11	0	2	7	9	30	75
Ogdensburg .....	9	6	2	3	8	11	5	8	0	52	1	0	0	0	3	0	3	0	7
Oswego .....	4	12	5	7	20	11	24	3	3	90									
Ovid .....	6	2	5	9	13	15	14	26	0	90	3	2	4	9	9	11	21	32	91
Penn Yan .....	0	11	0	2	25	16	25	11	0	90									
Smithville .....	5	13	2	7	23	18	15	7	0	90	2	12	0	0	9	26	27	8	82
Spencertown .....	13	0	2	6	12	24	2	31	0	90	3	0	1	5	7	8	20	21	65
Wampsville .....	0	0	12	6	16	4	49	3	0	90	0	0	10	6	16	4	44	3	83

## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY—																				
Bloomfield.....	1	23	3	10	0	39	1	13	0	90										
Burlington.....	7	30	1	0	2	5	26	3	16	90	2	13	0	0	2	1	3	1	22	
Lambertville.....	1	26	0	5	3	11	2	36	0	84										
PENNSYLVANIA—																				
Bedford.....	0	0	0	18	0	23	1	36	0	78	0	0	0	18	0	18	2	21	59	
Easton.....	12	9	4	4	5	5	3	30	8	80	0	2	1	0	0	0	10	1	14	
Gettysburg.....	12	11	4	3	7	23	6	17	7	90	1	7	0	3	0	14	11	11	47	
Harrisburg.....	3	4	17	11	1	2	6	36	0	80	0	0	1	1	0	1	3	16	22	
Lima.....	2	29	6	4	2	7	4	19	17	90	1	0	1	5	2	5	21	14	58	
Meadville.....	0	2	0	17	11	10	5	18	27	90	1	0	0	0	6	15	13	19	60	
Morrisville.....	10	18	2	0	3	16	13	17	11	90	11	14	2	0	0	14	15	14	70	
Moss Grove.....	1	2	3	2	26	15	28	1	0	78	0	0	0	3	5	20	34	0	72	
Norristown.....	0	11	10	7	1	7	19	23	0	78	0	2	12	4	0	5	32	6	61	
Philadelphia.....	3	30	2	3	0	20	5	27	0	90	0	2	0	2	0	2	4	6	16	
Pittsburg, [M. H.].....	0	0	21	0	11	10	36	4	29	120										
Pocopson.....	9	10	10	4	5	14	25	13	0	90	0	0	0	2	0	2	2	1	7	
Pottsville.....	0	0	16	10	10	1	3	33	5	90	4	3	11	0	6	1	7	18	59	
West Haverford.....	2	8	7	3	2	8	2	10	17	59	3	1	3	2	0	5	7	8	29	
DELAWARE—																				
Newark.....	4	7	0	3	0	2	5	12	0	33										
MARYLAND—																				
Annapolis.....	0	15	6	6	1	17	10	22	0	88										
Bladensburg.....	1	3	7	2	1	10	0	13	0	37										
Chestertown.....	4	8	10	8	1	15	12	16	0	74	0	0	0	1	1	3	8	4	17	
Frederick.....	8	19	3	4	4	19	7	16	10	90	4	1	2	1	5	6	34	3	56	
Sykesville.....	1	10	5	10	2	6	39	17	0	90	3	7	13	4	0	7	39	4	77	
DISTRICT OF COLUMBIA—																				
Washington.....	0	10	14	2	1	7	27	10	19	90										
VIRGINIA—																				
Alexandria.....	15	12	9	7	16	3	11	15	0	88										
Buffalo.....	8	0	0	0	14	9	0	15	27	82	0	0	0	0	1	15	24	4	44	
Crichton's Store.....	35	8	0	1	20	12	0	3	2	90	14	10	0	0	4	32	15	1	76	
Lewisburg.....	0	0	0	0	0	0	3	1	0	4	0	0	3	0	4	1	28	1	37	
Winchester.....	0	0	7	0	2	2	25	3	0	39	0	0	2	0	0	2	0	0	13	
NORTH CAROLINA—																				
Chapel Hill.....	14	15	4	3	2	18	12	14	0	82	2	5	3	0	1	37	3	0	51	
SOUTH CAROLINA—																				
All Saints.....	22	16	2	18	12	10	5	4	0	90	10	16	0	1	1	10	32	2	72	
Camden.....	11	33	0	7	0	14	0	12	4	90	3	8	0	0	2	12	25	6	59	
Charleston.....	0	39	4	3	1	5	0	0	0	60										
GEORGIA—																				
Savannah.....	20	14	12	18	3	6	5	13	0	91	0	0	0	2	1	3	12	1	19	
Sparta.....	1	29	7	16	4	14	2	12	0	85	0	4	4	8	0	18	4	4	42	
The Rock.....	1	8	1	3	0	0	2	7	0	22										
Whitemarsh Island.....	10	28	4	8	7	3	3	5	22	90	4	15	1	5	3	12	8	4	52	
FLORIDA—																				
Cedar Keys.....	8	32	14	7	8	1	5	3	11	90	2	9	12	5	5	4	5	3	45	
Jacksonville.....	12	32	3	11	2	8	2	15	1	86	7	19	0	13	0	17	8	7	77	
Key West.....	13	24	8	5	3	0	3	4	0	60										
Knox Hill.....	10	17	21	0	7	11	2	9	0	86	3	10	12	8	0	15	4	5	53	
St. Augustine.....	3	53	11	10	3	2	1	7	0	90	3	48	11	10	3	2	1	7	85	
Warrington.....	10	40	6	13	5	5	3	4	4	90	3	24	1	14	2	6	4	8	62	
ALABAMA—																				
Auburn.....	0	16	4	30	11	13	3	13	0	90	1	12	0	13	9	17	6	5	59	
Greene Springs.....	14	18	24	8	0	3	4	5	0	79	0	1	2	9	7	22	11	6	58	
MISSISSIPPI—																				
Jackson.....	44	0	7	0	30	0	8	0	1	90	5	0	18	1	17	1	29	0	71	
Oxford.....	19	11	5	11	1	5	16	22	0	90	4	2	2	16	9	6	16	15	70	
LOUISIANA—																				
New Orleans.....	17	22	0	18	0	2	0	0	1	83	5	0	1	5	5	9	8	5	38	



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TEXAS—																				
Austin .....	16	11	0	6	16	12	3	26	0	90	10	1	0	4	22	25	1	11	74	
New Wied.....	27	6	9	5	8	3	8	7	17	90	0	0	0	0	2	5	8	0	15	
ARKANSAS—																				
Camden.....	9	3	1	12	7	12	2	17	27	90	0	0	6	10	8	26	11	5	66	
TENNESSEE—																				
Glenwood.....	10	10	2	7	17	16	4	8	16	90	2	0	0	5	9	28	21	9	74	
KENTUCKY—																				
Danville.....	6	16	3	2	13	22	2	23	0	87	1	1	1	0	1	34	10	5	57	
Millersburg.....	8	0	13	9	9	4	9	5	0	57	—	—	—	—	—	—	—	—	—	
Springdale.....	3	10	12	1	0	24	10	8	22	90	—	—	—	—	—	—	—	—	—	
OHIO—																				
Cheviot.....	8	11	10	21	6	12	6	16	0	90	—	—	—	—	—	—	—	—	—	
Cincinnati, [Hurt].....	1	1	17	2	2	31	23	12	0	89	1	1	0	0	1	1	2	2	8	
Cleveland.....	8	6	5	14	20	13	7	13	0	86	1	5	3	0	5	14	16	9	53	
Gallipolis.....	5	3	0	6	6	4	4	9	0	37	—	—	—	—	—	—	—	—	—	
Germantown.....	3	9	0	9	2	28	2	34	0	87	0	2	0	6	1	28	3	19	63	
Granville.....	0	12	5	4	4	16	7	3	20	71	0	-1	1	0	1	15	8	1	27	
Hillsborough.....	1	18	0	10	2	17	1	11	0	60	0	1	0	0	0	3	0	5	9	
Jackson, [Gilmor].....	12	2	9	10	4	12	26	1	14	90	2	0	4	9	3	9	37	2	66	
Oberlin.....	2	5	3	11	14	15	11	15	12	88	1	2	2	0	7	8	28	7	55	
Savannah.....	7	5	0	2	1	29	3	42	0	89	3	6	0	2	1	25	1	31	69	
Unionville.....	6	9	5	2	7	23	24	10	4	90	4	8	0	0	5	21	31	11	80	
Urbana.....	3	7	0	3	10	6	24	6	0	59	0	10	0	20	4	15	10	12	71	
Zanesville.....	7	10	4	7	0	10	8	46	0	90	—	—	—	—	—	—	—	—	—	
MICHIGAN—																				
Ann Arbor, [Woodruff]..	5	9	6	16	4	18	8	9	11	86	2	0	1	4	2	15	29	8	59	
Ann Arbor, [Winchell]..	2	4	5	17	13	10	16	14	8	89	0	1	0	3	13	19	20	12	68	
Battle Creek.....	4	5	8	13	10	14	17	12	7	90	5	0	1	3	3	19	32	12	75	
Cooper.....	1	0	15	4	8	1	40	1	20	90	0	1	13	1	6	2	26	0	49	
Detroit.....	9	13	12	6	5	32	9	4	0	90	—	—	—	—	—	—	—	—	—	
Flint.....	14	3	2	7	12	29	10	7	0	84	—	—	—	—	—	—	—	—	—	
Grand Rapids.....	3	12	7	4	3	15	13	8	25	88	1	1	0	2	2	8	8	5	28	
Monroe.....	15	4	12	13	9	11	5	15	0	84	13	7	7	2	6	8	4	24	78	
St. James.....	7	5	12	11	9	27	2	16	1	90	5	0	4	2	2	23	8	11	55	
Saugatuck.....	5	5	29	7	4	8	20	12	0	90	2	1	3	4	4	27	32	16	89	
INDIANA—																				
Milton.....	3	15	1	6	3	10	10	4	38	90	0	0	1	0	2	5	3	3	14	
New Harmony.....	9	0	6	9	10	10	6	11	0	61	—	—	—	—	—	—	—	—	—	
ILLINOIS—																				
Athens.....	0	9	3	25	8	11	6	23	0	85	0	2	0	1	6	14	10	18	51	
Augusta.....	1	9	6	19	15	14	15	8	3	90	1	5	1	6	6	4	9	1	33	
Manchester.....	5	9	2	2	27	10	20	15	0	90	5	0	1	0	14	13	9	5	48	
Ottawa.....	0	1	0	4	5	6	6	6	0	28	0	0	0	0	0	1	6	1	8	
Upper Alton.....	4	12	0	10	17	29	13	6	0	91	0	0	0	0	0	1	0	0	1	
MISSOURI—																				
St. Louis.....	7	11	5	24	5	10	23	4	0	90	—	—	—	—	—	—	—	—	—	
WISCONSIN—																				
Beloit.....	1	10	4	10	26	11	14	14	0	90	2	1	0	1	8	3	10	2	27	
Janesville.....	4	13	2	16	8	20	15	5	7	90	—	—	—	—	—	—	—	—	—	
Milwaukee.....	4	7	13	12	7	15	18	14	0	90	—	—	—	—	—	—	—	—	—	
Platteville.....	5	2	12	16	10	15	25	5	0	90	5	0	6	3	1	19	27	3	64	
Superior.....	1	7	3	4	6	39	9	7	0	76	1	7	3	3	3	35	12	12	76	
IOWA—																				
Dubuque.....	6	2	3	11	14	8	12	12	20	88	2	0	1	1	1	7	16	10	38	
Fort Madison.....	3	13	4	33	10	11	2	14	0	90	2	5	4	2	0	12	19	4	48	
Muscatine.....	0	13	0	34	0	18	1	24	0	90	0	3	0	5	0	17	0	2	27	
Pella.....	5	3	2	13	32	4	25	6	0	90	—	—	—	—	—	—	—	—	—	
Poultney.....	1	5	7	9	8	16	19	5	15	85	1	0	0	1	0	3	7	3	15	
Quasqueton.....	0	3	1	20	2	11	4	27	0	68	0	0	0	0	2	1	0	1	4	
MINNESOTA—																				
Red Wing.....	6	3	18	6	5	3	19	23	1	84	10	2	3	0	13	5	27	10	70	
WEST INDIES—																				
Up Park Camp, Jamaica..	4	24	1	24	3	1	1	2	0	60	—	—	—	—	—	—	—	—	—	
EASTERN CONTINENT—																				
Mosul, Mesopotamia.....	3	1	0	0	2	0	0	0	0	6	—	—	—	—	—	—	—	—	—	

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1855.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA.—																			
Horton .....	4		5	1	17	21	26	13	93		2	8	4	8	1	16	25	22	86
Montreal .....	17	13	2	2	11	19	9	20	0	93	0	3	3	0	0	32	36	1	76
Red River Settlement .....	25	5	3	0	30	11	4	2	4	84	15	4	2	0	13	8	6	0	54
St Martin .....	0	26	0	7	0	32	16	12	0	93									
Toronto .....	4	10	2	11	0	37	0	20	0	93									
MAINE.—																			
Carmel .....	0	3	2	0	0	11	14	25	16	80	0	1	2	6	0	8	7	8	32
Fryeburg .....	7	5	1	1	2	12	15	16	0	59	0	0	0	0	0	4	0	19	32
Gardiner .....	3	25	1	10	0	21	4	22	7	93	0	1	0	0	1	19	1	9	31
Perry .....	2	6	0	5	2	16	11	51	0	93	5	4	0	1	1	14	13	11	49
Portland .....	5	16	2	1	1	11	30	25	2	93	1	0	0	0	0	2	11	7	21
Steuben .....	0	14	0	4	1	25	11	33	0	88	0	2	0	0	0	25	17	16	50
Windham .....	1	7	1	11	6	4	1	40	8	82									
NEW HAMPSHIRE.—																			
Concord .....	3	3	0	10	2	15	1	59	0	93									
Exeter .....	4	1	0	2	0	16	31	19	0	73	1	1	0	2	0	12	18	8	45
Londonderry .....	2	5	0	5	1	3	0	30	38	93	0	0	1	2	1	0	7	3	14
Manchester .....	2	10	0	3	4	10	19	33	0	81	1	10	0	3	1	9	17	5	46
Stratford .....	7	0	4	0	2	0	23	0	0	36									
VERMONT.—																			
Brandon .....	19	0	0	2	38	10	4	15	0	88	0	0	0	0	2	2	13	18	35
Burlington .....	12	6	0	5	41	6	14	9	0	93									
Craftsbury .....	5	4	0	4	30	20	9	15	0	93	1	1	1	0	10	14	27	14	71
MASSACHUSETTS.—																			
Amherst .....	9	7	1	15	4	6	8	19	0	69	0	0	0	0	0	1	2	8	11
Boston .....	9	3	3	2	1	13	16	15	0	62									
Mendon .....	0	17	4	0	2	35	5	30	0	93	0	17	4	0	2	35	5	31	94
Nantucket .....	8	5	0	9	3	18	0	33	8	93									
New Bedford .....	4	10	3	1	2	21	10	35	2	88	0	2	2	0	1	2	7	5	19
Newburyport .....	14	4	3	3	10	9	23	13	0	79									
North Attleboro' .....	17	5	2	2	12	19	15	21	0	93	5	9	2	1	6	12	21	10	56
Princeton .....	2	11	5	3	1	16	34	21	0	93	1	10	2	2	0	9	32	5	61
Richmond .....	0	12	0	11	1	26	0	43	0	93	0	0	0	10	2	15	3	31	70
Southwick .....	0	10	1	0	5	7	6	13	2	44	0	1	0	0	0	13	3	5	22
Springfield .....	12	3	0	0	4	9	2	21	42	93	4	2	0	0	2	6	5	15	34
Westfield .....	12	0	1	18	3	10	18	16	0	87									
Williamstown .....	0	3	9	11	5	12	23	18	9	90	0	0	0	2	1	8	13	13	37
Worcester .....	24	4	0	2	7	25	15	16	0	93									
RHODE ISLAND.—																			
Providence .....	4	9	3	3	2	22	10	40	0	93									
CONNECTICUT.—																			
New London .....	3	9	0	4	3	25	10	39	0	93									
Pomfret .....	8	12	1	4	7	23	3	35	0	93	2	9	2	3	6	22	7	16	67
Saybrook .....	8	9	4	4	3	11	16	28	9	92	3	1	0	1	4	2	11	14	36
NEW YORK.—																			
Angelica .....	0	3	2	18	2	41	21	6	0	93	0	0	0	4	1	34	28	1	68
Baldwinsville .....	0	5	18	3	1	8	26	28	0	89	0	0	0	1	0	1	38	24	64
Beverly .....	3	15	0	11	3	33	3	13	0	81	0	0	0	7	3	26	14	3	62
Canton .....	1	16	0	0	3	55	5	8	0	88	2	18	0	0	4	52	3	9	88
Gouverneur .....	3	0	0	0	0	10	2	0	0	15	2	0	0	0	0	0	1	1	13
Lodi .....	1	5	3	19	9	11	22	16	7	93	0	0	1	3	4	6	17	11	42
Madrid .....	0	11	0	0	0	26	4	3	9	53	0	5	0	0	0	31	4	2	42
New York city .....	0	14	3	8	1	23	12	32	0	93	0	8	4	5	3	14	25	15	74
Ogdensburg .....	0	4	3	0	2	11	3	5	0	31									
Oswego .....	1	1	12	7	28	6	31	3	4	93									
Ovid .....	1	4	2	5	13	16	17	24	0	82	0	1	2	2	1	12	14	16	48
Penn Yan .....	3	4	2	0	18	38	26	2	0	93									
Sag Harbor .....	0	13	1	4	3	28	11	29	1	92	0	4	2	6	0	26	15	11	64
Smithville .....	3	11	10	4	17	22	20	0	0	93	6	7	1	0	0	39	32	0	85
Spencertown .....	2	1	0	8	7	16	2	57	0	93	1	1	0	7	4	8	13	22	56
Wampsville .....	0	1	11	17	15	5	44	0	0	93	0	1	11	14	15	0	43	0	87
Watertown .....	0	37	0	0	0	25	5	5	0	75	3	31	0	0	0	25	3	9	71



## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY—																				
Burlington.....	6	15	■	1	5	12	33	5	10	89	2	4	0	1	4	4	6	1	22	
Lambertville.....	1	13	0	4	7	■	9	34	0	77										
PENNSYLVANIA—																				
Carlisle.....	■	19	1	11	0	26	10	18	8	93	■	5	■	5	■	15	12	15	52	
Easton.....	3	5	3	13	■	4	13	36	14	92	0	0	■	4	2	5	15	13	39	
Gettysburg.....	5	11	0	1	5	26	18	20	7	93	0	0	0	0	3	21	23	10	57	
Harrisburg.....	0	■	8	19	4	2	7	50	0	92	0	1	■	0	2	■	4	26	33	
Lima.....	5	14	1	5	5	1	11	25	26	93	1	1	0	1	2	9	21	11	46	
Meadville.....	0	1	1	10	10	18	16	11	32	93	0	0	0	2	3	19	18	8	50	
Morrisville.....	2	16	0	2	■	12	31	23	5	93	1	9	0	2	2	5	35	15	69	
Moss Grove.....	0	3	1	7	26	23	16	11	0	87	0	0	■	0	1	20	38	8	67	
Nazareth Hall.....	5	16	3	1	4	20	20	21	0	90	1	2	0	0	0	7	16	11	37	
Norristown.....	■	6	7	3	■	7	37	18	0	78	0	0	1	2	0	7	39	13	62	
Philadelphia.....	3	17	0	6	1	25	19	22	■	93	1	0	0	0	1	10	8	■	22	
Pittsburg, [M. H.].....	3	0	13	3	8	16	43	3	35	124										
Pocopson.....	5	4	7	2	3	23	39	8	■	91	0	0	0	0	0	3	5	0	■	
Pottsville.....	6	5	17	5	1	10	6	38	1	89	2	3	3	0	3	7	6	25	49	
West Haverford.....	1	1	4	3	1	10	3	17	22	62	3	■	■	1	■	3	13	12	32	
MARYLAND—																				
Annapolis.....	7	9	0	2	10	11	3	28	■	70										
Bladensburg.....	1	5	2	1	2	9	1	14	■	35										
Chestertown.....	■	1	8	■	5	11	13	19	0	66	0	0	0	■	1	2	11	1	15	
Frederick.....	■	13	1	2	8	25	13	16	■	83	1	0	■	0	4	7	37	6	55	
Sykesville.....	5	3	1	12	■	8	53	5	■	93	1	■	5	■	4	6	54	1	80	
DISTRICT OF COLUMBIA—																				
Washington.....	1	12	1	5	5	25	11	19	14	93										
VIRGINIA—																				
Alexandria.....	17	9	2	8	15	14	0	27	0	92										
Ashland.....	4	0	0	1	2	19	8	10	49	93	0	0	0	0	0	14	25	8	45	
Crichton's Store.....	28	1	1	5	24	13	16	5	0	93	7	2	0	1	9	41	12	3	75	
Lewisburg.....	1	0	0	0	0	■	1	0	0	8	■	■	■	0	0	■	25	1	28	
Winchester.....	1	0	1	1	0	3	12	11	64	93	■	0	0	0	1	■	8	1	10	
NORTH CAROLINA—																				
Chapel Hill.....	8	12	3	1	12	13	26	18	0	93	■	0	0	■	3	37	4	1	45	
SOUTH CAROLINA—																				
All Saints.....	18	11	9	4	8	22	■	13	0	93	5	1	1	3	6	29	7	1	53	
Camden.....	7	19	0	10	2	21	8	21	■	88	■	4	1	1	1	25	12	7	51	
Charleston.....	2	23	8	7	1	10	1	10	0	62										
GEORGIA—																				
Augusta.....	9	5	6	9	3	8	15	13	0	68										
Savannah.....	13	12	12	13	11	5	■	21	0	93	■	0	0	2	1	7	11	0	21	
Sparta.....	1	24	5	9	9	15	3	25	0	91	1	3	1	1	3	24	5	6	44	
The Rock.....	1	6	1	7	1	3	0	9	■	28										
Whitemarsh Island.....	11	14	5	6	6	7	7	15	22	93	5	1	0	4	2	23	7	4	46	
FLORIDA—																				
Cedar Keys.....	11	23	11	15	8	5	5	■	9	93	0	5	8	2	5	15	8	■	49	
Jacksonville.....	10	28	0	7	6	22	1	19	0	93	16	9	3	2	6	25	2	2	65	
Key West.....	7	19	10	15	2	2	■	4	3	62										
Warrington.....	16	30	4	8	1	15	2	16	1	93	9	2	2	13	■	22	7	8	63	
ALABAMA—																				
Auburn.....	5	9	3	31	5	8	4	30	0	93	1	9	0	18	9	9	1	2	49	
MISSISSIPPI—																				
Jackson.....	69	0	2	0	21	1	0	0	0	93	2	2	7	0	14	1	28	1	55	
Oxford.....	6	7	3	34	3	11	6	23	0	93	1	4	3	8	6	16	5	9	52	
LOUISIANA—																				
New Orleans.....	18	26	12	16	■	3	■	8	■	93	5	1	0	2	3	12	3	5	31	
TEXAS—																				
Austin.....	24	2	0	16	6	23	■	17	2	93	6	■	0	9	5	33	5	■	67	
New Wied.....	30	5	12	4	11	0	8	2	20	92	0	0	1	1	■	4	2	0	14	
TENNESSEE—																				
Glenwood.....	7	5	2	12	16	9	4	24	14	93	1	3	0	0	3	13	14	15	49	

No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
KENTUCKY—																				
Danville.....	6	4	1	7	18	28	18	11	0	93	0	0	2	1	0	28	20	5	56	
Millersburg.....	11	0	10	3	10	1	7	22	0	64	0	0	0	0	0	0	0	0	0	
Springdale.....	2	5	5	3	5	38	5	7	23	93	0	0	0	0	0	0	0	0	0	
OHIO—																				
Bellefontaine.....	1	4	1	11	12	26	18	12	0	85	0	2	1	7	0	32	12	13	76	
Cheviot.....	1	0	9	19	8	20	15	15	0	93	0	0	0	0	0	0	1	1	2	
Cincinnati, [Hurt].....	7	0	0	0	1	42	40	3	0	93	0	0	0	0	0	0	1	1	2	
Cincinnati, [Lea].....	3	2	2	6	9	13	10	3	18	66	0	0	0	0	0	0	0	0	0	
Cincinnati, [Telegraph].....	4	10	2	6	14	14	6	6	0	62	0	0	0	0	0	0	0	0	0	
Cleveland.....	5	4	6	7	30	15	13	9	0	89	2	0	3	0	5	16	19	9	54	
Gallipolis.....	1	2	2	0	3	10	0	13	0	37	0	0	0	0	0	0	0	0	0	
Germantown.....	4	10	3	28	6	29	0	7	0	87	0	8	2	15	2	36	0	2	67	
Granville.....	0	1	1	0	0	2	4	0	5	13	0	2	1	0	1	5	10	0	19	
Hillsborough.....	0	10	1	14	4	21	5	7	0	62	0	0	0	0	0	0	0	1	7	
Oberlin.....	2	4	1	12	13	20	27	14	0	93	0	3	1	1	3	15	31	3	57	
Savannah.....	1	1	0	9	0	28	6	42	0	87	0	1	0	9	0	24	4	28	0	
Unionville.....	5	5	1	11	18	30	16	2	5	93	5	1	0	1	0	45	17	13	90	
Urbana.....	3	2	0	15	4	17	16	12	0	69	0	0	1	4	0	0	42	0	62	
Zanesville.....	2	0	0	0	3	51	15	20	0	93	0	0	0	0	0	0	0	0	0	
MICHIGAN—																				
Ann Arbor, [Woodruff].....	8	0	5	11	7	21	13	13	4	88	2	1	2	2	0	10	26	12	55	
Ann Arbor, [Winchell].....	4	3	7	11	12	20	16	12	8	93	1	3	1	11	0	24	28	13	81	
Battle Creek.....	5	6	6	12	10	17	25	11	0	92	0	0	2	5	0	8	58	10	85	
Detroit.....	3	17	4	6	4	47	10	2	0	93	0	0	0	0	0	0	0	0	0	
Flint.....	8	3	0	5	20	24	19	8	0	87	0	0	0	0	0	6	0	4	14	
Grand Rapids.....	0	15	2	11	0	27	21	0	10	94	0	1	0	0	0	6	0	4	14	
Monroe.....	12	15	15	2	1	9	7	32	0	93	11	16	12	0	0	8	7	31	91	
St. James.....	10	1	4	10	10	17	10	30	1	93	3	0	2	1	2	15	10	16	51	
Saugatuck.....	1	0	22	9	0	11	30	9	0	93	3	4	2	3	10	15	60	12	109	
INDIANA—																				
Milton.....	12	2	1	11	5	7	12	0	31	0	0	0	1	0	3	8	0	14	0	
New Harmony.....	7	0	5	5	18	10	14	4	0	63	0	0	0	0	0	0	0	0	0	
ILLINOIS—																				
Athens.....	3	4	2	20	1	24	8	22	0	84	1	2	0	1	1	8	25	10	48	
Augusta.....	1	10	6	10	5	24	19	17	0	92	1	4	1	8	2	5	7	5	33	
Manchester.....	10	1	2	0	21	12	31	16	0	93	0	0	0	0	5	18	19	5	47	
Ottawa.....	0	11	6	6	7	19	15	14	1	85	0	1	0	0	1	0	2	0	15	
Upper Alton.....	0	10	2	4	6	26	25	21	0	94	0	0	0	0	0	0	0	0	0	
MISSOURI—																				
St. Louis.....	2	3	0	24	11	19	15	16	0	93	0	0	0	0	0	0	0	0	0	
WISCONSIN—																				
Beloit.....	0	1	3	13	10	0	26	25	0	93	2	0	1	2	2	0	0	0	14	
Janesville.....	14	3	4	8	21	14	13	10	6	93	0	0	0	0	0	0	0	0	0	
Milwaukee.....	0	8	8	8	7	21	20	21	0	93	0	0	0	0	0	0	0	0	0	
Platteville.....	8	6	10	6	6	20	29	8	0	93	3	5	0	6	8	11	22	5	63	
Superior.....	3	12	1	1	0	51	9	5	0	91	3	12	1	1	6	50	8	0	89	
IOWA—																				
Dubuque.....	20	3	2	7	12	5	10	9	17	85	9	0	1	0	1	1	9	7	28	
Fort Madison.....	4	8	0	18	15	20	3	25	0	93	0	4	0	3	0	15	15	0	43	
Muscataine.....	0	5	3	17	0	30	4	34	0	93	0	1	0	0	0	14	0	2	17	
Pella.....	7	4	6	6	24	5	29	12	0	93	0	0	0	0	0	0	0	0	0	
Poultney.....	0	11	8	0	1	26	17	10	7	91	0	0	0	0	0	2	10	3	15	
Quasqueton.....	4	6	0	16	3	10	6	19	1	71	0	0	0	0	0	0	1	1	2	
MINNESOTA—																				
Red Wing.....	4	10	20	0	4	11	38	4	0	91	0	0	1	0	5	8	17	1	39	
Lac qui Parle.....	8	5	5	4	7	3	15	46	0	93	1	4	5	2	2	0	9	5	28	
WEST INDIES—																				
Up Park Camp, Jamaica.....	20	11	1	25	1	0	1	3	0	62	0	0	0	0	0	0	0	0	0	
EASTERN CONTINENT—																				
Mosul, Mesopotamia.....	1	1	0	0	0	1	0	1	0	4	0	0	0	0	0	0	0	0	0	



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1855.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>BRITISH AMERICA—</b>													
Horton .....									2.320	4.130	2.409	1.599	.....
Montreal .....									3.860	5.370	5.770	4.130	.....
Red River Settlement .....									6.000				.....
St. Martin .....	3.203	1.500	2.091	3.712	1.756	5.125	15.125	13.500	3.471	8.894	4.658	7.242	51.061
Toronto .....	2.855	3.950	2.295	2.190	2.655	4.070	3.245	1.455	5.585	2.565	4.890	4.795	41.550
<b>MAINE—</b>													
Fryeburg (a) .....	?	?	?	?	0.562	5.775	3.500	3.750	?	9.187	6.333	?	.....
Gardiner .....	7.169	1.700	1.103	4.570	1.932	5.984	2.416	3.096	1.760	1.315	3.178	5.008	51.066
Perry .....	2.500	?	1.300	4.600	5.600	8.500	2.700	2.800	1.650	10.500	3.700	4.000	.....
South Thomaston .....						25.000							.....
Steuben (a) .....	?	612.800	?	9.900	5.500	6.300	1.800	5.100	1.900	617.000	6.600	?	.....
<b>NEW HAMPSHIRE—</b>													
Concord (a) .....	?		?	5.250	1.000	4.230	4.750	3.250	0.250	11.000	4.250	?	.....
Great Falls (a) .....	4.345	6.320	?	5.475	1.130	4.470							.....
Londonderry .....	6.950	4.950	0.400	3.450		2.800		1.800	0.000	7.400	3.100	5.400	.....
<b>VERMONT—</b>													
Burlington .....	1.950	0.980	0.720	2.220	0.340	6.470	8.430	2.940	4.500	5.970	1.280	2.500	38.300
St. Johnsbury (a) .....	?		?	1.000	0.120	10.250	3.920						.....
<b>MASSACHUSETTS—</b>													
Amherst .....	5.061	2.702	1.078	3.845	1.492	5.191	6.102	2.553	0.547	10.078	4.123	5.409	48.181
Nantucket .....	4.504	3.040	3.838	8.492	5.875	4.772	2.162	1.509	1.210	4.130	3.106	6.299	48.937
New Bedford .....	4.200	2.330	1.730	3.770	3.230	1.630	4.260	1.260	0.550	4.145	4.290	5.050	36.445
Newburyport .....	5.343	3.795	1.070	5.280	1.385	2.418	2.568	3.135	0.460	6.860	4.300	5.595	42.209
North Attleboro' .....	5.740	4.084	0.900	3.700	2.910	3.685	5.274	2.025	0.605	5.955	4.480	5.580	44.938
Princeton .....	4.240	5.400	1.140	4.480	1.080	3.200	6.030	2.200	0.760	8.360	4.520	4.830	47.240
Richmond (a) .....	?	?	?	8.725	8.417		22.187	10.000	3.000	19.375	?	?	.....
Southwick (a) .....	?	2.810	1.890	3.070	2.580	4.020	7.790	2.460	1.380	11.810	3.960	6.080	.....
Springfield .....	4.000	3.040	0.950	3.110	1.910	4.150	8.180	2.400	0.740	9.460	3.870	5.400	47.210
Westfield .....	5.210	2.870	1.340	2.950	2.070	4.700	5.380	2.950	0.370	10.270	4.160	6.120	48.390
Williamstown .....	2.520	1.430	0.210	5.640	2.850	5.480	6.750	3.557	1.915	12.931	4.592	6.629	54.504
Wood's Hole .....		4.577	3.900	5.830									.....
Worcester (c) .....	8.010	4.480	2.300	5.390	1.640	4.190	9.400	4.060	0.200	7.970	5.850	6.900	55.050
<b>RHODE ISLAND—</b>													
Providence .....	6.450	4.050	0.850	2.500	2.550	1.950	3.250	2.020	0.250	5.330	3.750	6.100	39.050
<b>CONNECTICUT—</b>													
Pomfret .....	5.790	4.100	0.870	2.610	1.990	3.220	4.570	2.040	0.220	7.190	3.930	6.150	42.680
Saybrook .....	5.000		1.050	4.000	2.500	3.125	3.750	?	0.750	7.500	2.750	6.500	.....
<b>NEW YORK—</b>													
Blackwell's Island .....											2.597		.....
Buffalo .....									3.130	1.835	1.941	1.588	.....
Canton (a) .....	?	?	?	2.500	?	?	?	?	?	?	?	?	.....
Gouverneur .....	2.580	0.100	1.650	0.850	0.400	6.600	3.050	1.300	1.750	4.900	0.150	2.330	25.660
Lodi .....	2.4375	1.500	0.625	4.000	2.9375	5.8125	5.000	2.500	3.1875	4.3125	2.000	2.6875	37.000
Lowville .....	4.812	2.375	3.875	2.375	1.312	6.125	44.437						.....
Madrid .....					?	4.050	3.700	3.220					.....
New York city .....	4.770	5.120	2.330	2.860	4.900	5.830	45.460	2.900	1.510	7.370	3.000	6.880	52.930
Penn Yan. ....	2.000	1.560	0.670	2.850	3.020	5.960	4.560	1.700	1.340	3.500	1.280	1.520	29.960
Sag Harbor .....	5.320	1.250	1.380	4.050	3.200	2.660	4.370	2.980	0.900	5.380		4.910	.....
Spencertown .....	1.586	0.886	0.200	2.740	3.565	6.863	8.109	2.330	1.630	7.416	2.879	4.267	42.471
<b>NEW JERSEY—</b>													
Bloomfield .....	3.193	3.366	1.642	1.420	2.649	4.450	3.930	1.956	1.064	3.826	2.512	2.875	32.883
Lambertville .....	2.893	2.950	1.966	1.670	3.050	7.490	4.972	1.715	5.320	4.630	2.580	5.938	45.174
Newark .....	4.030	3.466	1.875	2.470	2.365	4.525	4.470	4.160	2.250	5.260	2.890	6.500	44.261
<b>PENNSYLVANIA—</b>													
Bedford (a) .....	?	0.960	1.818	1.624	1.933	6.060	3.932	2.870		1.065	6.720		.....
Gettysburg .....	3.572	2.410	2.040	2.085	1.690	7.716	3.790	10.885	5.915	2.220	1.268	4.030	47.621
Harrisburg (a) .....	?	?	?	1.879	2.955	8.541	9.188	3.150	3.681	4.815	1.565	?	.....
Lima .....	2.410	2.360	1.660	2.300	4.300	9.320	4.060	2.480	3.920	5.350	2.010	6.410	46.580
Morrisville .....	2.600	1.800	1.800	2.500	3.400	8.800	5.000	2.500	2.300	4.900	2.700	4.800	43.100
Moss Grove .....		3.300	1.700	2.950	3.000	7.300	3.650	5.700	3.600	3.100	4.800	3.750	.....
Norristown .....	2.600	3.100	1.850	1.970	4.370	7.550	7.580	1.340	5.230	4.940	2.180	5.430	48.140
Philadelphia .....	2.601	2.480	1.979	2.148	3.033	8.008	6.594	3.237	4.129	3.416	2.022	5.006	44.653
Pittsburg, [Oakland Station] .....	0.820	1.640	3.300	2.380	2.195	7.725	8.823	5.396	4.728	1.365	5.347	2.193	45.912
Pocopson .....	2.820	3.390	1.810	2.060	3.720	8.110	3.260	4.130	7.080	4.680	2.240	6.260	49.560
Pottsville .....	3.326	3.131	?	2.587	2.377	9.461	8.432	2.160	4.762	3.988	2.198	5.786	.....
Randolph .....	4.400	3.200	2.850	3.050	3.350	9.900			3.650	?	?	?	.....
West Haverford .....	2.072	3.330	1.680	?	2.725	7.927	5.282	2.069	?	?	?	?	.....
<b>MARYLAND—</b>													
Chestertown .....						4.100	3.030	9.440		4.890	1.650	4.140	.....
Frederick .....	3.055	1.882	2.290	1.133	2.160	5.687	2.316	3.804	5.495	2.103	1.058	3.076	34.059
Sykesville (a) .....	3.500	2.150	4.950	1.550	3.000	7.450	4.200	4.000	10.500	4.500	1.750	6.250	53.809
<b>DISTRICT OF COLUMBIA—</b>													
Washington .....				?	1.421	5.573	4.056	2.903	2.913	3.535	1.115	3.200	.....
<b>VIRGINIA—</b>													
Alexandria .....	2.246	1.770	1.526	1.902	1.412	6.333	4.272	3.896	2.671	2.990	0.820	3.480	33.318
Ashland .....	1.304		2.859	1.489	1.671	5.300	3.669	5.183	3.614	1.319	2.068	3.567	.....
Orichton's Store .....	2.300		5.650	0.350	1.750	5.400	4.700	7.200	0.550	3.100	3.000	4.900	.....
Lewisburg .....							3.360						.....
Smithfield (a) .....	3.067	2.120	6.055	2.274	1.382	4.218	5.385	5.026	2.885	5.098	0.933	4.290	41.733
<b>NORTH CAROLINA—</b>													
Thornbury .....	2.416	0.830	4.030	1.953									.....
<b>SOUTH CAROLINA—</b>													
Aiken .....	2.084	2.193	2.715	1.308	5.600	4.789	6.177	5.621	2.147	0.240	1.810	6.133	40.817
All Saints .....	1.090	1.790	3.470	0.540	0.970	7.110	3.600	1.910	1.280	1.150	1.330	6.730	30.970
Camden .....	1.320	1.060	4.400	0.850	5.220	7.490	2.740	7.290	5.220	0.720	1.640	4.650	42.600
Charleston .....	0.750	0.810	4.410	0.880	5.390	3.690	4.420	2.690	3.280	0.860	0.970	6.700	34.850

a Snow not reduced to water in all cases.

b Doubtful.

c Observations in September incomplete.

d Approximate.

e First twelve days.



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1855.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>GEORGIA—</b>													
La Grange.....	0.210												
Savannah.....	1.261	1.176	2.771	2.211	5.887	4.944	2.645	5.582	2.251	1.982	2.224	5.660	39.294
Whitemarsh Island.....	1.220	1.820	2.600	2.520	5.040	3.800	2.100	4.460	1.470	2.300	5.710	37.360	
Sparta.....	1.020	1.000	2.260	1.650	4.030	4.970	11.740	11.300	8.830	1.220	2.000	8.230	51.520
<b>FLORIDA—</b>													
Cedar Keys.....	1.140	1.437	2.937	0.375	0.025	3.250	7.500	5.125	1.937	5.187	2.437	2.562	34.512
Key West.....	4.110	1.500	1.430	0.300	2.480	3.050	3.850	5.860	7.280	3.270	2.780	2.130	39.610
Knov Hill.....	2.9202	2.8315	1.7000	3.1689	2.9267	5.2327	8.4078	5.0050	2.3198	1.9607	7.6121		
St. Augustine.....											1.800		
Warrington.....	0.187	1.250	1.562	0.750	0.844	3.437	11.125	19.302	2.187	3.500	5.000	8.500	40.500
<b>ALABAMA—</b>													
Auburn.....	0.250	0.900	1.850	2.280	1.720	1.890		5.860	1.640	2.470	5.280	8.340	
Greene Springs.....	1.090	1.200	1.190	0.400	1.300	4.610	3.130	8.690		1.640	7.110		
Monroeville.....	0.250	1.625						8.000	5.687		6.250		
Tuscaloosa.....	0.901	1.734	2.200										
<b>MISSISSIPPI—</b>													
Columbus.....					1.200	3.672	8.200	3.607	5.004	1.532	8.877	4.304	
Jackson.....										1.560	10.000	6.820	
Oxford.....	2.837	8.444	1.985	3.835	1.697	5.641	4.013	a 5.440	11.113	1.451	8.675	2.337	41.488
Port Gibson.....								c 3.950					
<b>LOUISIANA—</b>													
New Orleans.....	0.550	1.720	0.900	1.800	0.000	5.900	3.877	4.160	5.110	2.055	5.720	5.275	38.007
<b>TEXAS—</b>													
New Wied.....	0.000	2.150	0.890	0.450	1.920	4.000	3.470	5.200	1.800	4.700	1.000	0.200	25.400
<b>ARKANSAS—</b>													
Camden.....										3.300	4.200		
<b>TENNESSEE—</b>													
Friendship.....			1.9375	4.850	4.700	0.500	8.110						
Glenwood.....	4.667	1.531	3.851	2.598	3.783	3.923	3.572	4.000	7.298	1.400	4.657	2.265	44.105
Knoxville.....	2.610	1.170	4.130	2.200	2.000	4.780							
Lebanon.....			2.980										
<b>KENTUCKY—</b>													
Danville.....	3.217	0.800	5.501	1.349		5.464	3.370		5.761		3.400	3.184	
Millersburg.....	1.910	0.500	5.100	1.910	0.380	8.800				0.552	2.270	8.500	
Springdale.....	4.840	1.210	5.070		3.750	8.100	2.550	4.440	3.650	1.850	5.160	3.180	
<b>OHIO—</b>													
Areola.....	5.375						5.125						
Berea.....			2.200										
Cincinnati, [Hurt].....	4.470	1.590								3.180	5.200	3.335	
Cincinnati, [Lea].....												3.280	
Cleveland.....					2.900	10.300	0.000	3.340	2.000	3.470	4.300	3.000	
Gallipolis.....	1.544	1.699	2.381	1.543	3.755	5.380	4.076	4.103	5.040	1.300	2.540	3.860	37.021
Germantown.....	4.192	1.437	3.554	2.285	2.537	6.925	5.100	5.043	4.645	1.289	5.200	3.648	47.005
Granville.....	2.770	1.900	5.500	2.550	3.220	7.840	7.670	3.150	8.640	1.700	5.900	5.040	54.880
Hillsborough.....				1.150									
Hiram.....									3.125	3.000			
Jackson, [Gilmor].....				1.340	2.968	4.100	4.310	6.510	5.890	1.030	2.952		
Jackson, [Wood].....				1.340									
Madison.....		0.000											
Marietta.....	1.708	1.000	2.080	1.805	4.085								
Mount Vernon (d).....	1.120	?	3.000	1.120	?								
Newark.....	2.000	?	0.500	?	?								
New Lisbon.....	1.900	1.000	2.100	1.100	3.000								
Norwalk.....	2.640												
Oberlin.....	2.400	1.360	1.440	4.000	0.000	10.650	3.590	0.700	4.500	3.550	4.310	2.490	48.000
Perrysburg.....	2.000	1.375	2.500	4.687	3.000	8.125	9.812	2.437	7.500	2.250	7.000	4.500	35.188
Savannah.....				3.000	4.483	15.000	8.616	3.475	6.791	3.433	6.082	3.940	
Unionville.....				3.344	6.875	6.750			3.304	7.781	6.750	4.785	
Urbana.....		1.660	3.400		6.720	10.700	6.170	1.230	8.760	3.180	3.800		
Zanesville.....	3.324	2.710	2.571	2.005		6.194	6.720	4.578	6.288	1.493	5.221	2.920	
<b>MICHIGAN—</b>													
Ann Arbor, [Winchell].....	2.450	1.880	2.100	5.668	0.914	6.574	7.668	1.488	4.424	0.900	4.400	3.291	43.357
Ann Arbor, [Woodruff].....	3.380	2.300	0.300	5.910	0.000	7.000	8.740	1.504	5.265	2.100	5.200	3.940	40.023
Battle Creek.....	3.240	1.420	1.350	0.200	1.000	5.400	6.400	0.600	7.270	1.870	4.180	1.630	42.940
Cooper (d).....	?	?	?	?	3.125	17.125	12.300	6.687	14.125	8.000			
Detroit.....	4.535	1.550	4.000	7.390	2.056	11.657	15.010	1.962	5.608	4.391	9.213	3.730	71.101
Flint.....	2.845	1.463	1.740	2.400	2.540	7.601	3.963	0.550	5.700	2.545	5.574	3.171	49.661
Grand Rapids.....	6.800	0.940	2.310	3.540	0.940	0.720	7.240	4.600	6.300	4.190	4.380	5.030	52.060
Saugatuck.....			?	?	?	?	?	?	4.025	4.580	3.507	3.512	
St. James (e).....	1.250			0.750	0.500	?	?	0.875	1.875	1.375	?		
<b>INDIANA—</b>													
New Harmony.....	4.000	0.750	4.000	5.000	3.540	5.190	7.010	4.440	5.000	1.300	3.650	2.400	42.070
<b>ILLINOIS—</b>													
Athens.....	0.370	0.850	2.500	1.000	4.800	3.400	5.140	4.400	0.300	0.500	2.500	3.500	40.500
Manchester.....	13.500	1.562	2.910	0.900	6.431	2.600	3.521	2.065	2.765	2.551	2.820	3.020	48.042
Upper Alton.....	4.827	0.000	0.500	0.024	3.947	3.081	3.009	1.944	2.818	3.300	3.000	3.000	32.390
<b>MISSOURI—</b>													
Hannibal (d).....	?	0.500	2.000	0.937	7.000								
St. Louis.....	4.660	0.200	2.890	0.000	7.460	4.270	5.170	6.300	3.800	5.800	5.100	3.100	50.370
<b>WISCONSIN—</b>													
Beloit.....					1.745	4.607	3.000	1.200	2.310	0.000	1.600	1.000	
Ceresco.....	?			2.700	4.950								
Janesville.....	2.000	1.250	1.000	1.100	2.000	2.200	4.600	0.000	4.350	2.200	2.950	2.050	31.140
Madison.....				4.438									
Milwaukee, [Winkler].....	1.500	1.200	1.750	2.000	1.450	3.680	3.300	3.000	6.880	2.110	1.800	2.610	32.280
<b>IOWA—</b>													
Dubuque.....	1.000	1.130	1.000	0.640	0.000	4.280	3.070	1.910	5.000	2.500	2.710	1.810	29.130

a Since the 9th.

b From August 1st to September 9th.

c Since the 19th.

d Snow not reduced to water in all cases.

e Amount not always given; snow not reduced to water in all cases.



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1855.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
IOWA—Continued.													
Fort Madison (a) .....	?	?	1.025	4.950	8.050	5.100	6.900	4.350	3.250	2.500	4.850	?	.....
Muscatine (a) .....	3.326	3.131	?	2.567	2.377	9.461	8.432	2.160	4.762	3.988	2.198	2.080	.....
Poultnev (b) .....	2.237	0.860	2.016	1.050	2.133	3.265	2.875	4.705	4.845	2.014	2.618	? 2.370	30.988
Quasqueton (a) .....	1.005	?	?	?	1.294	2.740	2.480	.....	.....	1.250	?	.....	.....
MINNESOTA—													
Red Wing .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.373	1.247	.....
Lac qui Parle .....	.....	.....	.....	.....	?	5.000	?	10.500	.....	.....	.....	?	.....
CALIFORNIA—													
Sacramento .....	2.670	3.460	4.200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco .....	.....	.....	4.310	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WEST INDIES—													
Up Park Camp .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.708	2.810	10.000	.....
EASTERN CONTINENT—													
Mosul, Mesopotamia .....	4.170	1.600	1.530	1.460	0.370	0.000	0.000	0.000	0.000	0.800	0.650	0.760	11.340

a Snow not reduced to water in all cases.

b Amount not always given.

## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1855.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			Range for the year.		
			DATE.		HEIGHT.	DATE.		HEIGHT.			
			Day.	Hour.		Day.	Hour.				
		<i>Inches.</i>				<i>Inches.</i>			<i>Inches.</i>		
Maine	Carmel	29.59	Jan.	6	7 a m.	30.65	April	1	9 p.m.	28.39	2.26
	Steuben	30.00	Jan.	5	9 p.m.	30.89	Dec.	26	7 a.m.	29.19	1.70
New Hampshire	Concord	29.61	Jan.	6	7 a.m.	30.60	Dec.	9	9 p.m.	28.53	2.07
	Manchester	29.94	Jan.	6	7 a.m.	30.91	Dec.	9	9 p.m.	28.91	2.00
Vermont	Burlington	29.62	Jan.	5	9 p.m.	30.49	Dec.	9	9 p.m.	28.56	1.93
Massachusetts	Amherst	29.74	Jan.	6	7 a.m.	30.66	Dec.	9	9 p.m.	28.64	2.02
	Nantucket	29.98	Jan.	6	7 a.m.	30.86	Dec.	9	9 p.m.	29.11	1.75
	New Bedford	29.90	Jan.	6	7 a.m.	30.75	April	1	2 p.m.	28.87	1.88
	Newburyport	29.96	Jan.	6	8 a.m.	31.07	Dec.	9	9 p.m.	28.92	2.15
	North Attleboro'	29.88	Jan.	6	7 a.m.	30.71	Dec.	9	9 p.m.	28.76	1.95
	Princeton	28.81	Jan.	6	7 a.m.	29.68	Dec.	9	9 p.m.	27.76	1.92
	Southwick	29.93	Jan.	6	7 a.m.	30.83	Jan.	26	9 p.m.	29.06	1.77
	Williamstown (a)	29.25	Jan.	6	7 a.m.	30.09	Dec.	9	9 p.m.	28.20	1.89
	Worcester	29.45	Dec.	13	7 a.m.	30.24	Nov.	29	7 a.m.	28.44	1.80
Rhode Island	Providence	29.96	Jan.	6	Sunrise.	30.65	Dec.	9	10 p.m.	28.77	1.88
Connecticut	Pomfret	28.97	Jan.	6	7 a.m.	29.70	Dec.	9	9 p.m.	27.95	1.75
New York	Canton	29.40	Jan.	8	2 p.m.	30.27	Dec.	10	7 a.m.	28.33	1.94
	Penn Yan (a)	29.23	Jan.	8	Sunrise.	30.00	Dec.	9	Sunset.	28.18	1.82
	Sag Harbor (b)	29.68	Jan.	6	2 p.m.	30.58	Dec.	9	9 p.m.	28.68	1.90
	Spencertown	29.28	Jan.	8	2 p.m.	30.08	Jan.	26	9 p.m.	28.25	1.83
New Jersey	Bloomfield	29.84	Jan.	8	2 p.m.	30.65	Dec.	9	9 p.m.	28.89	1.76
	Burlington (c)	29.99	Jan.	8	2 p.m.	30.78	Dec.	9	9 p.m.	29.10	1.68
	Lambertville	30.02	Jan.	8	-----	30.78	Dec.	9	-----	29.12	1.66
	Newark (d)	29.99	Jan.	6	7 a.m.	30.79	Jan.	23	7 a.m.	29.23	1.56
Pennsylvania	Gettysburg	29.44	Jan.	8	7 a.m.	30.20	Dec.	9	2 p.m.	28.47	1.73
	Harrisburg	29.75	Jan.	6	7 a.m.	30.40	Dec.	9	2 p.m.	28.83	1.57
	Lima	29.85	Jan.	8	7 a.m.	30.62	Jan.	26	2 p.m.	29.04	1.58
	Morrisville	30.11	Jan.	8	2 p.m.	30.90	Dec.	9	9 p.m.	29.20	1.70
	Norristown	29.92	Jan.	8	7 a.m.	30.71	Nov.	28	9 p.m.	29.12	1.59
	Philadelphia	29.87	Jan.	8	2 p.m.	30.61	Dec.	9	9 p.m.	28.98	1.63
	Pittsburg, [O. S.]	28.79	Jan.	8	7 a.m.	29.79	Dec.	9	2 p.m.	27.94	1.85
	Pittsburg, [M. H.] (e)	28.96	Jan.	8	9 p.m.	29.80	Jan.	21	9 p.m.	28.05	1.75
	Pottsville	29.23	Jan.	8	7 a.m.	30.05	Jan.	22	7 a.m.	28.12	1.93
Maryland	Frederick	29.60	Jan.	8	7 a.m.	30.46	Dec.	9	2 p.m.	28.61	1.85
Dist. of Columbia	Washington	30.03	Jan.	8	7 a.m.	30.81	Dec.	9	2 p.m.	29.07	1.74
Virginia	Alexandria	30.02	Jan.	8	2 p.m.	30.80	Dec.	9	2 p.m.	29.15	1.65
North Carolina	Chapel Hill	29.45	Jan.	8	2 p.m.	30.07	Jan.	21	9 p.m.	28.88	1.19
South Carolina	All Saints	30.01	Dec.	27	2 p.m.	30.57	March	31	9 p.m.	29.23	1.34
	Camden	29.90	Jan.	8	9 p.m.	30.49	Jan.	28	2 p.m.	29.23	1.26
	Charleston	29.99	Jan.	-----	-----	30.71	Oct.	-----	-----	29.32	1.39
Georgia	Savannah	30.07	Jan.	8	9 p.m.	30.61	March	31	2 p.m.	29.40	1.21
	Sparta	29.35	Jan.	8	9 p.m.	29.92	Jan.	28	2 p.m.	28.90	1.02
	The Rock (a)	29.51	April	-----	-----	30.15	Jan.	-----	-----	29.10	1.05
Florida	Cedar Keys	29.91	Jan.	9	7 a.m.	30.30	Jan.	28	2 p.m.	29.52	0.78
	Jacksonville	30.12	Jan.	8	9 p.m.	30.60	March	12	9 p.m.	29.45	1.15
	Key West	29.73	Jan.	7	2 p.m.	30.05	March	31	7 a.m.	29.42	0.63
	Knox Hill	29.84	Mar.	1	7 a.m.	30.24	Jan.	28	2 p.m.	29.31	0.93
	Warrington (a)	30.03	Mar.	1	7 a.m.	30.48	Jan.	28	7 a.m.	29.57	0.91
	Oxford	29.56	Dec.	12	2 p.m.	-----	-----	-----	-----	-----	-----
Mississippi	New Orleans	30.22	Jan.	8	9 p.m.	30.86	Jan.	21	7 a.m.	29.04	1.37
Louisiana	New Wied (c)	28.82	Jan.	3	7 a.m.	29.60	Jan.	22	7 a.m.	29.85	1.01
Texas	Glenwood	29.57	Jan.	7	9 p.m.	30.23	Jan.	22	7 a.m.	28.38	1.22
Tennessee	Germantown	29.23	Jan.	8	7 a.m.	29.97	Jan.	21	7 a.m.	28.77	1.46
Ohio	Granville	29.23	Jan.	8	7 a.m.	29.97	Jan.	21	2 p.m.	28.25	1.72
	Hillsborough	28.97	Jan.	8	7 a.m.	29.72	Jan.	21	2 p.m.	28.05	1.67
	Hillsborough	28.88	Jan.	8	7 a.m.	29.57	Dec.	9	7 a.m.	28.05	1.66
	Oberlin	29.10	Jan.	8	7 a.m.	29.89	Dec.	9	7 a.m.	27.91	1.66
	Oberlin	29.10	Jan.	8	7 a.m.	29.89	Dec.	9	7 a.m.	28.02	1.87

a For hours of observation see monthly tables.

b Year complete, except November.

c Not corrected for temperature.

d Observations taken at 7 a. m. and 6 p. m., and not corrected for temperature.

e Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.



## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1855.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.			Range for the year.		
		DATE.		HEIGHT.	DATE.		HEIGHT.			
		Day.	Hour.		Day.	Hour.				
	<i>Inches.</i>				<i>Inches.</i>			<i>Inches.</i>	<i>Inches.</i>	
Ohio.....Perrysburg (n).....	29.36	Jan.	8	7 a. m.	30.16	Dec.	9	1 p. m.	28.31	1.82
Michigan.....Ann Arbor, [Winchell].....	29.04	Jan.	6	7 a. m.	29.81	Dec.	9	2 p. m.	27.96	1.85
.....Detroit.....	29.50	Jan.	8	7 a. m.	30.30	Dec.	9	2 p. m.	28.41	1.89
Indiana.....Milton.....	29.05	Jan.	7	9 p. m	29.67	Jan.	21	2 p. m.	28.07	1.60
Illinois.....Upper Alton.....	29.46	Jan.	7	9 p. m.	30.14	March	12	9 p. m.	28.33	1.81
Wisconsin.....Beloit.....	29.18	Jan.	7	9 p. m.	29.81	Dec.	9	7 a. m.	28.29	1.52
.....Milwaukee, [Winkler].....	29.28	Jan.	7	9 p. m	29.97	Dec.	9	7 a. m.	28.25	1.72
Iowa.....Dubuque.....	29.30	Dec.	27	7 a. m.	29.94	Dec.	8	9 p. m	28.25	1.69
.....Muscatine.....	29.48	Dec.	24	7 a. m	30.04	Dec.	8	9 p. m.	28.56	1.48

a For hours of observation see monthly tables.

## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
BRITISH AMERICA— St. Martin, Canada...	36.29	50.04	39.78	42.04	June 30	94	June 30	81.76	Feb. 6	-34	Feb. 6	-25.23	128	4.61
MAINE— Carnuel.....	37.06	51.34	37.61	42.00	July 1	90	July 2	80.40	Feb. 7	-24	Feb. 7	-12.67	120	5.16
Perry.....	35.71	46.89	39.81	41.18	July 19	82	July 19	71.33	Feb. 7	-15	Feb. 6	-8.00	97	5.40
Salem.....	39.62	46.98	40.80	42.48	June 29	87	June 29	77.00	Feb. 7	-19	Feb. 6	-9.33	106	6.18
NEW HAMPSHIRE— Concord.....	40.87	52.38	43.91	45.69	July 1	a 93	July 1	84.33	Feb. 7	-24	Feb. 6	-11.33	117	4.28
Exeter.....	39.20	51.26	41.48	43.18	July 17	90	July 17	79.67	Feb. 7	-20	Feb. 6	-11.33	110	4.61
Manchester.....	40.45	54.78	46.12	47.14	July 16	a 96	July 1	87.00	Feb. 7	-22	Feb. 6	-15.33	118	5.60
VERMONT— Brattleboro.....	40.57	50.70	42.55	44.61	June 30	90	June 30	83.16	Feb. 7	-22	Feb. 6	-17.83	112	5.27
Burlington.....	41.49	52.10	43.47	45.69	July 17	a 92	June 30	84.60	Feb. 6	-24	Feb. 6	-19.00	116	3.19
MASSACHUSETTS— Andover.....	41.93	52.80	44.73	46.49	June 30	b 92	June 30	84.67	Feb. 7	-16	Feb. 6	-8.00	108	5.13
Mendon.....	43.34	52.58	45.45	47.12	June 30	b 92	July 1	87.00	Feb. 7	-17	Feb. 6	-10.33	109	5.14
Nantuxet.....	49.65	53.13	48.41	50.66	July 19	86	July 16	78.33	Feb. 6	-4	Feb. 6	8.33	82	4.79
Newburyport.....	43.44	51.36	45.11	46.64	July 19	84	July 17	82.90	Feb. 7	-13	Feb. 6	-6.00	107	6.83
New Bedford.....	45.67	53.97	46.12	47.18	July 1	c 93	June 29	80.67	Feb. 6	-14	Feb. 6	-7.83	103	6.20
North Attleboro?.....	40.65	53.79	43.63	46.02	July 19	93	July 19	84.33	Feb. 7	-15	Feb. 6	-9.00	108	4.77
Princeton.....	40.54	48.97	42.20	43.90	July 2	91	July 1	79.00	Feb. 7	-17	Feb. 7	-5.57	100	5.67
Spraguefield (c).....	42.89	55.36	46.45	48.23	July 19	93	June 30	86.33	Feb. 7	-19	Feb. 6	-6.00	112	4.60
Wilmington (c).....	40.21	50.23	43.44	44.63	June 30	87	June 30	81.50	Feb. 7	-18	Feb. 6	-14.17	105	6.17
Worcester.....	42.80	52.71	44.82	46.78	July 1	91	June 30	85.33	Feb. 7	-16	Feb. 6	-10.33	108	4.36
RHODE ISLAND— Providence.....	43.78	55.28	45.46	48.17	July 19	a 95	July 19	84.67	Feb. 7	-15	Feb. 6	-8.00	115	5.06
CONNECTICUT— Putnam.....	42.59	51.89	43.87	46.12	July 19	a 88	July 19	82.00	Feb. 7	-16	Feb. 6	-9.00	104	5.15
NEW YORK— Albany.....	39.97	51.48	42.21	44.55	June 30	93	July 19	81.33	Feb. 6	-28	Feb. 6	-18.67	121	4.97
Bathurstville.....	41.28	49.55	44.67	45.17	June 30	89	June 30	81.00	Feb. 6	-22	Feb. 6	-16.67	111	5.95
Beverly.....	45.10	53.30	47.00	48.67	June 30	89	June 30	83.00	Feb. 7	-12	Feb. 6	-4.67	101	5.42
Canterbury.....	39.29	51.26	42.70	44.62	Aug. 2	93	June 30	81.67	Feb. 7	-40	Feb. 6	-27.00	133	5.30
Gouverneur.....	41.19	51.76	44.27	45.71	July 1	d 90	July 1	82.00	Feb. 6	-44	Feb. 5	-26.00	134	5.70
Lodi.....	42.46	51.26	43.23	45.65	July 19	90	July 19	a 83.00	Feb. 6	-22	Feb. 6	-18.33	112	6.42
Penn Yan (c).....	40.00	52.63	45.67	46.07	June 30	90	July 19	81.33	Feb. 7	-21	Feb. 6	-14.00	111	6.63
Sag Harbor.....	47.37	59.40	48.35	51.71	July 19	96	July 19	a 85.00	Feb. 6	-6	Feb. 6	-0.33	102	4.92
Smithville.....	39.85	50.76	44.33	44.31	July 1	94	July 17	79.33	Feb. 6	-38	Feb. 6	-26.67	122	5.63
Spencerstown.....	41.92	50.94	43.22	45.36	June 30	95	July 1	84.67	Feb. 7	-19	Feb. 6	-13.33	114	4.79
Wampsville.....	42.32	54.43	43.23	46.76	June 29	94	July 29	84.00	Feb. 6	-27	Feb. 6	-21.00	121	5.36
NEW JERSEY— Bloomfield.....	40.57	50.70	42.55	44.61	June 30	97	July 19	84.33	Feb. 6	-9	Feb. 6	-2.67	104	4.62
Burlington.....	47.90	58.61	51.05	52.52	June 29	93	July 19	87.33	Feb. 7	-2	Feb. 7	3.67	82	6.51
Lambertville.....	46.26	59.90	47.53	51.23	June 29	94	July 19	85.63	Feb. 7	-5	Feb. 7	2.12	104	.....
Newark (c).....	46.26	59.90	47.53	51.23	June 29	94	July 19	85.63	Feb. 7	-5	Feb. 7	2.12	104	.....
PENNSYLVANIA— Easton (c).....	44.69	60.25	47.90	51.01	June 30	102	June 30	86.67	Feb. 6	-13	Feb. 6	-5.00	115	5.09
Gettysburg.....	46.32	57.82	49.43	51.19	July 19	94	June 29	86.00	Feb. 6	-5	Feb. 7	1.33	99	5.21
Harrisburg.....	49.24	58.55	53.50	53.76	June 30	97	June 29	a 89.33	Feb. 7	-1	Feb. 7	1.33	98	5.44
Lancaster.....	47.38	57.40	48.95	51.24	July 19	93	June 30	86.20	Feb. 7	-1	Feb. 6	3.63	94	5.54
Morrisville.....	45.77	57.64	48.18	50.73	July 19	94	July 19	83.67	Feb. 7	-4	Feb. 6	3.33	98	4.40
Norristown.....	46.57	56.60	48.40	50.52	June 29	92	July 19	83.67	Feb. 7	-2	Feb. 6	3.23	94	5.32
Paradise.....	45.42	58.68	53.80	54.70	July 19	95	June 30	86.67	Feb. 7	-1	Feb. 6	4.50	96	5.02
Philadelphia.....	50.42	58.68	53.80	54.70	July 19	95	June 30	86.67	Feb. 7	-1	Feb. 6	4.50	96	5.02
Pittsburg, [M. H.] (c).....	48.02	55.60	52.35	51.99	June 30	b 90	June 29	84.00	Feb. 27	10A	Feb. 27	13.00	80	.....
Pittsburg, [O. S.].....	45.45	55.34	47.76	50.82	June 29	91	June 30	82.67	Feb. 6	-9	Feb. 6	3.33	100	.....
Pocahontas.....	49.54	58.25	50.06	52.98	July 19	98	June 30	87.00	Feb. 7	-2	Feb. 7	4.33	100	5.48
Pottsville.....	44.65	55.93	45.26	48.61	July 17	98	July 17	86.00	Feb. 7	-6	Feb. 6	-4.00	104	5.84
West Haverford.....	46.76	58.86	51.91	52.51	July 30	95	June 30	87.00	Feb. 7	-4	Feb. 7	-2.00	99	5.74
MARYLAND— Bladensburg (i).....	46.25	62.19	50.43	52.99	July 19	102	July 19	86.17	Feb. 11	3	Feb. 7	7.50	99	4.92
Frederick.....	48.81	59.55	51.53	53.30	June 30	95	June 29	89.00	Feb. 7	4	Feb. 7	5.43	94	5.50
Sykesville.....	47.66	59.87	49.75	52.49	June 29	j 91	June 29	87.67	Feb. 7	-2	Feb. 7	2.33	93	5.05
DIST. OF COLUMBIA— Washington.....	50.00	61.08	53.39	54.84	July 19	a 95	June 29	86.67	Feb. 7	4	Feb. 7	6.50	99	.....
VIRGINIA— Alexandria.....	49.41	60.33	52.52	54.09	July 19	95	June 29	87.33	Feb. 7	6	Feb. 10	14.00	99	5.08
Lewisburg.....	48.23	62.45	50.98	53.89	May 23	k 92	July 19	79.60	Feb. 27	12	Feb. 27	17.00	90	5.78
Smithfield (i).....	47.42	57.42	50.42	53.42	July 20	96	June 29	85.75	Feb. 10	10	Feb. 10	16.50	86	.....
NORTH CAROLINA— Chapel Hill.....	58.01	68.61	57.65	59.77	April 19	103	June 30	86.67	Feb. 27	18m	Feb. 28	25.00	84	4.65
SOUTH CAROLINA— All Saints.....	59.60	69.32	62.58	63.83	Aug. 9	92	Aug. 11	85.31	Mar. 2	25	Feb. 27	30.33	67	3.68
Canden.....	56.24	71.53	60.60	62.79	April 19	97	April 19	86.67	Feb. 1	16	Jan. 27	29.67m	81	5.30
Charleston.....	61.17	71.96	64.20	65.78	August	94	.....	.....	.....	28	.....	.....	80	.....
GEORGIA— Savannah.....	60.47	73.78	64.46	66.24	April 19	99	Aug. 11	87.17	Jan. 27	27	Feb. 27	32.73	72	4.44
Sparta.....	54.25	72.55	60.24	62.38	May 23	100	May 23	86.33	Feb. 27	18	Feb. 27	26.00	82	4.76
The Rock (r).....	61.20	71.49	63.92	65.54	Aug. 15	93	Aug. 15	81.00	Jan. 30	23	Jan. 30	23.00	86	.....
Whitemarsh Island.....	61.20	71.49	63.92	65.54	April 20	93	Aug. 11	85.00	Jan. 27	25	Feb. 27	32.23	85	3.90
FLORIDA— Cedar Keys.....	66.60	73.21	69.42	71.74	Aug. 12	91	Aug. 9	84.00	Feb. 27	32	Feb. 28	40.00	69	3.66

a Same temperature June 30th.

b Same temperature July 19th.

c For hours of observation see monthly tables.

d Same temperature August 3d.

e Same temperature February 6th.

f Same temperature July 18th and 19th.

g Same temperature June 29th and 30th.

h Same temperature December 27th.

i Year complete except October.

j Same temperature July 20th.

k Same temperature April 19th.

l Computed from daily extremes.

m Same temperature February 28th.

n Same temperature January 30th and 31st.

o Same temperature July 16th.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1855.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
FLORIDA—Continued.	°	°	°	°		"		°		°		°		
Jacksonville .....	65.66	75.46	66.59	69.24	May 23	101	May 23	91.00	Feb. 1	30	Jan. 31	37.00	71	3.57
Key West .....	72.84	79.02	.....	75.93	June 8	93	June 8	86.50	Mar. 2	48	Jan. 23	52.00	45	4.90
Knox Hill (a) .....	63.49	75.25	65.30	67.68	May 24	93	Aug. 15	86.00	Feb. 27	25	Feb. 26	32.33	73	5.29
Warrington (b) .....	61.00	72.08	70.16	68.76	July 10	95	Aug. 27	85.00	Dec. 26	23	Dec. 26	33.33	85	3.85
MISSISSIPPI—														
Columbus .....	.....	.....	.....	63.96	May ....	94	.....	.....	February	14½	.....	.....	80	.....
Oxford .....	57.27	66.33	59.43	61.68	Aug. 13	94	May 22	86.33	Dec. 26	8	Dec. 25	14.67	86	3.98
TEXAS—														
Austin .....	57.29	76.18	64.04	65.84	Mar. 8	98	Aug. 5	87.33	Dec. 26	7	Dec. 25	17.33	91	5.26
New Wied .....	62.20	79.50	64.84	68.85	May 19	103	Aug. 7	88.67	Dec. 26	13	Dec. 24	23.67	90	5.66
TENNESSEE—														
Glenwood .....	52.16	64.28	55.84	57.43	May 22	92½	May 22	82.80	Dec. 26	11	Dec. 26	12.87	89½	6.21
OHIO—														
Cincinnati (b) .....	.....	.....	.....	54.12	July 20	95	July 20	86.50	Dec. 26	2	Dec. 26	7.00	93	.....
Germantown .....	46.34	57.88	48.19	50.80	July 19	93½	July 19	84.58	Dec. 26	—7	Dec. 26	—2.20	100½	5.99
Granville .....	46.65	57.75	49.28	51.23	July 15	c 91	July 18	87.67	Dec. 26	1	Feb. 26	3.67	90	5.47
Hillsborough .....	46.39	57.47	49.43	51.10	July 18	d 90	July 18	81.00	Dec. 26	—3	Feb. 26	2.50	93	4.71
Oberlin .....	46.01	56.38	46.47	49.62	July 17	94	June 29	84.67	Feb. 24	—10	Feb. 6	2.33	104	4.57
Perrysburg (b) .....	48.72	57.96	49.57	52.08	July 16	94	June 29	88.00	Feb. 6	—7	Feb. 6	3.67	101	.....
MICHIGAN—														
Ann Arbor, [Winchell] .....	42.14	52.32	41.06	46.17	June 28	90	July 16	81.40	Feb. 6	—14	Feb. 6	—6.07	105	.....
Ann Arbor, [Woodruff] .....	40.99	53.34	45.20	46.51	July 16	e 91	July 16	82.00	Feb. 24	—24	Feb. 6	—5.67	115	5.51
Battle Creek .....	43.61	56.63	45.07	48.44	July 16	91	July 16	87.33	Feb. 6	—9	Feb. 6	—2.00	105	4.99
Cooper .....	46.67	55.15	44.58	48.80	May 22	92	June 29	82.67	Feb. 6	0 f	Feb. 6	7.03	92	4.64
Detroit .....	44.56	53.50	45.86	47.97	June 28	92	July 16	84.33	Feb. 6	—14	Feb. 6	—7.00	106	6.09
Flint .....	41.02	54.79	43.07	46.29	June 29	93	.....	.....	Feb. 7	—31	.....	.....	124	.....
Grand Rapids .....	40.45	53.12	44.52	46.03	July 16	93	July 16	84.67	Feb. 6	—8	Feb. 6	0.67	101	4.85
St. James .....	40.35	48.98	39.71	43.01	June 30	90	June 30	82.33	Feb. 5	—16	Feb. 5	—9.83	106	5.78
INDIANA—														
Milton .....	47.53	56.84	49.27	43.56	July 18	91	July 18	84.00	Dec. 24	—14	Dec. 24	—8.67	108	4.41
New Harmony .....	50.80	62.51	53.56	55.62	July 19	95	July 19	87.67	Dec. 26	—2	Dec. 26	8.00	97	5.39
ILLINOIS—														
Athens .....	47.01	60.90	49.94	52.62	July 19	101	July 18	89.33	Dec. 26	—20	Dec. 25	—7.00	121	4.77
Augusta .....	44.22	58.67	48.91	50.60	July 19	95	Aug. 3	85.33	Dec. 30	—16	Dec. 26	—6.00	111	4.39
Manchester .....	46.16	59.23	49.04	51.48	July 18	96	June 28	85.83	Dec. 26	—17	Dec. 26	—11.00	113	4.98
Ottawa .....	44.15	56.84	45.83	48.94	May 22	96	June 29	88.33	Dec. 30	—10	Dec. 24	—3.00	106	4.02
Upper Alton .....	47.54	60.11	51.10	52.92	July 19	93	July 18	83.00	Dec. 30	—8	Dec. 24	0.33	101	3.25
WISCONSIN—														
Beloit .....	40.27	54.24	43.16	45.89	July 18	98	July 18	87.00	Dec. 24	—15	Dec. 24	—9.33	113	3.08
Milwaukee, [Winkler] .....	40.08	50.21	40.40	43.56	July 18	94	July 18	84.00	Dec. 24	—14	Dec. 24	—8.67	108	4.32
Platteville .....	41.73	56.78	45.94	48.15	May 22	98	July 18	88.67	Dec. 24	—22	Dec. 23	—14.67	120	.....
IOWA—														
Dubuque .....	43.27	54.69	46.66	48.21	May 22	99	July 17	g 86.33	Dec. 23	—13A	Jan. 13	—2.67	112	4.77
Fort Madison (b) .....	44.48	58.21	50.61	51.10	July 19	102	July 18	91.33	Dec. 30	—18	Dec. 23	—7.00	84	4.79
Muscatine .....	42.33	56.47	43.85	47.55	Aug. 3	96	July 17	84.67	Jan. 23	—23	Dec. 23	—9.00	119	4.00
Pella .....	39.82	56.36	42.95	46.04	July 18	g 98	July 17	89.00	Dec. 29	—16	Dec. 24	—11.33	114	.....
Poultney .....	40.09	54.60	41.47	45.45	July 12	100	July 16	85.67	Dec. 30	—18	Feb. 25	—7.33	118	5.66
MEXICO—														
Mirador (i) .....	.....	.....	.....	66.04	.....	.....	May .....	75.87	.....	.....	January	49.23	.....	.....

a Year complete except December.

b For hours of observation see monthly tables.

c Same temperature June 28th and 29th.

d Same temperature July 19th.

e Same temperature June 28th.

f Same temperature February 7th.

g Same temperature August 3d.

h Same temperature December 24th.

i Hours of observation not given.

## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1855.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
St. Martin .....	.240	.319	.263	June 30	1.074	Feb. 7	.010	.866	.730	.837	22	28	26
St. Martin .....	.252	.336	.275	June 29	.940	Feb. 7	.003	.871	.744	.857	29	42	59
VERMONT—													
Burlington .....	.248	.288	.252	July 17	.956	Feb. 4	.000a	.711	.572	.682	0	0	0
MASSACHUSETTS—													
Amherst .....	.301	.322	.306	July 18	.944	Feb. 7	.020	.904	.690	.858	50	22	39
Nantucket .....	.301	.295	.308	July 5	.958	Feb. 11	.000b	.729	.606	.800	0	0	20
New Bedford .....	.313	.347	.325	July 19	.904	Feb. 6?	.024?	.859	.715	.872	50	26	0
Newburyport .....	.267	.284	.282	Aug. 17	.774	Feb. 7	.000c	.757	.596	.760	0	4	4
North Attleboro' .....	.267	.274	.274	July 17	.886	Feb. 15	.000	.751	.553	.772	0	2	17
Princeton .....	.248	.254	.246	July 18	.817	Feb. 24	.000d	.775	.630	.737	0	9	0
Westfield .....	.258	.283	.283	Aug. 1	.907	Feb. 11	.000	.788	.592	.776	0	7	4
CONNECTICUT—													
Pomfret .....	.302	.359	.309	July 17	1.038	Feb. 26	.045	.897	.767	.882	45	41	42
NEW YORK—													
New York city .....	.303	.324	.313	July 26	.881	Dec. 26	.005	.728	.639	.718	15	22	0
Penn Yan .....		.285							.642			14	
NEW JERSEY—													
Bloomfield .....	.307	.347	.331	July 25	.915	Feb. 6	.005	.797	.620	.805	12	17	17
PENNSYLVANIA—													
Lima .....	.317	.332	.327	July 24	.961	Feb. 3	.029	.817	.611	.812	31	10	34
Norristown .....	.306	.338	.317	July 2	1.074	Feb. 6	.000e	.773	.627	.733	0	2	0
Philadelphia .....	.339	.354	.361	June 30	1.059	Feb. 6	.013	.767	.596	.719	41	16	34
MARYLAND—													
Frederick .....	.331	.367	.354	Aug. 2	.958	Dec. 13	.000f	.791	.605	.764	23	0	0
DISTRICT OF COLUMBIA—													
Washington .....	.358	.370	.387	July 19	1.045	Feb. 27, 28	.039	.818	.590	.791	24	0	34
VIRGINIA—													
Alexandria .....	.381	.441	.403					.867	.725	.832	26	18	0
SOUTH CAROLINA—													
Aiken .....	.453	.467	.461	Aug. 14	.935	Jan. 17	.000g	.807	.552	.711	34	0	0
All Saints .....	.495	.534	.519	Sept. 17	1.114	Jan. 23	.045	.838	.659	.811	45	16	17
Camden .....	.432	.458	.453	Aug. 13	.950	Feb. 9	.048	.813	.542	.752	13	10	30
Charleston (h) .....													
GEORGIA—													
Savannah .....	.504	.506	.519	Aug. 26	.989	March 2	.061	.795	.542	.754	37	11	24
FLORIDA—													
Jacksonville .....	.594	.711	.626	June 18	1.366	March 21	.000	.877	.766	.892	0	39	47
MISSISSIPPI—													
Oxford .....	.467	.513	.477	Sept. 21	1.336	Feb. 2	.019	.841	.669	.808	12	7	18
LOUISIANA—													
New Orleans .....	.560	.551	.583	June 15	1.165	Jan. 14	.026	.879	.633	.817	10	16	27
TEXAS—													
Austin .....	.459	.429	.485					.863	.466	.763	43	0	15
New Wied .....	.550	.709	.586	March 18	1.805	Jan. 16	.000i	.826	.641	.860	0	0	0
TENNESSEE—													
Glenwood .....	.394	.412	.418	July 30	1.266	Jan. 26	.043	.837	.575	.777	24	14	25
OHIO—													
Gallipolis .....	.373	.443	.412	Aug. 12	1.138	Feb. 24	.000	.822	.682	.791	43	0	42
Germantown .....	.338	.360	.347	July 25	.897	Dec. 26	.027	.860	.620	.839	26	18	35
Hillsborough .....	.353	.394	.361	July 22	.918	April 6	.016	.917	.712	.858	49	4	31
MICHIGAN—													
Ann Arbor, [Winchell].	.281	.308	.288	Oct. 10	1.210	Feb. 6	.023	.832	.665	.834	28	18	32

\* The maxima, being generally 100, or complete saturation, are omitted in this table. For changes in hours of observation, &c., see table of the thermometer for this month.

a Same amount January 12 and 14, February 6, 7, 24, 25, 26, and 27, and December 13 and 15.

b Same amount February 17.

c Same amount December 27.

d Same amount January 1, 15, and 24.

e Same amount February 7.

f Same amount March 30.

g Same amount December 12.

h Mean force of vapor for the year, .551.

i Same amount December 25, 26, and 30.



## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1855.

NAME OF STATION.	FORCE OF VAPOR.								RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.			MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	
	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>							
INDIANA— New Harmony .....	.397	.440	.429	Aug. 13	1.135	Feb. 26	.054	.880	.656	.874	42	13	39	
ILLINOIS— Manchester .....	.357	.466	.382	July 8	1.242	Dec. 26	.021	.902	.761	.901	6	34	43	
MISSOURI— St. Louis .....	.349	.370	.372	Aug. 3	.989	Nov. 19	.000	.767	.556	.728	0	9	20	
IOWA— Dubuque .....	.289	.309	.308	Aug. 15	1.163	Dec 24	.002	.778	.586	.737	27	11	11	

## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
St Martin.....	12	239	13	119	36	371	82	223	0	1095										
MAINE—																				
Carmel.....	8	61	10	117	20	133	78	282	136	845	5	36	9	90	13	100	47	116	416	
Fryeburg.....	88	94	47	40	41	234	116	167	2	829	9	8	4	9	9	96	143	161	439	
Perry.....	65	117	23	118	66	276	113	317	0	1095	58	73	21	46	57	166	128	115	664	
Steuben.....	24	267	18	68	10	107	48	214	32	1088	20	69	10	11	5	269	168	100	652	
NEW HAMPSHIRE—																				
Concord.....	27	122	15	181	11	280	20	439	0	1095										
Exeter.....	73	83	80	116	40	195	253	197	0	1037	59	71	60	83	24	137	199	89	722	
Manchester.....	91	89	55	54	121	98	190	444	6	948	30	73	41	35	60	53	277	90	659	
VERMONT—																				
Brandon.....	237	4	26	60	390	59	80	139	84	1079	40	3	0	3	50	56	115	183	450	
Burlington.....	287	38	15	40	450	44	89	152	0	1095	2	2	0	0	7	11	25	21	68	
MASSACHUSETTS—																				
Amherst.....	60	52	26	263	57	92	46	109	5	1010	6	25	6	12	33	65	60	163	370	
Mendon.....	28	179	53	19	21	134	82	276	3	1095	34	168	57	19	25	437	90	265	1095	
Nantucket.....	66	165	41	103	60	275	75	213	92	1090										
New Bedford.....	69	145	20	114	40	331	60	284	12	1075										
Newburyport.....	120	79	71	89	177	85	225	181	1	1028										
North Attleboro'.....	190	86	40	47	240	141	159	192	0	1095	112	67	47	29	178	107	183	103	826	
Princeton.....	47	150	103	53	30	147	366	199	6	1101	16	56	39	19	11	72	320	93	626	
Southwick.....	29	146	18	34	94	72	36	89	56	574	6	35	3	21	20	117	47	54	303	
Springfield.....	104	87	9	10	56	170	28	257	374	1095	56	66	4	7	37	126	38	199	533	
Williamstown.....	95	10	67	110	128	101	154	192	135	992	27	14	21	71	42	67	80	65	387	
Worcester.....	30	116	6	111	9	323	25	475	0	1095										
CONNECTICUT—																				
Pomfret.....	63	165	27	64	128	209	56	381	0	1093	32	126	23	42	92	177	71	211	774	
NEW YORK—																				
Angelica.....	18	72	21	127	54	366	252	131	0	1041	2	15	1	20	19	215	287	100	659	
Baldwinsville.....	56	34	94	71	36	149	252	331	1	1024	19	11	16	7	5	52	414	248	772	
Beverly.....	72	164	3	140	93	331	20	191	32	1046	12	86	25	119	45	271	172	87	817	
Canton.....	38	186	5	17	40	545	37	134	30	1032	18	118	3	7	28	466	27	85	752	
Gouverneur.....	130	148	6	22	38	446	129	98	0	1017	53	98	3	7	21	340	90	80	692	
Lodi.....	59	30	27	139	112	131	154	285	101	1088	25	6	8	11	46	68	181	153	498	
New York city.....	38	190	45	141	27	132	217	301	0	1091										
Penn Yan.....	63	132	21	9	249	257	281	83	0	1095										
Sag Harbor.....	52	119	45	116	58	254	104	186	10	974	22	80	33	41	32	253	146	171	778	
Smithville.....	60	148	58	49	219	282	223	52	6	1097	68	84	10	0	62	291	368	61	953	
Spencertown.....	194	21	14	56	206	201	82	298	7	1079	104	17	6	31	71	145	173	248	795	
Wampsville.....	4	17	94	105	194	84	529	64	1	1092	0	13	96	89	180	73	495	57	1009	
NEW JERSEY—																				
Bloomfield.....	38	123	19	102	45	276	77	175	0	855										
Burlington.....	91	173	21	20	47	154	278	73	229	1086	21	72	12	15	31	53	62	21	287	
Lambertville.....	23	178	13	87	62	182	48	384	0	977										
PENNSYLVANIA—																				
Easton.....	56	59	25	134	43	46	150	320	229	1062										
Gettysburg.....	113	119	14	22	98	277	163	220	62	1088	17	38	15	13	35	179	254	186	737	
Lima.....	87	205	49	57	67	52	274	255	1103	37	29	18	27	31	108	217	196	664	1103	
Morrisville.....	64	134	25	29	69	253	169	180	172	1095	42	90	26	18	15	156	291	147	785	
Norristown.....	4	64	100	73	34	170	355	164	0	964	1	19	104	34	9	107	387	53	714	
Philadelphia.....	47	216	26	60	36	273	137	300	0	1095	4	14	0	5	10	79	94	48	254	
Pittsburg, [M. H.].....	22	3	222	54	163	222	370	45	359	1460										
Pocapon.....	102	75	45	28	45	224	348	206	0	1073	0	3	4	5	3	12	47	28	111	
Pottsville.....	93	43	122	77	58	104	116	409	68	1090	61	29	57	45	46	82	95	342	757	
West Haverford.....	26	77	56	28	13	156	65	198	111	730	20	20	20	8	15	49	117	137	386	
MARYLAND—																				
Bladensburg.....	18	55	71	12	19	79	41	119	0	414										
Frederick.....	85	112	19	28	98	248	152	221	101	1064	35	19	10	14	47	103	373	88	689	
Sykesville.....	23	58	17	54	41	153	583	166	0	1095	14	30	57	50	28	66	616	35	896	
VIRGINIA—																				
Alexandria.....	177	135	39	84	222	120	54	257	0	1088										
Crichton's Store.....	256	43	5	24	279	235	102	41	13	998										
Lewisburg.....											18	1	10	0	46	28	305	23	431	



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1855.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
<b>NORTH CAROLINA—</b>																				
Chapel Hill .....	129	143	51	49	87	163	315	147	0	1084	21	40	15	12	56	293	94	49	580	
<b>SOUTH CAROLINA—</b>																				
All Saints .....	133	112	78	121	165	261	143	77	2	1092	65	81	32	44	57	178	242	42	741	
Camden .....	76	167	29	77	78	266	175	150	72	1090	30	61	22	35	21	206	175	103	653	
Charleston .....	17	191	44	106	15	237	25	92	0	727										
<b>GEORGIA—</b>																				
Savannah .....	137	79	101	166	221	119	115	158	0	1096	4	0	3	11	8	30	62	14	132	
Sparta .....	32	215	50	146	49	280	53	239	0	1064	8	47	19	41	16	164	75	88	458	
The Rock .....	6	37	11	69	22	54	4	100	1	304										
Whitemarsh Island .....	58	149	41	89	169	157	100	99	229	1091	24	68	22	66	36	109	95	87	507	
<b>FLORIDA—</b>																				
Cedar Keys .....	116	230	117	98	72	121	151	75	56	1036	41	99	85	64	43	87	104	47	570	
Jacksonville .....	68	306	37	123	54	292	30	152	15	1077	43	102	56	91	33	230	82	33	670	
Key West .....	87	172	201	124	21	13	24	79	9	730										
Knox Hill .....	55	131	145	95	60	159	135	93	2	875	11	49	85	84	57	154	113	36	589	
Warrington .....	93	171	46	191	96	261	30	163	45	1096	40	77	10	173	38	262	47	235	887	
<b>MISSISSIPPI—</b>																				
Oxford .....	58	87	73	172	89	201	157	166	8	1011	35	42	37	57	82	147	146	73	619	
<b>LOUISIANA—</b>																				
New Orleans .....	134	186	115	204	158	80	80	83	31	1071	39	30	31	26	64	76	96	34	396	
<b>TEXAS—</b>																				
Austin .....	200	109	24	271	185	121	29	140	16	1095	98	66	18	174	163	228	39	152	938	
New Wied .....	245	45	92	118	177	140	61	49	167	1094	11	2	33	9	41	23	28	34	181	
<b>TENNESSEE—</b>																				
Glenwood .....	82	86	31	95	168	149	71	104	279	1065	17	32	6	17	42	239	289	117	759	
<b>OHIO—</b>																				
Germantown .....	46	120	13	83	21	410	49	292	2	1036	20	74	5	55	7	388	33	206	788	
Granville .....	20	76	31	9	13	201	143	35	313	841	4	19	3	3	10	115	106	25	285	
Harrisburg .....	57	23	100	160	95	18	186	396	0	1035	15	2	8	28	42	7	109	183	394	
Hillsborough .....	15	127	3	96	25	315	11	135	4	731										
Oberlin .....	87	83	30	61	142	233	152	146	116	1060	20	30	12	7	22	82	441	59	673	
<b>MICHIGAN—</b>																				
Ann Arbor, [Woodruff] .....	78	109	59	123	81	257	82	147	134	1070	36	29	19	31	17	127	313	166	738	
Ann Arbor, [Winchell] .....	76	70	97	98	95	176	163	147	167	1089	79	37	30	39	42	192	287	147	853	
Battle Creek .....	59	84	101	81	138	213	189	126	91	1082	39	35	50	24	27	179	421	156	931	
Cooper .....	13	10	186	14	22	17	448	20	266	996	11	10	224	20	14	11	312	16	618	
Detroit .....	59	239	92	42	97	362	97	107	0	1095										
Flint .....	161	52	21	59	213	205	136	145	0	992										
Grand Rapids .....	26	163	103	54	28	217	147	52	275	1065	10	21	6	13	7	83	57	38	235	
St. James .....	94	64	106	92	73	305	49	255	57	1095	50	13	22	12	26	220	93	134	570	
<b>INDIANA—</b>																				
Milton .....	40	124	15	54	35	153	105	91	524	1141	1	7	2	1	9	52	39	18	129	
New Harmony .....	101	17	66	95	86	149	127	91	0	732										
<b>ILLINOIS—</b>																				
Athens .....	30	127	24	241	71	174	48	255	0	970	13	68	4	44	25	111	187	222	674	
Augusta .....	32	108	100	123	142	183	189	124	93	1094	16	41	19	34	49	63	101	40	363	
Manchester .....	156	69	52	33	225	164	220	175	0	1094	80	9	13	7	85	149	169	109	621	
Ottawa .....	79	181	57	69	129	198	112	147	27	999	22	26	6	3	13	85	61	84	300	
Upper Alton .....	113	98	9	112	157	249	131	258	13	1140										
<b>MISSOURI—</b>																				
St. Louis .....	64	92	100	267	98	148	180	147	0	1096										
<b>WISCONSIN—</b>																				
Beloit .....	159	124	69	96	225	120	129	100	0	1022	30	16	16	20	53	40	47	21	243	
Milwaukee, [Winkler] .....	53	232	116	157	39	174	153	172	1	1097										
Platteville .....	86	80	127	182	126	108	219	167	0	1095										
<b>IOWA—</b>																				
Dubuque .....	139	96	30	104	180	89	64	144	196	1042	30	36	11	21	23	83	98	144	446	
Fort Madison .....	77	171	47	284	103	145	30	230	8	1095	34	33	28	21	27	134	275	86	638	
Muscatine .....	38	139	44	263	51	267	72	221	0	1095	1	35	6	17	6	243	16	41	365	
Pella .....	80	42	37	98	397	48	230	163	0	1095										
Poultney .....	86	96	71	146	84	159	105	154	106	1007	23	13	13	17	26	47	96	55	290	



## No. 55.—WINDS—MEAN VELOCITY FOR THE YEAR 1855.

NAME OF STATION.	SURFACE CURRENT.								MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																		
St. John .....	5.80	4.72	3.55	3.97	4.00	4.25	7.39	6.79	5.10	.....	.....	.....	.....	.....	.....	.....	.....	.....
MAINE—																		
Cannal .....	11.62	11.54	8.00	7.50	4.00	8.35	8.62	13.71	8.84	6.40	11.28	6.22	7.49	8.06	8.89	8.02	15.05	10.23
Fryeburg .....	5.97	5.28	4.43	4.42	8.94	6.10	4.73	11.49	8.88	8.22	7.86	10.00	5.33	3.25	5.92	5.50	6.09	6.13
Perry .....	7.42	14.69	17.69	12.35	7.42	7.16	6.12	8.28	8.28	4.82	10.37	14.49	16.93	5.20	5.99	3.55	8.27	7.19
Stoughton .....	16.63	8.77	11.10	11.16	11.33	6.48	6.19	8.22	7.93	4.87	5.71	9.17	4.33	2.80	5.19	2.87	4.13	4.47
NEW HAMPSHIRE—																		
Concord .....	6.15	6.07	3.00	4.18	7.82	3.66	4.58	7.87	8.24	16.07	16.27	12.00	11.44	11.58	11.65	12.44	12.63	12.83
Exeter .....	12.74	14.54	10.90	9.00	8.67	9.17	11.12	12.34	11.28	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manchester .....	8.46	3.11	2.95	8.00	2.74	4.08	8.02	6.97	4.17	3.42	3.34	3.88	5.23	5.17	3.81	2.89	4.75	3.70
VERMONT—																		
Burlington .....	3.05	2.00	2.08	5.55	3.18	8.09	3.37	3.27	8.00	3.82	5.33	0	8.67	4.04	3.11	2.00	2.18	2.72
Burlington .....	4.74	4.30	4.53	5.74	11.90	9.14	15.70	6.70	9.01	3.60	2.00	0	0	12.71	11.00	10.00	8.20	8.99
MASSACHUSETTS—																		
Amherst .....	6.58	8.21	4.16	7.90	5.02	8.71	8.57	9.48	8.13	30.70	32.05	22.67	38.27	39.57	33.85	29.94	29.47	30.88
Mendon .....	8.20	7.19	5.53	4.79	1.11	7.90	4.57	7.77	7.34	4.90	7.60	3.59	5.74	10.68	7.08	4.99	6.13	6.58
Nantucket .....	16.38	14.48	9.90	10.72	8.07	11.30	12.87	13.25	12.29	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford .....	4.18	6.07	5.33	4.72	4.42	8.02	6.45	8.00	6.14	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburyport .....	22.25	7.00	10.00	2.00	19.40	15.25	19.00	8.00	16.67	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Attleboro .....	4.61	4.19	2.00	3.23	2.93	5.38	5.90	5.34	4.53	3.99	4.33	3.70	7.93	4.59	3.98	3.74	3.38	4.14
Providence .....	4.66	4.12	2.59	2.75	3.97	1.00	3.35	5.40	3.96	5.81	4.46	3.28	3.78	4.00	5.58	2.89	4.54	3.78
Southwick .....	8.00	8.00	8.00	10.09	10.00	12.36	14.83	16.57	10.25	7.60	22.18	20.67	15.60	22.70	16.30	12.75	21.42	17.81
Springfield .....	6.81	5.21	4.00	3.20	4.23	5.23	6.11	6.80	3.91	5.32	5.00	5.50	2.86	4.84	4.84	4.53	5.78	5.21
Wilmington .....	4.85	7.67	15.85	9.31	9.57	8.00	11.35	8.57	8.35	34.74	29.42	34.70	30.55	31.34	11.86	11.26	15.68	21.34
Worcester .....	8.89	17.15	?	12.10	?	6.18	?	11.26	11.64	.....	.....	.....	.....	.....	.....	.....	.....	.....
CONNECTICUT—																		
Pomfret .....	4.24	5.44	4.26	4.45	3.44	4.14	3.93	5.44	4.72	8.00	2.00	12.00	2.00	?	8.00	7.00	2.40	3.74
NEW YORK—																		
Albany .....	13.00	4.00	8.00	5.76	6.13	7.69	7.57	5.61	6.85	7.00	8.00	12.00	15.26	10.32	11.10	10.99	9.03	10.71
Baldwinsville .....	7.57	5.62	8.08	5.55	7.36	7.05	5.92	9.17	6.82	11.22	13.36	11.00	13.14	8.80	8.29	3.37	10.67	6.53
Beverly .....	2.54	4.16	2.00	7.26	3.50	6.33	4.20	7.47	5.56	5.50	7.60	6.33	8.05	4.67	4.59	3.41	8.14	6.01
Canton .....	5.03	3.54	2.00	3.18	5.82	5.27	6.11	4.37	4.67	5.00	3.66	2.00	4.81	4.81	4.82	5.59	4.29	4.60
Gouverneur .....	3.71	4.61	4.67	3.91	8.00	7.71	8.00	6.24	6.02	2.19	2.29	2.67	2.29	2.76	2.45	2.73	2.84	2.50
Lodi .....	6.31	5.03	3.44	9.10	11.10	10.71	10.71	9.71	8.71	2.80	4.00	2.00	3.64	6.02	3.00	3.41	3.49	3.61
New York city .....	2.81	4.08	2.19	4.19	3.45	4.27	3.58	4.96	4.10	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sag Harbor .....	7.63	10.40	8.00	6.08	6.17	8.30	7.55	8.68	7.57	6.55	11.75	9.00	10.37	8.25	6.72	5.33	5.57	7.07
Smithville .....	2.72	3.59	1.85	4.29	6.07	4.59	7.20	5.21	5.02	5.22	7.08	2.60	5.79	5.44	3.42	3.92	5.25	5.71
Spencer town .....	5.31	6.47	8.00	8.00	5.01	8.00	4.38	5.33	5.60	7.27	7.47	13.17	9.84	10.17	8.32	5.23	5.81	6.97
Wappingville .....	8.75	4.47	7.94	6.04	8.67	5.83	10.74	5.92	8.91	8.17	4.92	7.44	5.23	7.19	18.33	8.88	4.95	7.60
NEW JERSEY—																		
Bloomfield .....	12.00	5.71	13.50	2.00	?	13.47	4.33	7.50	11.04	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burlington .....	6.88	7.04	4.77	7.06	10.44	8.37	9.19	12.30	6.20	13.12	11.45	10.78	8.00	13.65	10.12	11.28	10.43	11.35
PENNSYLVANIA—																		
Easton .....	4.34	4.58	8.00	4.88	4.86	5.11	4.30	5.91	4.16	7.75	4.50	3.47	5.62	4.06	4.68	4.55	6.89	5.22
Gettysburg .....	2.20	2.13	2.14	2.12	2.71	3.15	3.50	5.58	3.24	7.50	4.50	3.47	5.62	4.06	4.68	4.55	6.89	5.22
Lima .....	9.43	5.75	5.85	4.92	9.48	8.00	7.49	15.07	7.32	6.03	9.43	10.10	8.01	9.39	7.90	4.68	7.09	6.71
Morrisville .....	4.84	3.95	3.08	3.10	5.84	3.82	3.38	5.68	3.64	3.38	4.85	2.64	4.00	7.99	3.94	2.93	5.29	3.91
Norristown .....	13.25	5.39	4.60	4.39	6.06	6.49	8.08	12.25	6.91	12.00	3.89	5.23	7.47	16.33	8.26	5.45	8.14	6.24
Philadelphia .....	4.48	3.81	3.68	3.21	3.50	4.12	5.09	5.05	4.36	7.50	6.43	0	2.40	7.50	5.77	3.72	6.42	5.21
Pittsburg, [Marine Hospital] .....	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Pocahontas .....	5.83	4.00	3.26	3.74	6.47	8.00	6.21	9.37	6.45	4.45	6.67	8.00	4.00	2.67	6.82	3.82	4.50	4.51
Pottsville .....	8.80	5.40	4.52	1.29	8.02	4.32	4.92	1.42	6.42	7.54	8.41	8.04	12.62	7.78	9.41	7.35	8.00	8.32
West Haverford .....	12.46	7.79	9.01	5.64	3.08	7.90	5.14	9.67	8.00	10.45	20.65	20.12	7.53	14.21	10.21	15.62	13.78	.....
MARYLAND—																		
Baltimore .....	2.00	?	2.00	?	?	?	?	2.00	8.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fredrick .....	5.17	4.59	4.52	4.50	8.17	7.09	9.64	13.62	7.51	8.36	8.13	11.33	11.70	10.51	9.54	7.38	10.67	8.61
Sykesville .....	3.30	3.14	8.00	3.36	7.98	4.04	3.31	4.45	3.75	3.14	3.13	2.32	3.00	4.57	8.00	2.52	4.61	2.75
VIRGINIA—																		
Alexandria .....	3.65	3.23	2.41	3.38	3.88	3.74	4.55	5.96	4.25	.....	.....	.....	.....	.....	.....	.....	.....	.....
Crichton's Store .....	2.76	2.05	2.00	2.12	3.58	3.94	6.85	8.00	3.78	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisburg .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.83	12.00	11.20	0	12.78	12.00	8.37	13.78	7.63
NORTH CAROLINA—																		
Chapel Hill .....	4.02	3.05	2.63	2.69	3.37	4.00	3.94	5.30	3.86	2.95	2.70	2.67	3.13	2.43	2.48	2.15	1.23	2.43
SOUTH CAROLINA—																		
All Saints .....	6.89	12.11	8.91	9.00	8.00	10.46	7.08	8.51	8.66	5.20	8.02	5.87	4.77	3.70	6.57	2.91	4.00	4.94
Canden .....	10.16	13.51	7.24	8.58	10.08	14.85	11.50	10.60	8.73	11.21	11.73	8.23	13.05	12.00	9.86	8.00	11.04	.....
GEORGIA—																		
Savannah .....	3.52	5.04	5.38	4.06	4.00	3.49	3.33	5.06	4.19	?	?	?	2.00	?	2.00	2.00	8.00	8.00
Sparta .....	4.25	6.47	6.24	5.12	6.10	6.21	6.85	7.44	8.00	5.37	8.13	11.25	7.79	14.21	8.32	5.73	5.73	7.58
Whitemarsh Island .....	7.17	1.51	9.88	8.99	12.27	9.85	5.93	10.34	8.36	7.08	14.71	7.64	7.41	9.86	8.31	5.35	6.11	8.17
FLORIDA—																		
Cedar Keys .....	8.00	8.65	8.90	7.19	8.64	10.01	7.19	13.29	8.40	4.79	4.49	6.07	5.91	5.47	5.09	6.52	5.91	5.57
Jacksonville .....	4.34	4.38	5.22	4.03	3.38	5.17	5.14	3.02	4.89	3.19	3.74	2.79	3.16	2.73	3.45	2.43		



## No. 55.—WINDS—MEAN VELOCITY FOR THE YEAR 1855.

NAME OF STATION.	SURFACE CURRENT.								MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
TEXAS—																		
Austin .....	8.77	4.31	5.42	6.03	6.84	6.31	4.62	7.50	6.58	3.60	4.06	3.78	4.32	6.73	3.54	2.37	2.84	4.14
New Wied .....	8.57	3.62	4.71	5.23	6.49	5.53	3.46	5.04	5.19	3.50	3.00	2.48	4.67	4.26	3.82	2.48	2.64	3.28
TENNESSEE—																		
Glenwood .....	3.65	3.66	2.97	4.89	7.08	6.40	4.23	7.91	4.10	4.75	4.18	4.00	4.25	9.63	3.92	2.68	4.94	3.90
OHIO—																		
Germantown .....	2.48	2.02	2.15	2.39	4.45	2.74	3.59	2.93	2.73	2.70	2.27	2.40	2.11	4.00	2.46	3.33	2.31	2.44
Granville .....	2.00	3.70	3.54	4.00	4.60	6.56	6.27	5.71	3.23	3.00	2.46	2.00	2.00	13.57	6.64	4.10	7.18	5.63
Harrisburg .....	2.88	2.87	3.27	3.29	3.24	2.66	2.92	7.02	4.61	2.80	3.00	3.25	4.68	2.95	7.29	3.63	8.78	6.05
Hillsborough .....	9.07	5.56	3.33	5.44	5.42	9.73	15.09	10.70	8.46									
Oberlin .....	7.84	9.45	7.67	8.08	7.44	11.82	15.49	11.89	9.61	10.95	18.00	14.91	23.86	19.36	16.01	4.61	10.81	8.24
ICHIGAN—																		
Ann Arbor, [Woodruff] ....	4.26	5.73	5.00	5.79	6.69	14.33	15.09	10.50	7.89	6.82	9.33	10.69	7.48	11.53	7.47	4.47	4.91	5.84
Ann Arbor, [Winchell] ....	9.62	7.03	4.24	6.35	7.10	10.21	10.79	10.26	7.32	6.49	7.17	7.44	6.77	7.07	4.45	5.68	8.19	6.15
Battle Creek .....	3.83	6.67	5.27	5.07	5.14	9.24	8.42	7.21	6.42	5.15	8.69	6.60	8.71	6.30	8.68	5.41	6.43	6.49
Cooper .....	8.38	10.04	6.22	8.21	7.27	9.82	7.70	8.65	5.46	14.00	14.55	7.39	15.37	16.40	16.40	5.47	10.95	7.88
Detroit .....	7.22	4.37	5.45	3.28	5.25	6.36	7.58	8.16	5.99									
Grand Rapids .....	4.12	5.01	3.12	3.56	5.32	6.99	7.03	7.25	4.24	21.70	16.63	34.33	19.31	29.57	17.71	15.31	20.47	18.57
St. James .....	15.65	18.34	17.11	13.79	16.99	16.04	10.43	12.35	10.17	18.58	7.77	11.59	11.50	14.15	19.49	15.00	16.33	16.96
INDIANA—																		
Milton .....	3.65	3.78	2.13	2.89	4.80	1.80	6.08	6.43	2.51	35.00	28.43	13.50	45.00	34.89	27.46	28.59	31.11	28.86
New Harmony .....	2.00	?	15.67	18.50	15.87	16.40	20.23	16.43	17.16									
ILLINOIS—																		
Athens .....	5.30	3.99	5.29	3.47	4.41	3.35	7.36	5.36	4.37	12.62	12.16	14.25	10.09	10.64	9.21	7.33	7.88	8.77
Augusta .....	7.44	9.92	5.61	8.53	9.40	10.86	8.41	10.52	8.36	4.87	5.80	2.53	3.94	5.27	4.89	4.32	6.55	4.86
Manchester .....	4.84	3.68	3.55	3.43	5.58	4.20	6.16	11.19	5.07	?	?	2.00	?	?	2.00	2.00	?	2.00
Ottawa .....	5.34	4.81	3.08	4.59	5.11	5.78	7.35	5.48	5.29	5.15	5.73	0	10.33	3.56	5.17	4.79	3.63	4.73
Upper Alton .....	3.26	3.36	3.14	3.37	3.40	3.68	3.39	3.16	3.34									
MISSOURI—																		
St. Louis .....	8.40	8.50	?	11.55	12.59	13.35	13.22	10.49	12.07									
WISCONSIN—																		
Beloit .....	5.05	4.06	3.40	4.66	5.61	5.78	6.62	7.69	5.46	8.00	10.47	8.31	8.60	8.22	10.45	12.02	9.67	9.62
Milwaukee, [Winkler] .....	3.73	4.02	1.81	3.23	3.33	4.45	3.68	3.43	3.56									
Platteville .....	7.51	6.46	6.92	5.05	5.60	5.91	6.22	6.20	6.11									
IOWA—																		
Dubuque .....	17.53	11.97	6.77	7.62	10.69	11.57	13.66	6.93	10.44	25.00	36.06	38.70	27.48	25.30	25.30	15.84	20.92	22.10
Fort Madison .....	8.22	4.82	3.11	5.94	8.24	9.66	6.80	12.80	7.93	9.59	14.67	13.14	12.76	11.37	9.96	7.42	12.66	9.77
Muscatine .....	7.00	4.37	5.61	4.21	7.55	6.72	10.72	6.70	6.08	2.00	5.46	2.17	7.12	2.33	4.56	3.12	4.39	4.60
Poultney .....	5.03	3.89	4.61	3.68	4.45	5.03	7.46	5.15	4.24	8.28	7.00	7.11	8.23	6.24	5.25	4.00	5.20	5.47

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REDUCTIONS

OF

METEOROLOGICAL OBSERVATIONS

FOR THE YEAR 1856.

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# NO. 1.—LIST OF STATIONS AND OBSERVERS, 1856.\*

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Ft.		
Acquidnetset, R. I. (a) .....	41 30 ?	71 40 ?	30 ?	4	E. G. Arnold.
Aiken, S. C. ....	33 32	81 34	565	11	H. W. Ravenel.
Alexandria, Va. ....	38 48	77 04	56	12	Benjamin Hallowell.
All Saints, S. C. (b) .....	43 40	79 17	20	12	Rev. Alex. Glennie.
Amherst, Mass. ....	42 23	72 34	267	12	Prof. E. S. Snell.
Angelica, N. Y. ....	42 15	78 01	1,500	12	Dr. E. M. Alba.
Annapolis, Md. ....	38 58	76 29	34	3	A. Zumbrock, M. D.
Annapolis, Md. ....	38 59	76 29	-----	12	W. R. Goodman.
Ann Arbor, Mich. (c) .....	42 17	83 45	891	5	Prof. A. Winchell.
Ann Arbor, Mich. (d) .....	42 16	83 30	850	8	Lum Woodruff.
Appleton, Wis. (e) .....	44 10	88 35	800 ?	12	Prof. R. Z. Mason.
Athens, Ill. ....	39 52	89 56	?	12	Joel Hall.
Atsena, Pa. (f) .....	29 08	82 03	12	12	Judge Augustus Steele.
Auburn, Ala. ....	33 37	88 03	821	12	Prof. John Darby.
Augusta, Ill. ....	40 12	89 45	203	12	S. B. Mead, M. D.
Austin, Texas .....	30 20	97 46	?	12	S. K. Jennings, M. D.
Baldwinsville, N. Y. ....	43 04	76 41	?	12	John Bowman.
Ballardsville, Ky. ....	38 26	85 31	?	12	John Swain, M. D.
Barnstead, N. H. (g) .....	43 38	71 27	?	9	R. F. Hanscom.
Battle Creek, Mich. ....	42 20	85 01	750	11	Dr. W. M. Campbell.
Bay City, Wisconsin .....	46 35	91 03	-----	3	Edward Ellis, M. D.
Bedford, Pa. ....	40 01	78 30	?	12	Samuel Brown.
Belair, Pa. ....	30 30 ?	84 30 ?	70	1	B. F. Whitner.
Bellefontaine, Ohio .....	40 21	83 40	?	8	Joseph Shaw.
Belle Prairie, Minn. ....	46 06 ?	94 20	?	1	B. F. Odell.
Beloit, Wis. ....	42 30	89 04	750	12	Prof. William Porter.
Bellevue, Iowa .....	42 15	90 25	?	11	John C. Fory.
Berwick, Pa. ....	41 05	76 16	588	3	John Eggert.
Berryville, Va. ....	39 09	78 00	580	12	Miss Ellen Kownslar.
Beverly, N. Y. (h) .....	41 23	72 12	180	12	Thomas B. Arden
Black River, La. ....	31 30	91 46	108	3	Andrew B. Kirkpatrick, M. D.
Blackwell's Island, N. Y. ....	40 45	73 57	29	12	Wm. W. Sanger, M. D.
Bladensburg, Md. ....	38 57	76 58	?	12	Benj. O. Lowndes.
Bloomfield, N. J. ....	40 49	74 11	120	12	Robert L. Cooke.
Border Plains, Iowa .....	42 36	94 05	?	6	Wm. K. Goss.
Boston, Mass. ....	42 22	71 03	?	12	
Brandon, Vt. ....	43 45	73 01	?	12	David Buckland.
Bridgewater, Mass. ....	42 00	71 00	150	10	Leander A. Darling.
Brighton, Ill. (i) .....	39 00	90 30 ?	-----	8	Wm. V. Eldredge.
Buffalo, N. Y. ....	42 50	78 53	-----	7	Elias O. Salisbury.
Buffalo, Va. ....	38 38	81 57	-----	4	Samuel Couch.
Burlington, N. J. ....	40 00	75 12	26	12	Dr. E. R. Schmidt and Rev. Adolph Frost.
Burlington, Vt. ....	44 29	73 11	346	12	Mrs. Phebe Thompson.
Camanche, Iowa .....	41 48	90 45	?	1	Nathan H. Parker.
Cambridge, Mass. ....	42 24	71 07	71	11	Prof. W. C. Bond.
Camden, S. C. ....	34 17	80 33	275	12	J. A. Young, M. D.
Cannelton, Ind. ....	37 58	86 40	?	1	Hamilton Smith.
Cannonsburg, Pa. ....	40 16	80 10	936	10	Wm. Smith.
Canton, N. Y. ....	44 38	75 15	304	8	E. W. Johnson.
Cape Girardeau, Mo. ....	37 20	89 34	-----	3	Rev. James Knoud.
Carlisle, Pa. ....	40 12	87 01	500	12	Prof. W. C. Wilsen.
Carlowville, Ala. ....	32 10	89 15	300	7	H. S. Alison.
Carmel, Maine .....	44 47	69 00	175	11	John J. Bell.
Carthage, Ill. ....	40 23	91 17	?	1	Samuel Jacob Wallace.
Cascade Valley, Wis. ....	44 30	92 09	?	2	Samuel R. Siebert.
Catharina Sophia, Surinam .....	5 48	56 47	?	11	C. S. Hering.
Cazenovia, N. Y. ....	42 55	75 46	1,260	5	Aaron White.
Chapel Hill, N. C. ....	35 54	79 18	?	12	Prof. James Phillips.
Charleston, S. C. ....	32 46	79 57	20	12	Joseph Johnson, M. D.
Charleston, S. C. ....	32 46	79 57	?	12	J. L. Dawson, M. D.

\* For the different names by which in some cases the same place is designated by the observers, see General List of Stations in the introduction.

a East Greenwich.

b Waccamaw.

c University of Michigan.

d Three and a half miles ESE. from Ann Arbor.

e Lawrence University.

f Cedar Keys

g North Barnstead.

h Philipstown.

i Piassa Farms.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1856.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Chestertown, Md.....	39 14	76 02	?	2	James A. Pearce, jr.
Cheviot, Ohio.....	39 07	84 34	?	11	Ebenezer Hannaford.
Chicago, Ill.....	41 53	87 41	601	2	G. D. Hiscox.
Chromedale, Pa.....	39 55	75 25	196	12	Joseph Edwards.
Cincinnati, Ohio (a).....	39 06	84 27	?	12	George W. Harper.
Cincinnati, Ohio.....			?	9	Boston Telegraph, (newspaper)
Cincinnati, Ohio.....			?	2	John Lea.
Cleveland, Ohio.....	41 31	81 40	665	12	Gustavus A. Hyde.
Clinton, Iowa.....	41 54	90 30	?	1	Nathan H. Parker.
Clinton, N. Y.....	43 00	75 20	?	7	Prof. O. Root.
College Hill, Ohio, [Farmers' College]	39 10	70 24	800	6	Prof. R. S. Bosworth.
Collingwood, Ohio.....	41 49	83 34	?	7	Henry Bennett.
Colonia Tovar, Venezuela.....	10 26	67 20	?	6	Angustus Fendler.
Columbia, S. C.....	33 59	80 48	315	2	F. H. Harleston.
Columbia, Vt.....	41 42	72 19	?	1	Wm. H. Yeomans.
Columbus, Miss.....	33 30	88 29	227	12	James S. Lull.
Concord, N. H.....	43 12	71 29	374	12	Wm. Prescott, M. D.
Concord, N. Y.....	43 00	79 00	2,000	4	Lewis Woodward.
Cooper, Mich.....	42 40	85 31	?	12	Mrs. Octavia C. Walker.
Copper Falls Mines, Mich.....	47 25	88 16	1,230	12	Charles S. Whittlesey.
Cornish, Maine.....	43 40	70 44	800	10	G. M. Guptill.
Craftsbury, Vt.....	44 40	72 29	1,100	11	James A. Paddock.
Crichton's Store, Va.....	36 40	77 46	500	12	Lieut. R. F. Astrop.
Danville, Ky.....	37 40	84 31	950	8	O. Beatty.
Dayton, Ohio.....	39 11	89 11	?	7	James C. Fisher, M. D.
Dayton, Ohio.....				3	Cooper Female Seminary.
Detroit, Mich.....	42 24	82 58	620	9	Rev. George Duffield.
Dubuque, Iowa.....	42 30	90 52	1,258	11	Dr. Asa Horr and Dr. W. W. Woolsey.
Eagle River, Mich.....	47 26	88 02	627	11	Mrs. M. A. Goff.
Easton, Pa.....	40 43	75 16	320	12	Selden J. Coffin.
Eden, N. Y.....	42 37	79 01	700	3	Stephen Landon.
Edisto Island, S. C.....	32 34	80 18	23	10	Edward A. Fuller.
Fairfield, Iowa.....	41 01	91 57	?	7	Dr. J. M. Shaffer.
Fayal, Azores.....	38 30	28 42	80	2	Samuel W. Dabney.
Fishkill Landing, N. Y.....	41 34	73 58	42	8	Wm. H. Denning.
Flatbush, N. Y.....	40 37	74 02	54	12	Rev. R. D. Van Kleeck.
Fleming, Pa.....	41 00	78 00	?	12	Samuel Brugger.
Fordham, N. Y.....	40 54	80 05	147	5	Claudius Pernot, S. J.
Fort Madison, Iowa.....	40 37	91 28	?	12	Daniel McCready.
Franklin, Iowa.....	42 45	92 11	?	8	Dexter Beal.
Franklin, Ohio.....	39 30	84 00	?	1	W. L. Schenck, M. D.
Frederick, Md.....	39 24	77 18	?	12	Henry E. Hanshew.
Fryeburg, Maine.....	44 03	71 00	?	5	George B. Barrows.
Gainesville, Fa.....	29 35	82 26	160	11	James B. Bailey.
Gallipolis, Ohio.....	39 00	82 01	520	5	G. W. Livesay.
Gardiner, Maine.....	44 10	69 45	?	12	R. H. Gardiner.
Garysville, Va.....	37 18	77 16	-----	12	Dr. T. Francis Beckwith.
Gaston, N. C.....	36 28	77 45	?	3	George F. Moore.
Geneva, N. Y.....	42 53	77 02	567	10	Prof. W. D. Wilson.
Georgetown, Conn.....	41 15	73 25	300	10	Aaron B. Hull.
Germantown, Ohio.....	39 30	84 10	720	12	L. Groneweg.
Germantown, Ohio.....	39 37	84 11	?	7	J. S. Binkerd.
Gettysburg, Pa.....	39 49	77 03	?	12	Prof. M. Jacobs.
Glenwood, Tenn.....	36 28	87 13	481	12	Wm. M. Stewart.
Goldsborough, N. C.....	35 20	77 51	?	10	Prof. Daniel Morrelle.
Grand Rapids, Mich.....	43 00	86 00	743	12	Alfred O. Currier.
Grand Rapids, Mich.....				2	L. H. Streng.
Granville, Ohio.....	40 03	82 34	995	12	Prof. S. N. Sanford.
Great Falls, N. H.....	43 17	76 52	200	3	Henry E. Sawyer.
Greene Springs, Ala.....	32 50	87 46	?	10	Prof. H. Tutwiler.
Greensborough, Ala.....	32 30	87 10	350	7	Robert B. Waller.
Hannibal, Mo. (b).....	39 45	91 28	?	2	Edw. Duffield, M. D.

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NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fed.		
Harrisburg, Pa. ....	40 15	76 54	?	12	Dr. John Heisely.
Hazlewood, Minn. (a) ..	45 00	95 30	?	11	Rev. S. R. Riggs.
Hillsborough, Ohio ..	39 13	83 30	1,000	12	J. McD. Mathews.
Hiram, Ohio ..	41 20	81 09	675	12	S. M. Luther.
Holland, Mich. ....	42 45	86 11	?	4	L. H. Streng.
Homer, N. Y. ....	42 38	76 11	1,100	2	E. G. Reed.
Houseville, N. Y. ....	43 40	75 32	?	3	Walter D. Yale.
Huntersville, Va. ....	39 30	80 31	2,640	2	Wm. Skeen.
Iowa City, Iowa ..	41 39	91 33	?	4	Herman H. Fairall.
Jacksonville, Fa. ....	30 15	82 00	14	12	Dr. A. S. Baldwin.
Janesville, Wis. ....	42 42	89 09	768	12	J. F. Willard.
Jefferson, Ohio ..	42 00	81 00	?	11	James D. Herrick.
Kanawha, Va. ....	38 53	81 25	?	12	David L. Ruffaer.
Kenosha, Wis. ....	42 35	87 50	555	12	Rev. John Gridley.
Knoxville, Tenn. ....	35 59	83 50	1,000	3	Prof. T. L. Griswold.
Lake, N. Y. ....	43 15	73 33	?	1	Peter Reid.
Lake Winnibigoshish ..	47 30	94 40	?	2	Benjamin F. Odell.
Lambertville, N. J. ....	40 23	74 56	-----	12	L. H. Parsons.
Lawrence, Mass. ....	42 42	71 11	?	12	John Fallon.
Lewisburg, Va. ....	38 00	80 00	2,000	12	Thomas Patton, M. D.
Lewisburg, Pa. ....	40 58	76 58	?	12	Charles S. James.
Liberty, N. Y. ....	41 45	74 46	1,474	4	John Felt, jr.
Lodi, N. Y. ....	42 37	76 54	1,000	9	John Lefferts
Londonderry, N. H. ....	42 53	71 20	?	7	R. C. Mack.
Lowville, N. Y. ....	43 46	75 03	?	8	J. Carroll House.
Madison, Ohio ..	41 50	81 01	725	4	Miss Ardelia Cunningham.
Madison, Wis. ....	43 05	90 13	892	6	A. Schue, M. D.
Madison, Wis. ....	43 05	89 25	892	1	Prof. J. W. Sterling.
Madrid, N. Y. ....	44 43	75 33	280	2	E. A. Dayton.
Manchester, N. H. ....	42 59	71 25	300	11	Samuel N. Bell.
Manchester, Ill. ....	39 33	90 35	723	12	John Grant.
Manitowoc, Wis. ....	44 07	87 37	?	12	Jacob Lups.
Marengo, Ill. ....	42 14	88 38	650	9	O. P. Rogers.
McGrawville, N. Y. ....	42 34	76 00	?	2	Metcalf J. Smith.
Meadville, Pa. ....	41 39	80 11	1,088	12	J. F. Thickett.
Mendon, Mass. ....	42 06	71 34	?	12	John George Metcalf, M. D.
Mexico, N. Y. ....	43 27	76 14	423	10	John R. French.
Mexico City, Mexico ..	14 30	99 01	7,665	10	Prof. L. C. Ervendberg.
Millersburg, Ky. ....	38 40	84 27	804	8	George S. Savage, M. D.
Milwaukee, Wis. ....	43 03	87 57	593	12	Carl Winkler.
Milwaukee, Wis. ....	43 03	87 57	?	12	F. C. Pomeroy.
Mirador, Mexico ..	19 50	96 25	3,500	12	Carl Sartorius.
Monroe, Mich. ....	41 56	83 22	590	12	Miss Helen Irene Whelpley.
Monson, Maine ..	45 11	69 35	?	5	Benjamin F. Wilburn.
Montreal, Canada ..	45 30	73 36	57	12	Archibald Hall, M. D.
Montross, Va. ....	38 07	76 46	200	1	H. H. Fauntleroy.
Morrisania, N. Y., [Fairmount Inst.] ..	40 53	74 01	150 ?	5	J. S. Gorton.
Morrisville, Pa. (b) ..	40 12	74 43	30	12	Ebenezer Hance.
Mossy Creek, Va. ....	39 35	78 30	?	2	James Hotchkiss.
Moss Grove, Pa. (c) ..	41 40	74 11	?	10	Francis Schreiner.
Mount Solon, Va. ....	38 00 ?	79 00 ?	?	1	James T. Clarke.
Mount Vernon, Iowa ..	42 00	91 00	?	4	B. Wilso Smith.
Murfreesborough, N. C. ....	36 30	77 06	?	3	Rev. A. McDowell.
Muscataine, Iowa ..	41 25	92 02	586	12	T. S. Parvin.
Mustapha, Va. (d) ..	39 20	81 41	?	6	James Frazer.
Nantucket, Mass. ....	41 17	72 21	30	12	Hon. Wm. Mitchell.
Natchez, Miss. ....	31 34	91 24	?	4	J. Edwards Smith.
Nazareth, Pa. ....	40 43	75 21	?	12	H. A. Brickenstein.
New Albany, Ind. ....	38 17	85 45	?	3	C. Barnes.
Newark, Del. ....	39 38	75 47	120	8	Thomas J. Craven, Richard A. Martin, and Robert Crawford.
Newark, Mich. ....	42 30 ?	86 00 ?	?	2	L. H. Streng.

a Lac qui Parle.

b Near Morrisville.

c Kingsley.

d Head of Mustapha.



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NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Newark, N. J. ....	40 45	74 10	30	12	W. A. Whitehead.
New Bedford, Mass. ....	41 39	70 56	90	12	Samuel Rodman.
New Braunfels, Texas ....	29 42	98 15	?	11	J. L. Forke.
Newburyport, Mass. ....	42 49	70 52	?	12	H. C. Perkins, M. D.
New Harmony, Ind. ....	38 08	87 50	320	12	John Chappellsmith.
New London, Conn. ....	41 21	72 03	90	12	Rev. Tryon Edwards, D. D.
New London, Wis. ....	44 21	88 45	?	3	J. Everett Breed
New Orleans, La. ....	29 57	90 00	?	3	Lewes B. Taylor.
New York city, N. Y., [D. & D. Inst.].	40 43	74 05	147	12	Prof. O. W. Morris.
Norristown, Pa. ....	40 08	75 19	153	12	Rev. J. Grier Ralston.
North Attleborough, Mass. ....	41 52	71 23	175	12	Henry Rice.
North Salem, N. Y. ....	40 20	73 38	361	10	Mrs. M. J. Lobdell.
North Whitehall, Pa. ....	40 40	75 26	250	12	Edward Kohler.
Norway, Wis. ....	42 30	88 00	753	10	John E. Himoe.
Norwich, Conn. ....	41 32	72 03	50	11	N. Scholfield.
Norwich, Vt. ....	43 42	72 21	?	8	Prof. A. Jackman.
Oberlin, Ohio ....	41 20	82 25	800	11	Prof. J. H. Fairchild.
Ogdensburg, N. Y. ....	44 43	77 35	?	11	Wm. E. Guest.
Oswego, N. Y. ....	43 28	74 30	232	12	Wm S. Malcolm.
Ottawa, Ill. ....	41 20	88 47	500	12	J. O. Harris, M. D.
Ovid, N. Y. ....	42 41	76 54	800	12	J. W. Chickering, jr.
Oxford, Miss. ....	34 20	89 25	300	6	Dr. L. Harper.
Palmyra, Mo. ....				7	G. P. Cornings.
Paradise, Penn. ....	40 00	76 08		12	Jacob Frantz.
Paris, Ky. ....	38 16	84 07	810	12	L. G. Ray, M. D.
Peach Grove Lodge, Va. ....	39 15	81 00	1,100	9	W. C. Quincy.
Pekin, Ill. ....	40 36	89 45	?	12	J. H. Riblet.
Pella, Iowa ....	41 30	92 55	730	3	E. H. A. Scheeper.
Penn Yan, N. Y. ....	42 42	77 11	740	12	Dr H. P. Sartwell.
Peoria, Ill. ....	40 36	89 30	?	10	Frederick Brendel, M. D.
Perry, Maine ....	45 00	67 06	100	12	Wm. D. Dana.
Perrysburg, Ohio ....	41 39	83 40	?	12	D. K. Hollenbeck.
Perrysville, Ark. ....	35 00	92 46	?	1	Harmon F. Hardy.
Philadelphia, Pa. ....	39 57	75 11	53	11	Prof. James A. Kirkpatrick.
Pin Oak, Texas ....	30 00	97 15	?	12	W. H. Gantt, M. D.
Pittsburg, Pa., [Oakland Station].	40 26	80 02	1,026	12	W. W. Wilson.
Plainville, N. Y. ....	43 00	77 16	?	3	J. H. Norton.
Platteville, Wis. ....	42 25	90 00	?	12	Dr. J. L. Pickard.
Plattsburg, N. Y. ....	44 40	73 26	156	3	Joseph W. Taylor.
Pleasant Plain, Iowa ....	41 07	91 54	?	12	Townsend McConnel.
Pocopson, Pa. ....	39 54	75 37	218	12	Fenelon Darlington.
Pomfret, Conn. ....	41 53	72 00	1,000	12	Rev. D. Hunt.
Pompey Hill, N. Y. ....	42 52	76 09	1,737	3	John F. Kendall.
Poplar Grove, Va. ....	38 20	81 21	?	7	James E. Kendall.
Port Gibson, Miss., [Elliott Academy].	31 51	91 02	500	6	Prof. J. Boyd Elliott.
Port of Spain, Trinidad. ....	10 38	61 34	16	3	Geological Surveyors.
Portland, Maine ....	43 39	70 15	875	12	Henry Willis.
Portsmouth, Ohio ....	38 56	82 49	468	9	James H. Poe.
Portsmouth, Va. ....	36 50	76 19	30	11	Prof. N. B. Webster.
Poultney, Iowa ....	42 40	91 20	?	3	Benjamin F. Odell.
Princeton, Mass. ....	42 28	71 53	1,113	12	John Brooks.
Princeton, Minn. ....	45 50	93 45	?	3	O. E. Garrison.
Providence, R. I. ....	41 49	71 25	?	12	Prof. A. Caswell.
Quasqueton, Iowa ....	42 23	91 43	888	6	E. C. Bidwell, M. D.
Racine, Wis. ....	42 44	87 44	600	3	W. J. Durham.
Racine, Wis. ....			?	9	E. Seymour.
Randolph, Pa. ....	41 28	80 10	1,720	2	O. T. Hobbs.
Red River Settlement, H. B. Territory	50 06	97 00	?	5	Donald Gunn.
Red Wing, Minn., [Hamlin University]	44 34	92 30		1	Rev. Jabez Brooks.
Richmond, Ind. ....	39 47	84 47	800	10	Joseph Moore.
Richmond, Mass. ....	42 23	73 20	1,190	12	Wm. Bacon.
Ridge, Md. (a) ....	38 05	76 18	?	7	T. G. Staggs.

(a) Point Lookout, or St. Ingeoes.

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	° ' "	° ' "	Feet.		
Riley, Ill.....	42 08	88 33	650	12	E Babcock.
Rochester, Mo.....	38 55	92 38	?	4	Charles Q Chandler, M. D.
Rochester, N. Y.....	43 08	77 51	-----	12	William Harkness.
Rochester, N. Y.....	43 08	77 51	516	12	Wm. C. Pratt.
Romeo, Mich.....	42 44	83 00	714	12	Seth L. Andrews, M. D.
Rougemont, Va.....	38 05	78 21	450	12	George C. Dickinson.
Ruthven, Va.....	37 15	77 15	?	6	Julian C. Ruffin.
Sacramento, Cal.....	38 35	121 40	29	12	Thomas M. Logan, M. D.
Sag Harbor, N. Y.....	40 59	72 20	40	11	Ephraim N. Byram.
St. Augustine, Fla.....	29 49	81 35	8	8	P. B. Mauran, M. D.
St. Francisville, La.....	30 49	91 27	?	1	B. R. Gifford.
St. James, Mich.....	45 44	85 27	?	5	James J. Strang.
St. John's, Newfoundland.....	47 35	52 38	?	9	E. M. J. Delany.
St. John's, S. C.....	-----	-----	-----	12	T. P. Ravenel.
St. Louis, Mo.....	28 37	90 16	482	11	George Engelmann, M. D.
St. Martin, Canada.....	45 32	73 36	118	12	Charles Smallwood, M. D.
Salem, N. J.....	39 34	75 27	?	2	C. M. Dodd.
Salt Ponds, Fla.....	24 33	81 48	4	12	Wm. C. Dennis.
San Francisco, Cal.....	37 48	122 23	115	2	W. O. Ayres, M. D.
Saratoga, N. Y.....	42 00	74 00	360	1	Walter H. Riker.
Saugatuck, Mich.....	42 30	85 50	?	4	L. H. Streng.
Savannah, Ga.....	32 05	81 05	42	12	John F. Posey, M. D.
Savannah, Ohio.....	41 12	82 31	?	12	John Ingram, M. D.
Saybrook, Conn. (a).....	41 18	72 20	10	12	James Rankin.
Scioto, Ohio.....	38 40	81 49	468	1	J. H. Poe.
Shamokin, Pa.....	40 45	76 31	700	12	P. Friel.
Shelburn, Vt.....	44 23	73 11	150	10	George Bliss.
Shelburne, N. H.....	44 23	71 06	920	1	Fletcher Odell.
Sidney, Ohio.....	40 21	83 40	?	4	Joseph Shaw.
Smithfield, Va.....	36 50	76 41	100 ?	12	John B. Purdie, M. D.
Smithville, N. Y.....	44 00	76 01	?	5	J. E. Breed.
Somerset, Pa.....	40 02	79 02	1,997	7	Frank Chorpenning, M. D.
Southwick, Mass.....	42 48	72 10	265	3	Amasa Holcomb.
Sparta, Ga.....	33 18	83 09	550	12	E. M. Pendleton, M. D.
Spencertown, N. Y.....	42 19	73 41	700	12	S. F. Woodin and A. W. Morehouse.
Springdale, Ky.....	38 07	85 34	570	12	Mrs. Lawrence Young.
Springfield, Mass.....	42 06	72 35	199	5	Lucius C. Allin.
Stanbridge, Canada East.....	45 00	73 00	?	1	J. C. Baker.
Steuben, Maine.....	44 44	67 50	50	12	J. D. Parker.
Stockton, Cal.....	37 57	121 14	?	7	R. K. Reid, M. D.
Stratford, N. H.....	44 08	71 07	1,000	12	B. Gould Brown.
Superior, Wis.....	46 38	92 03	658	12	L. Washington.
Sykesville, Md.....	39 23	76 57	700	12	Miss Harriett M. Baer.
Tarentum, Pa.....	40 37	79 19	950	2	John H. Baird.
Taunton, Mass.....	41 49	71 09	?	1	Albert Schlegel.
Thomaston, Ga.....	32 54	84 23	833	12	James Anderson.
Toronto, Canada.....	43 39	79 21	342	12	Magnetic Observatory.
Townsendville, N. Y.....	42 37	76 52	1,000	3	John Lefferts.
Trinity, La.....	31 37	91 47	68	2	Edward Murill, M. D.
Trout Run Valley, Va.....	39 00	78 01	?	11	D. H. Ellis.
Troy, N. Y.....	42 44	73 36	58	2	Prof. D. Greene.
Troy Hill, Pa.....	40 30	80 00	?	2	Victor Scriba.
Unionville, Ohio.....	41 50	81 01	650	8	Miss Ardelia Cunningham.
Up Park Camp, Jamaica.....	17 59	76 56	225	3	
Upper Alton, Ill.....	39 00	89 36	?	10	Dr. John James.
Urbana, Ohio.....	40 06	83 43	1,015	12	Prof. M. G. Williams.
Utica, N. Y., [Lunatic Asylum].....	43 07	75 15	500	5	Dr. L. A. Tourtellot.
Vera Cruz, Mexico.....	19 12	96 09	26	5	Dr. G. Berendt.
Wallingford, Conn.....	41 27	72 50	133	9	Benjamin F. Harrison.
Walnut Grove, Tenn.....	36 00	82 53	1,350	5	James B. Bean.
Wampsville, N. Y.....	43 04	75 50	500	12	Stillman Spooner.
Warrington, Va.....	30 21	87 16	12	12	Joseph Fry.

a Lynde Point.



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	° ' "	° ' "	Feet.		
Warsaw, Ill. ....	41 00	92 31	?	9	Benjamin Whitaker.
Washington, D. C. ....	38 53	77 01	30	12	Smithsonian Institution.
Washington, Texas ....	30 26	96 15	?	1	B. F. Bucher.
Washington, Texas ....	30 26	96 15	?	12	W. H. T. Rhodes.
Waterford, N. Y. ....	42 48	73 41	?	12	John C. House.
Watertown, N. Y. ....	43 56	76 08	33	12	Peter O. Williams, M. D.
Waukesha, Wis. ....	43 00	88 12	833	9	Prof. S. A. Bean.
West Bedford, Ohio ....	40 18	82 01	876	4	H. D. McCarty.
West Concord, N. Y. ....	42 32	78 52	2,000	5	Lewis Woodward.
West Enfield, N. H. ....	43 38	72 07	?	5	Nath. Purmort.
West Fairlee, Vt. ....	43 55	72 15	?	2	L. W. Bliss.
Westfield, Mass. ....	42 06	72 48	?	12	Rev. Emerson Davis.
West Haverford, Pa. ....	40 00	75 21	?	12	Paul Swift, M. D.
West Salem, Ill. ....	38 30	88 00	?	11	Henry A. Titze.
Weymouth, Mass. ....	42 12	71 00	150	7	N. Quincy Tirrell, M. D.
Whitemarsh Island, Ga. ....	32 02	81 01	18	12	R. T. Gibson.
Williamstown, Mass., [Williams Coll.]	42 42	73 13	725	12	Lavalette Wilson.
Winchester, Va. ....	39 15	78 10	?	10	John W. Marvin.
Windham, Maine ....	43 49	70 17	?	2	Samuel A. Eveleth.
Wirt Court House, Va. ....	39 05	81 26	?	8	J. N. Hoff.
Wolfville, Nova Scotia ....	45 06	64 25	95	12	Prof. A. P. S. Stuart.
Worcester, Mass. ....	42 16	71 48	536	12	Wm. H. Rice, M. D.
Zanesville, Ohio ....	40 00	81 31	?	2	L. M. Dayton.
Zanesville, Ohio ....	39 58	82 29	700	4	John G. F. Holston, M. D.
Zebulon, Ga. ....	33 07	84 26	?	12	Mrs. J. T. Arnold.

## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
British America—Hamilton (a).....	29.64	25	9 p. m.	16	9 p. m.
Montreal.....	29.82	5	7 a. m.	17	7 a. m.
St. Martin.....	29.80	4	9 p. m.	16	9 p. m.
Toronto (a).....	29.67	25	10 p. m.	28	6 a. m.
Wolfville.....	29.37	12	9 p. m.	14	9 p. m.
Maine.....Carmel.....	29.53	5	7 a. m.	17	9 p. m.
Gardiner.....	29.74	4	9 p. m.	17	2 p. m.
Portland.....	29.76	5	7 a. m.	17	2 p. m.
Steuben.....	29.92	2	7 a. m.	17	2 p. m.
New Hampshire—Concord.....	29.55	5	7 a. m.	13	9 p. m.
Vermont.....Barlington.....	29.63	5	7 a. m.	17	7 a. m.
Massachusetts—Amherst.....	29.70	5	7 a. m.	13	9 p. m.
Nantucket.....	29.88	4	9 p. m.	13	2 p. m.
New Bedford.....	29.83	4	9 p. m.	13	9 p. m.
Newburyport.....	29.91	5	7 a. m.	c 30.56	13 9 p. m.
North Attleborough.....	29.72	5	7 a. m.	13	2 p. m.
Princeton.....	28.71	5	7 a. m.	c 29.32	13 9 p. m.
Southwick (d).....	29.85?	5	7 a. m.	13	9 p. m.
Westfield.....	30.14	4	9 p. m.	13	9 p. m.
Williamstown.....	29.20	5	7 a. m.	13	9 p. m.
Worcester.....	29.39	2	7 a. m.	c 29.94	13 9 p. m.
Rhode Island—Providence (a).....	29.71	4	10 p. m.	13	1 p. m.
Connecticut—Pomfret.....	28.81	5	7 a. m.	c 29.37	13 2 p. m.
New York—Blackwell's Island.....	29.99	26	7 a. m.	f 30.50	13 2 p. m.
Canton.....	29.42	4	9 p. m.	17	7 a. m.
Clinton.....	28.89	4	9 p. m.	13	9 p. m.
Fishkill Landing.....	30.19	4	9 p. m.	13	2 p. m.
Flatbush.....	29.86	4	2 p. m.	c 30.48	13 2 p. m.
Geneva.....	29.40	-----	9 p. m.	-----	9 p. m.
Homer.....	28.69	4	9 p. m.	13	2 p. m.
Liberty.....	28.32	27	9 p. m.	13	9 p. m.
New York city.....	29.90	4	9 p. m.	13	2 p. m.
Oswego.....	29.30	25	9 p. m.	28	2 p. m.
Ovid.....	28.87	25	9 p. m.	29.42	14 7 a. m.
Penn Yan (a).....	29.17	25	9 p. m.	29.68	28 7 a. m.
Plattsburg.....	29.83	12	2 p. m.	30.46	17 2 p. m.
Rochester, [Pratt].....	29.43	25	9 p. m.	30.06	1 9 p. m.
Sag Harbor.....	29.68	4	9 p. m.	30.35	13 2 p. m.
Spencertown.....	29.38	4	9 p. m.	30.01	13 2 p. m.
New Jersey—Bloomfield.....	29.80	4	9 p. m.	30.46	13 2 p. m.
Burlington (g).....	30.02	4	9 p. m.	30.56	13 2 p. m.
Lambertville.....	30.05	4	9 p. m.	30.66	13 2 p. m.
Newark (h).....	29.91	4	6 p. m.	30.49	13 6 p. m.
Pennsylvania—Bedford.....	29.13	26	7 a. m.	29.67	28 7 a. m.
Carlisle.....	29.21	26	7 a. m.	c 29.75	13 2 p. m.
Chromedale.....	29.86	4	9 p. m.	30.42	13 7 a. m.
Gettysburg (a).....	29.46	26	7 a. m.	30.01	13 2 p. m.
Harrisburg.....	29.76	26	7 a. m.	30.31	28 7 a. m.
Morrisville (g).....	30.09	4	9 p. m.	30.65	13 2 p. m.
Norristown.....	29.96	4	9 p. m.	30.48	28 7 a. m.
Philadelphia.....	29.87	4	9 p. m.	30.38	13 7 a. m.
Pittsburg.....	29.11	31	7 a. m.	29.93	13 7 a. m.
Delaware—Newark (e).....	29.83?	26	7 a. m.	30.32	28 7 a. m.
Maryland—Annapolis.....	30.06	26	7 a. m.	30.63	13 7 a. m.
Chesertown.....	29.87	26	7 a. m.	30.30	13 7 a. m.
Frederick.....	29.71	26	7 a. m.	30.28	13 7 a. m.

a See notes to table of thermometer for this month.

b Same height at 2 p. m. the 17th of the month.

c Same height at 9 p. m. the 4th of this month.

d Incomplete.

e Same height at 9 p. m. on the 13th.

f Same height at 9 p. m. on the 25th.

g Not corrected for temperature.

h Observations taken at 7 a. m. and 6 p. m.



## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Dist. of Columbia. Washington .....	30.08	26	7 a. m.	30.64	13	7 a. m.	<i>a</i> 29.52
Virginia..... Alexandria .....	30.07	4	9 p. m.	30.57	13	7 a. m.	29.53
North Carolina..... Chapel Hill .....	29.49	26	7 a. m.	29.91	20	7 a. m.	29.10
..... Goldsborough .....	30.00	26	7 a. m.	30.52	20	7 a. m.	29.49
South Carolina..... All Saints .....	30.02	26	7 a. m.	30.43	20	7 a. m.	29.47
..... Camden .....	29.93	26	7 a. m.	30.33	20	7 a. m.	29.40
..... Charleston, [Johnson] .....	30.11	11	2 p. m.	30.44	20	2 p. m.	29.63
..... Charleston, [Dawson] .....				30.47			29.66
..... St. John's (b) .....	29.98	25	9 p. m.	30.41	12	2 p. m.	29.55
Georgia..... Savannah .....	30.10	10	9 p. m.	30.41	20	7 a. m.	29.55
..... Sparta .....	29.48	10	9 p. m.	29.73	20	7 a. m.	29.07
..... Thomaston (c) .....	29.38	11	7 a. m.	29.60	12	7 a. m.	29.10
Florida..... Atsena .....	29.96	22	7 a. m.	30.23	20	7 a. m.	<i>d</i> 29.67
..... Jacksonville .....	30.17	22	7 a. m.	30.45	20	7 a. m.	29.72
..... Salt Ponds (c) .....	29.74	22	2 p. m.	29.94	20	7 a. m.	29.53
..... Warrington (b) .....	30.13	22	Sunrise.	<i>e</i> 30.47	19	Sunset.	29.63
Alabama..... Auburn .....	29.43	22	7 a. m.	29.67	19	2 p. m.	29.01
Mississippi..... Oxford .....	29.71	22	2 p. m.	30.01	25	2 p. m.	29.24
..... Port Gibson .....	29.71	22	7 a. m.	30.07	19	2 p. m.	29.30
Texas..... New Braunfels .....	29.17	28	2 p. m.	29.90	25	7 a. m.	28.74
Tennessee..... Glenwood .....	29.68	10	7 a. m.	30.10	27	2 p. m.	29.14
Kentucky..... Ballardsville .....	29.16	4	7 a. m.	29.53	27	7 a. m.	28.80
..... Millersburg (c) .....	29.39	10	2 p. m.	29.77	12	2 p. m.	28.99
..... Paris .....	29.26	4	7 a. m.	29.68	27	9 p. m.	28.68
..... Springdale .....	29.51	4	7 a. m.	29.98	27	9 p. m.	28.91
Ohio..... Cincinnati, [Harper] .....	29.61	10	2 p. m.	30.03	27	9 p. m.	29.02
..... Cincinnati, [Lea] .....				30.09			28.41
..... College Hill .....	29.13	25	9 p. m.	29.57	27	9 p. m.	28.59
..... Dayton .....	29.33	28		29.91	27		28.94
..... Germantown .....	29.31	4	7 a. m.	29.77	27	9 p. m.	28.74
..... Granville (b) .....	29.04	4	7 a. m.	29.47	13	7 a. m.	28.68
..... Hillsborough .....	28.91	4	7 a. m.	29.37	27	9 p. m.	28.37
..... Hiram .....	28.92	26	7 a. m.	29.48	28	7 a. m.	28.38
..... Oberlin .....	29.14	25	9 p. m.	29.74	28	7 a. m.	28.65
..... Perrysburg (b) .....	29.44	25	2 p. m.	29.99	27	9 p. m.	28.99
..... Urbana .....	28.81	25	9 p. m.	29.29	28	7 a. m.	28.31
Michigan..... Ann Arbor .....	29.15	25	9 p. m.	29.75	28	7 a. m.	28.70
..... Battle Creek .....	29.15	25	9 p. m.	29.67	28	7 a. m.	28.72
..... Romeo .....	29.07	25	9 p. m.	29.65	28	7 a. m.	28.62
Indiana..... New Harmony .....	29.79	10	7 a. m.	30.22	27	9 p. m.	29.29
Illinois..... Manchester (b) .....	28.94	10	7 a. m.	29.40	27	9 p. m.	28.46
..... Upper Alton .....	29.60	3	9 p. m.	30.00	27	2 p. m.	29.10
Missouri..... St. Louis .....	29.63	3	9 p. m.	30.04	27	2 p. m.	29.08
Wisconsin..... Appleton .....	29.18	25	7 a. m.	<i>f</i> 29.68	31	9 p. m.	28.71
..... Beloit .....	29.30	25	7 a. m.	29.80	31	9 p. m.	28.87
..... Kenosha City (g) .....	29.53?						
..... Manitowoc .....	29.72			30.29			29.22
..... Milwaukee, [Winkler] .....	29.37	25	9 p. m.	29.90	31	9 p. m.	28.88
..... Racine (h) .....	29.46	25	9 p. m.	29.99	17	7 a. m.	29.07
..... Superior .....	29.47	25	7 a. m.	30.11	16	2 p. m.	28.95
Iowa..... Dubuque .....	29.47	25	7 a. m.	29.99	31	2 p. m.	28.99
..... Muscatine .....	29.65	25	7 a. m.	30.04	27	2 p. m.	<i>i</i> 29.22
..... Quasqueton .....	29.19	25	7 a. m.	29.68	31	2 p. m.	28.71
California..... Sacramento .....	30.00	26	9 p. m.	30.24	15	2 p. m.	29.63
..... San Francisco (b) .....	30.06	21	2 p. m.	30.19	22	2 p. m.	29.84
..... Stockton (c) .....	29.59	4	7 a. m.	29.85	9	2 p. m.	29.20
West Indies..... Up Park Camp, Jamaica .....	29.82		9½ a. m.	29.93		3½ p. m.	29.63

*a* Same height at 9 p. m. on the 13th.*b* See notes to table of thermometer for this month.*c* Not corrected for temperature.*d* Same height at 9 p. m. on the 19th.*e* Same height at sunrise on the 23d.*f* Same height at 9 p. m. on the 25th.*g* Observations very much interrupted.*h* Observations taken at 9 a. m. and 9 p. m.*i* Same height at 9 p. m. on the 27th.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.47	25	9 p. m.	30.42	16	9 a. m.	28.80
Montreal .....	29.58	6	2 p. m.	30.21	12	7 a. m.	28.89
St. John's (a) .....	29.21?						
St. Martin .....	29.56	6	7 a. m.	30.22	12	7 a. m.	28.78
Toronto (a) .....	29.48	6	6 a. m.	30.09	16	2 p. m.	28.79
Wolfville .....	29.19	7	7 a. m.	29.86	18	7 a. m.	28.30
Maine .....	29.33	6	9 p. m.	29.98	17	9 p. m.	28.37
Carmel .....	29.52	6	9 p. m.	30.16	17	9 p. m.	28.71
Gardiner .....	29.62	11	9 p. m.	30.37	17	9 p. m.	28.55
Steuben .....	29.36	6	9 p. m.	30.00	17	2 p. m.	28.67
New Hampshire .. Concord .....	29.35	6	2 p. m.	30.11	21	2 p. m.	28.19
Vermont .....	29.35	6	2 p. m.	30.11	21	2 p. m.	28.19
Burlington .....	29.35	6	2 p. m.	30.11	21	2 p. m.	28.19
Massachusetts .. Amherst .....	29.51	6	2 p. m.	30.15	17	2 p. m.	28.83
Nantucket .....	29.74	6	9 p. m.	30.39	17	2 p. m.	29.03
New Bedford .....	29.65	6	9 p. m.	30.27	17	2 p. m.	28.97
Newburyport .....	29.63	6	9 p. m.	30.37	17	2 p. m.	28.93
North Attleborough .....	29.56	6	7 a. m.	30.27	17	9 p. m.	29.04
Princeton .....	28.52	11	7 a. m.	29.34	12	7 a. m.	27.82
Southwick (b) .....	29.62	29	9 p. m.	30.08	17	7 a. m.	c 29.15
Westfield .....	30.03	6	7 a. m.	30.47	17	9 p. m.	29.77
Williamstown .....	29.02	11	7 a. m.	29.65	12	7 a. m.	28.38
Worcester .....	29.20	6	2 p. m.	29.81	17	2 p. m.	28.58
Rhode Island .. Providence (a) .....	29.54	11	10 p. m.	30.17	17	1 p. m.	28.87
Connecticut .. Pomfret .....	28.66	11	2 p. m.	29.24	17	2 p. m.	28.06
New York .....	29.83	6	7 a. m.	30.49	12	7 a. m.	29.23
Blackwell's Island .....	29.21	6	7 a. m.	29.85	12	7 a. m.	28.57
Canton .....	28.71	11	7 a. m.	29.27	12	7 a. m.	28.10
Clinton .....	29.98	11	2 p. m.	30.67	12	7 a. m.	29.38
Fishkill Landing .....	29.70	6	7 a. m.	30.38	12	7 a. m.	29.07
Flatbush .....	29.63	6	2 p. m.	30.26	12	2 p. m.	28.99
Fordham .....	29.23		7 a. m.	29.85		2 p. m.	28.61
Geneva .....	28.52	6	7 a. m.	29.13	16	9 p. m.	27.92
Homer .....	28.12	6	7 a. m.	28.69	12	7 a. m.	27.56
Liberty .....	29.39?	11	7 a. m.	30.09	12	7 a. m.	28.80
Madrid (a) .....	29.67	11	7 a. m.	30.32	12	7 a. m.	29.06
New York city .....	29.10	6	2 p. m.	29.76	16	9 p. m.	28.44
Oswego .....	28.71	6	7 a. m.	29.33	16	2 p. m.	28.11
Ovid .....	29.00	6	Sunrise.	29.58	16	Sunset.	28.39
Penn Yan (a) .....	29.59	6	7 a. m.	30.25	12	7 a. m.	28.86
Plattsburg .....	29.30	6	7 a. m.	29.92	16	2 p. m.	28.66
Rochester, [Pratt] .....	29.51	6	9 p. m.	30.15	17	7 a. m.	28.82
Sag Harbor .....	29.31	11	9 p. m.	29.89	12	7 a. m.	28.55
Spencertown .....	29.70	6	7 a. m.	30.33	12	7 a. m.	29.07
New Jersey .....	29.79	6	2 p. m.	30.41	17	7 a. m.	29.21
Blomfield .....	29.87	11	2 p. m.	30.54	12	7 a. m.	29.37
Burlington .....	29.76	6	7 a. m.	30.40	12	7 a. m.	29.12
Lambertville .....	28.95	6	7 a. m.	29.54	16	9 p. m.	28.34
Newark (d) .....	29.05	11	7 a. m.	29.69	16	9 p. m.	28.44
Pennsylvania .. Bedford .....	29.71	6	7 a. m.	30.41	16	9 p. m.	29.03
Carlisle .....	29.35	6	7 a. m.	29.97	16	9 p. m.	28.68
Chromedale .....	29.64	6	7 a. m.	30.27	16	9 p. m.	29.01
Gettysburg .....	29.40	11	6 a. m.	30.07	16	10 p. m.	28.75
Harrisburg .....	29.95	6	7 a. m.	30.60	12	7 a. m.	f 29.40
Lewisburg (n) .....	29.78	6	7 a. m.	30.44	12	7 a. m.	29.16
Morrisville (e) .....	29.73	11	7 a. m.	30.38	12	7 a. m.	29.14
Norristown .....	29.80	6	7 a. m.	29.37	18	7 a. m.	28.16
Philadelphia .....	29.71	6	7 a. m.	30.44	12	7 a. m.	29.10
Pittsburg .....	29.92	6	7 a. m.	30.62	16	9 p. m.	29.26
Delaware .....							
Newark .....							
Maryland .....							
Annapolis (a) .....							

a See notes to table of thermometer for this month.

b For the last 14 days of the month only.

c Same height at 2 p. m. on the 17th of this month.

d Observations taken at 7 a. m. and 6 p. m.

e Not corrected for temperature.

f Same height at 2 p. m. on the 12th and 9 p. m. on the 16th.



## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1856.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
Day.	Hour.	Day.	Hour.					
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Maryland	Chestertown	29.77	6	7 a. m.	30.31	12	7 a. m.	29.14
	Frederick	29.56	■	7 a. m.	30.22	16	2 p. m.	28.92
Dist. of Columbia	Washington	29.94	■	7 a. m.	30.64	16	2 p. m.	29.27
Virginia	Alexandria	29.94	6	7 a. m.	30.58	16	2 p. m.	29.33
North Carolina	Chapel Hill	29.38	■	7 a. m.	29.93	16	2 p. m.	28.85
	Goldsborough	29.88	6	7 a. m.	30.55	16	2 p. m.	29.28
South Carolina	All Saints	29.92	6	7 a. m.	30.51	16	9 p. m.	29.42
	Camden	29.82	6	7 a. m.	30.39	16	2 p. m.	29.39
	Charleston, [Johnson]	30.11	6	7 a. m.	30.62	21	7 a. m.	29.75
	Charleston, [Dawson]				30.58			29.66
	Edisto Island (a)	30.01	19	7 a. m.	30.22	16	9 p. m.	29.81
	St. John's (a)	30.05	6	2 p. m.	30.53	21	9 p. m.	29.71
Georgia	Savannah	30.00	6	7 a. m.	30.52	16	9 p. m.	29.56
	Sparta	29.38	■	7 a. m.	29.82	16	9 p. m.	28.95
	Thomaston (b)	29.27	6	7 a. m.	29.65	16	2 p. m.	c 28.90
Florida	Atsena	29.89	5	7 a. m.	30.27	21	7 a. m.	29.51
	Jacksonville	30.07	5	7 a. m.	30.53	21	2 p. m.	29.57
	Salt Ponds (b)	29.70	5	2 p. m.	30.00	21	7 a. m.	29.44
	Warrington	30.04	5	2 p. m.	30.47	21	7 a. m.	29.62
Alabama	Auburn	29.30	5	9 p. m.	29.70	16	2 p. m.	28.90
Mississippi	Oxford	29.54	5	7 a. m.	30.00	16	2 p. m.	29.16
	Port Gibson	29.59	5	7 a. m.	30.01	20	9 p. m.	29.23
Texas	New Braunfels (b)	28.99	3	7 a. m.	29.40	16	2 p. m.	28.72
Tennessee	Glenwood	29.54	5	7 a. m.	30.02	16	7 a. m.	29.00
Kentucky	Ballardsville	29.00	5	9 p. m.	29.50	16	2 p. m.	28.47
	Millersburg (b)	29.25	5	2 p. m.	29.66	16	2 p. m.	28.88
	Paris	29.09	5	7 a. m.	29.55	16	7 a. m.	28.51
	Springdale	29.37	5	2 p. m.	29.83	16	2 p. m.	28.80
Ohio	Cincinnati, [Harper]	29.44	5	7 a. m.	29.96	16	2 p. m.	28.76
	Cincinnati, [Lea]				29.96			28.65
	College Hill	28.98	5	9 p. m.	29.49	16	2 p. m.	28.34
	Dayton	29.33			29.73			28.91
	Germantown, [Groneweg]	29.15	■	9 p. m.	29.66	15	2 p. m.	28.68
	Granville	28.87	6	7 a. m.	29.39	16	7 a. m.	28.24
	Hillsborough	28.76	5	2 p. m.	29.27	16	2 p. m.	28.12
	Hiram	28.78	5	9 p. m.	29.35	16	9 p. m.	28.31
	Oberlin	28.97	■	7 a. m.	29.51	16	2 p. m.	28.24
	Perrysburg (a)	29.31	■	7 a. m.	29.82	16	7 a. m.	28.57
	Urbana	28.66	■	7 a. m.	d 29.16	16	2 p. m.	27.98
Michigan	Ann Arbor, [Woodruff]	28.93	6	7 a. m.	29.51	16	7 a. m.	28.24
	Battle Creek	28.99	■	7 a. m.	29.44	16	7 a. m.	28.38
	Romeo, [Andrews] (a)	28.92	6	7 a. m.	29.59	16	6 a. m.	28.22
Indiana	New Harmony	29.62	5	7 a. m.	30.14	16	7 a. m.	29.03
	Richmond	28.91						
Illinois	Manchester (a)	28.79	5	7 a. m.	29.26	16	7 a. m.	28.27
	Upper Alton	29.47	5	2 p. m.	29.75	16	7 a. m.	28.95
Missouri	Hannibal (a)	29.37	5	9 a. m.	e 30.06	26	9 p. m.	28.69
	St. Louis	29.47	5	7 a. m.	29.92	16	7 a. m.	28.89
Wisconsin	Appleton	28.97	6	7 a. m.	29.35	1	7 a. m.	28.16
	Beloit	29.13	5	9 p. m.	29.53	16	7 a. m.	28.54
	Kenosha (f)	29.38						
	Manitowoc	29.57			29.94			28.95
	Milwaukee, [Winkler]	29.20	■	7 a. m.	29.61	16	7 a. m.	28.57
	Racine, [Seymour]	29.36	15	9 p. m.	29.84	16	9 a. m.	28.69
	Superior	29.25	13	7 a. m.	29.61	15	9 p. m.	28.66
Iowa	Dubuque	29.29	5	9 p. m.	29.68	15	9 p. m.	28.68
	Muscatine	29.45	5	7 a. m.	29.83	15	9 p. m.	28.94
	Quasqueton (a)	29.06	29	7 a. m.	29.37	16	7 a. m.	28.49

a See notes to table of thermometer for this month.

b Not corrected for temperature.

c Same height at 9 p. m. on the 16th.

d Same height at 9 p. m. on the 5th.

e Same height at 9 p. m. on the 4th.

f Observations very much interrupted.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				
California ..... Sacramento.....	30.01	11	7 a. m.	30.31	4 7 a. m.
San Francisco .....	29.99	10	7 a. m.	30.26	4 2 p. m.
Stockton (a) .....	29.55	10	7 a. m.	<i>b</i> 29.80	4 2 p. m.
West Indies..... Up Park Camp, Jamaica.....	29.80	-----	9½ a. m.	29.93	----- 9½ a. m.
South America... Catharina Sophia, Surinam (c).....	29.82	5	6 a. m.	29.94	22 2 p. m.
					<i>d</i> 29.72

*a* Not corrected for temperature.*b* Same height at 9 p. m. on the 9th.*c* See notes to table of thermometer for this month.*d* Same height at 6 p. m. on the 24th.



## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.56	31	9 a. m.	30.00	■	9 a. m.	28.96
Montreal .....	29.66	31	9 p. m.	30.12	2	2 p. m.	29.11
St. John's .....	29.25?	5	9 a. m.	29.80	24	9 p. m.	? 28.70
St. Martin .....	29.64	31	9 p. m.	30.13	2	2 p. m.	29.06
Toronto (a) .....	29.56	31	10 p. m.	30.05	2	6 a. m.	28.83
Wolfville (b) .....	29.57	2	7 a. m.	29.67	2	9 p. m.	28.71
Maine .....	29.39	4	7 a. m.	29.80	2	2 p. m.	c 28.91
Carmel .....	29.63	31	9 p. m.	30.07	2	2 p. m.	29.06
Gardiner .....	29.62	4	7 a. m.	30.05	■	9 p. m.	29.13
Portland .....	29.60	30	9 p. m.	30.06	2	2 p. m.	29.04
Steuben .....	29.44	31	9 p. m.	29.87	2	2 p. m.	28.87
New Hampshire .. Concord .....	29.46	31	9 p. m.	29.89	2	2 p. m.	28.89
Vermont .....	29.45	1	7 a. m.	29.82	2	2 p. m.	28.91
Norwich (d) .....	29.58	31	9 p. m.	30.01	2	7 a. m.	29.16
Massachusetts .. Amherst .....	29.76	4	Sunrise	30.21	28	3 p. m.	29.37
Cambridge (a) .....	29.81	4	7 a. m.	30.27	2	2 p. m.	29.13
Nantucket .....	29.72	4	7 a. m.	30.17	2	2 p. m.	29.09
New Bedford .....	29.78	4	7 a. m.	30.24	2	2 p. m.	29.14
Newburyport .....	29.63	4	7 a. m.	30.08	2	2 p. m.	29.01
North Attleboro' .....	28.61	31	9 p. m.	29.03	2	2 p. m.	28.04
Princeton .....	29.84	4	7 a. m.	30.19	2	2 p. m.	29.20
Southwick (d) .....	30.04	31	9 p. m.	30.32	2	2 p. m.	29.81
Westfield .....	29.08	31	9 p. m.	29.55	2	2 p. m.	28.48
Williamstown .....	29.28	23	9 p. m.	29.81	■	2 p. m.	28.71
Worcester .....	29.61	4	Sunrise	30.05	2	1 p. m.	28.97
Rhode Island .. Providence (a) .....	29.83	31	9 p. m.	30.25	28	7 a. m.	29.49
Connecticut .....	28.73	4	7 a. m.	e 29.12	■	2 p. m.	28.16
Pomfret .....	29.87	31	2 p. m.	30.32	2	7 a. m.	29.26
New York .....	29.27	31	9 p. m.	29.77	2	2 p. m.	28.65
Blackwell's Island .....	28.79	31	9 p. m.	29.28	2	7 a. m.	28.21
Canton .....	30.06	4	7 a. m.	30.45	■	2 p. m.	29.45
Clinton .....	29.76	31	9 p. m.	30.21	2	7 a. m.	29.14
Fishkill Landing .....	29.29	---	9 p. m.	29.84	---	7 a. m.	28.51
Flatbush .....	28.24	31	9 p. m.	28.65	2	2 p. m.	27.71
Geneva .....	29.52	31	9 p. m.	30.04	11	2 p. m.	29.15
Liberty .....	29.44	---	9 p. m.	29.97	---	7 a. m.	28.77
Madrid (f) .....	29.78	31	9 p. m.	30.25	2	7 a. m.	29.17
Mexico .....	29.45	---	9 p. m.	29.98	---	2 p. m.	28.89
New York city .....	29.17	31	9 p. m.	29.69	2	7 a. m.	28.47
North Salem .....	28.78	31	9 p. m.	29.26	2	7 a. m.	28.12
Oswego .....	29.08	31	2 p. m.	29.50	2	Sunrise	28.45
Ovid .....	29.67	31	9 p. m.	30.10	2	7 a. m.	29.10
Penn Yan (a) .....	29.37	31	9 p. m.	29.85	2	7 a. m.	28.73
Plattsburg .....	29.57	4	7 a. m.	30.01	2	7 a. m.	28.95
Rochester, [Pratt] .....	29.28	31	9 p. m.	29.73	2	2 p. m.	28.70
Sag Harbor .....	29.74	18	7 a. m.	30.14	2	2 p. m.	29.14
Spencertown .....	29.85	4	7 a. m.	30.19	■	2 p. m.	29.31
New Jersey .....	29.96	31	9 p. m.	30.39	2	2 p. m.	29.40
Bloomfield .....	29.78	4	7 a. m.	h 30.15	2	7 a. m.	29.23
Burlington .....	29.02	18	7 a. m.	29.30	24	2 p. m.	28.69
Lambertville .....	29.11	31	9 p. m.	29.52	2	7 a. m.	28.57
Newark (g) .....	29.77	31	9 p. m.	30.18	■	7 a. m.	29.19
Pennsylvania .. Bedford .....	29.35	31	9 p. m.	29.76	2	7 a. m.	28.80
Carlisle .....	29.67	18	7 a. m.	30.01	2	7 a. m.	28.13
Chromedale .....	29.45	31	10 p. m.	29.92	2	6 a. m.	28.87
Gettysburg .....	30.02	31	9 p. m.	30.40	■	7 a. m.	29.40
Harrisburg .....	29.74	15	9 p. m.	30.18	27	7 a. m.	29.32
Lewisburg (a) .....							
Morrisville (i) .....							
Norristown .....							

a See notes to table of thermometer for this month.

b For the first 5 days of the month only.

c Same height at 9 p. m. on the 2d.

d Month incomplete.

e Same height at 7 a. m. on the 18th.

f For the last 21 days of the month only.

g Observations taken at 7 a. m. and 6 p. m.

h Same height at 6 p. m. on the 31st.

i Not corrected for temperature.

## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Philadelphia.....	29.77	31	9 p. m.	30.16	2	7 a. m.	29.23
.....Pittsburg.....	28.87	31	9 p. m.	29.30	1	9 p. m.	28.33
Delaware.....Newark.....	29.82 <sup>e</sup>	18	7 a. m.	30.06	21	7 a. m.	29.56
Maryland.....Annapolis (a).....	29.96	31	9 p. m.	30.37	2	7 a. m.	29.39
.....Frederick.....	29.61	31	9 p. m.	29.99	2	7 a. m.	29.03
Dist. of Columbia.....Washington.....	29.98	31	9 p. m.	30.38	24	2 p. m.	29.55
Virginia.....Alexandria.....	29.95	31	9 p. m.	30.37	2	7 a. m.	29.42
North Carolina.....Chapel Hill.....	29.40	4	7 a. m.	29.70	1	9 p. m.	28.94
.....Goldsborough.....	29.91	4	7 a. m.	30.31	2	7 a. m.	29.39
South Carolina.....All Saints.....	29.93	31	7 a. m.	30.33	2	7 a. m.	29.49
.....Camden.....	29.84	4	7 a. m.	30.21	2	7 a. m.	29.39
.....Charleston, [Johnson].....	30.14	4	7 a. m.	30.50	2	7 a. m.	29.70
.....Charleston, [Dawson].....				30.46			29.68
.....Edisto Island.....	30.04	4	7 a. m.	30.27	22	2 p. m.	29.84
.....St. John's (a).....	30.06	4	Sunrise	30.60	1	Sunrise	29.56
Georgia.....Savannah.....	30.01	4	7 a. m.	30.39	2	7 a. m.	29.59
.....Sparta.....	29.38	4	7 a. m.	29.67	2	7 a. m.	29.04
.....Thomaston.....	29.27	4	7 a. m.	29.56	21	2 p. m.	29.01 <sup>b</sup>
Florida.....Atsena.....	30.07	4	7 a. m.	30.30	13	2 p. m.	29.66
.....Jacksonville.....	30.08	5	9 p. m.	30.43	13	7 a. m.	29.62
.....Salt Ponds (c).....	29.71	4	2 p. m.	29.90 <sup>d</sup>	22	7 a. m.	29.42
.....Warrington (a).....	30.06	4	2 p. m.	30.35	13	7 a. m.	29.72
Alabama.....Auburn.....	29.31	4	7 a. m.	29.63	1	9 p. m.	28.91
Mississippi.....Columbus (e).....	29.82	28	7 a. m.	30.12	10	9 p. m.	29.48
.....Oxford.....	29.57	28	7 a. m.	29.80	1	2 p. m.	29.25
Texas.....New Braunfels (e).....	28.94 <sup>e</sup>	4	7 a. m.	29.24	10	7 a. m.	28.63
Tennessee.....Glenwood.....	29.59	10	7 a. m.	29.95	1	2 p. m.	29.15
.....Knoxville.....	29.05	10	7 a. m.	29.35	1	9 p. m.	28.56
Kentucky.....Ballardsville.....	29.07	10	7 a. m.	29.40	1	9 p. m.	28.66
.....Paris.....	29.15	31	9 p. m.	29.48	1	9 p. m.	28.67
.....Springdale.....	29.46	10	7 a. m.	29.79	1	9 p. m.	29.02
Ohio.....Cincinnati, [Harper].....	29.50	10	7 a. m.	29.86	1	9 p. m.	29.02
.....College Hill.....	29.06	31	9 p. m.	29.40	1	9 p. m.	28.58
.....Dayton.....	29.27			29.59			29.03
.....Germantown, [Groneweg].....	29.23	5	7 a. m.	29.64	1	9 p. m.	28.73
.....Granville.....	28.92	31	9 p. m.	29.35	1	9 p. m.	28.38
.....Hillsborough.....	28.84	31	9 p. m.	29.17	1	9 p. m.	28.31
.....Oberlin.....	29.08	31	9 p. m.	29.52	1	9 p. m.	28.57
.....Perrysburg (a).....	29.38	31	1 p. m.	29.79	2	7 a. m.	28.92 <sup>f</sup>
.....Urbana.....	28.74	31	9 p. m.	29.12	1	9 p. m.	28.28
.....Zanesville, [Holston].....	29.13	31	9 p. m.	29.55	1	7 a. m.	28.60
Michigan.....Ann Arbor, [Woodruff].....	29.08	31	9 p. m.	29.52	2	7 a. m.	28.59
.....Battle Creek.....	29.09	31	7 a. m.	29.51	2	7 a. m.	28.63
.....Detroit.....	29.51	31	9 p. m.	29.97	2	7 a. m.	29.01
.....Romeo, [Andrews] (a).....	29.01	31	9 p. m.	29.45	1	7 a. m.	28.52
Indiana.....New Harmony.....	29.70	10	7 a. m.	30.03	1	2 p. m.	29.36
.....Richmond.....	28.98	31	2 p. m.	29.30	1	9 p. m.	28.48
Illinois.....Manchester.....	28.82	10	7 a. m.	29.27	20	1 p. m.	28.52
.....Upper Alton.....	29.52	9	9 p. m.	29.79	23	7 a. m.	29.24
Missouri.....St. Louis.....	29.55	10	7 a. m.	29.89	23	7 a. m.	29.24
Wisconsin.....Appleton.....	29.08	31	2 p. m.	29.56	23	2 p. m.	28.66
.....Beloit.....	29.23	31	7 a. m.	29.60	23	2 p. m.	28.88
.....Kenosha (g).....	29.49						
.....Madison.....	29.08	31	7 a. m.	29.50	5	2 p. m.	28.72
.....Manitowoc.....	29.69			30.12			29.31
.....Milwaukee, [Winkler].....	29.29	9	7 a. m.	29.96	23	2 p. m.	28.90
.....Racine, [Seymour] (h).....	29.40	31	9 a. m.	29.80	2	9 a. m.	29.10
.....Superior.....	29.35	8	9 p. m.	29.82	23	7 a. m.	28.85

See notes to table of thermometer for this month.

Same height at 9 p. m. on the 21st.

Not corrected for temperature.

Same height at 2 p. m. on the 29th.

e For the last 13 days of the month only.

f Same height at 9 p. m. on the 1st.

g Observations very much interrupted.

h Observations taken at 9 a. m. and 9 p. m.



## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Wisconsin ----- Waukesha (a) -----	29.21	31	7 a. m.	29.57	23	2 p. m.	28.78
Iowa ----- Dubuque -----	29.33	8	7 a. m.	29.68	8	7 a. m.	28.65
----- Muscatine -----	29.52	31	7 a. m.	29.85	23	7 a. m.	<sup>b</sup> 29.19
----- Quasqueton -----	29.15	31	7 a. m.	29.47	23	7 a. m.	28.78
California ----- Sacramento -----	29.98	1	2 p. m.	30.29	9	9 p. m.	29.67
----- Stockton (c) -----	29.54	12	7 a. m.	29.82	9	9 p. m.	29.22
West Indies ----- Up Park Camp, Jamaica (a) -----	29.80	-----	9½ a. m.	29.91	-----	3½ p. m.	29.71
South America. -- Catharina Sophia, Surinam (a) -----	29.78	19	2 p. m.	29.86	22	6 a. m.	29.71

<sup>a</sup> See notes to table of thermometer for this month.  
<sup>b</sup> Same height at 2 p. m. on the 19th.

<sup>c</sup> Not corrected for temperature.

## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.61	10	9 a. m.	30.06	12	9 a. m.	29.14
Montreal .....	29.79	1	7 a. m.	30.22	12	2 p. m.	29.35
St. John's (a) .....	29.69	22	9 a. m.	29.95	18	9 a. m.	29.40
St. Martin .....	29.78	1	7 a. m.	30.24	12	2 p. m.	29.27
Toronto (b) .....	29.58	1	7 a. m.	30.06	12	2 p. m.	29.17
Maine .....	29.59	26	7 a. m.	30.04	12	9 p. m.	29.21
Carmel .....	29.80	26	7 a. m.	30.25	12	2 p. m.	29.25
Gardiner .....	29.80	26	2 p. m.	30.19	12	2 p. m.	29.21
Portland .....	29.90	26	7 a. m.	30.29	12	2 p. m.	29.32
Steuben .....	29.62	1	7 a. m.	c 30.02	12	2 p. m.	29.04
New Hampshire .. Concord .....	29.59	1	7 a. m.	30.07	12	2 p. m.	29.24
Vermont .....	29.59	1	7 a. m.	30.05	9	p. m.	29.08
Norwich .....	29.74	1	2 p. m.	30.22	12	2 p. m.	29.18
Massachusetts .. Amherst .....	29.88	1	7 a. m.	30.29	12	7 p. m.	29.34
Bridgewater (b) .....	29.90	1	Sunrise.	30.34	12	3 p. m.	29.33
Cambridge (b) .....	29.96	1	2 p. m.	30.36	12	9 p. m.	29.46
Nantucket .....	29.88	1	7 a. m.	30.28	12	9 p. m.	29.38
New Bedford .....	29.93	26	7 a. m.	30.37	6	9 p. m.	29.33
Newburyport .....	29.78	1	7 a. m.	30.20	12	2 p. m.	29.24
North Attleborough .....	28.80	26	7 a. m.	d 29.19	12	2 p. m.	28.25
Princeton .....	30.10	1	7 a. m.	30.46	12	2 p. m.	29.90
Westfield .....	29.23	1	7 a. m.	29.69	12	2 p. m.	28.69
Williamstown .....	29.45	26	7 a. m.	e 29.81	18	7 a. m.	29.07
Worcester .....	29.77	1	10 p. m.	30.26	12	1 p. m.	29.24
Rhode Island .. Providence (b) .....	29.59	8	9 p. m.	30.69	25	7 a. m.	29.26
Connecticut .....	28.87	26	7 a. m.	29.25	12	9 p. m.	28.41
Norwich .....	29.84	26	7 a. m.	30.25	12	1 p. m.	29.40
Pomfret .....	29.98	1	7 a. m.	30.46	21	7 a. m.	29.39
Wallingford (b) .....	29.30	1	7 a. m.	29.80	12	7 a. m.	28.81
New York .....	29.39	1	7 a. m.	29.84	12	2 p. m.	28.90
Blackwell's Island .....	30.14	1	7 a. m.	30.64	21	9 p. m.	29.57
Buffalo (b) .....	29.85	1	7 a. m.	f 30.34	21	2 p. m.	29.25
Canton .....	29.39	1	7 a. m.	29.88	22	2 p. m.	28.87
Fishkill Landing .....	28.38	26	7 a. m.	28.77	21	9 p. m.	27.90
Flatbush .....	29.94	1	7 a. m.	30.38	21	2 p. m.	29.35
Geneva .....	29.57	1	7 a. m.	30.01	22	2 p. m.	29.06
Liberty .....	29.23	1	2 p. m.	29.71	22	7 a. m.	28.78
New York city .....	28.84	1	7 a. m.	29.34	22	7 a. m.	g 28.39
North Salem .....	29.18	1	2 p. m.	29.59	22	Sunrise.	28.70
Oswego .....	29.42	1	7 a. m.	29.89	22	7 a. m.	28.97
Ovid .....	29.68	1	2 p. m.	30.11	12	9 p. m.	29.15
Penn Yan (b) .....	29.31	1	7 a. m.	29.88	21	9 p. m.	28.75
Rochester, [Pratt] .....	29.82	1	7 a. m.	30.28	21	9 p. m.	29.29
Sag Harbor .....	29.85	1	2 p. m.	30.36	21	2 p. m.	29.26
Spencertown .....	30.04	1	2 and 9	30.50	21	2 p. m.	29.48
New Jersey .....	29.88	1	7 a. m.	30.34	21	6 p. m.	29.31
Bloomfield .....	29.12	12	7 a. m.	29.91	3	2 p. m.	28.81
Burlington, [Frost] .....	29.14	1	7 a. m.	29.64	21	9 p. m.	28.55
Lambertville .....	29.82	1	7 a. m.	30.31	21	9 p. m.	29.19
Newark (h) .....	29.41	1	7 a. m.	i 29.89	21	9 p. m.	28.82
Pennsylvania .....	29.71	1	7 a. m.	30.19	21	9 p. m.	29.13
Bedford (b) .....	29.50	1	7 a. m.	30.03	21	9 p. m.	28.94
Carlisle .....	30.06	1	7 a. m.	i 30.53	21	2 p. m.	29.45
Chromedale .....	29.72	26	2 p. m.	30.11	21	2 p. m.	k 29.14
Gettysburg .....	29.78	1	7 a. m.	30.20	21	2 p. m.	29.24
Harrisburg .....	29.82	1	7 a. m.	30.27	21	9 p. m.	29.28
Lewisburg .....	28.89	1	7 a. m.	29.32	22	7 a. m.	28.48
Morrisville (j) .....							
Norristown .....							
North Whitehall .....							
Philadelphia .....							
Pittsburg .....							

a Observations taken at 9 a. m. and 9 p. m.

b See notes to table of thermometer for this month.

c Same height at 2 p. m. on the 26th, and at 9 p. m. on the 30th.

d Same height at 2 p. m. on the 26th.

e Same height at 2 p. m. on 1st, and at 9 p. m. on the 30th.

f Same height at 9 p. m. on the 1st.

g Same height at 2 p. m. on the 12th.

h Observations taken at 7 a. m. and 6 p. m.

i Same height at 2 p. m. on the 1st.

j Not corrected for temperature.

k Same height at 9 p. m. on the 21st.



## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Delaware.....Newark, [Martin] .....	29.76	1	7 a. m.	30.22	3	2 p. m.	29.05
Maryland.....Frederick .....	29.63	1	7 a. m.	30.14	21	9 p. m.	29.06
Dist. of Columbia.....Washington .....	30.01	12	2 p. m.	30.57	21	9 p. m.	29.43
Virginia.....Alexandria .....	29.97	1	7 a. m.	30.48	12	2 p. m.	29.40
Portsmouth .....	29.66	1	7 a. m.	30.30	15	2 p. m.	29.15
Winchester .....							
North Carolina.....Chapel Hill .....	29.43	1	2 p. m.	29.81	21	9 p. m.	29.13
Goldsborough .....	29.98	1	7 a. m.	30.38	22	7 a. m.	29.63
South Carolina.....All Saints .....	29.97	1	7 a. m.	<i>a</i> 30.32	21	2 p. m.	29.60
Camden .....	29.88	1	7 a. m.	30.28	21	2 p. m.	29.62
Charleston, [Johnson] .....	30.14	12	7 a. m.	30.37	1	7 a. m.	29.83
Charleston, [Dawson] .....				30.42			29.77
Edisto Island .....	30.06	27	2 p. m.	30.24	29	9 p. m.	29.84
St. John's ( <i>b</i> ) .....	30.15	26	2 p. m.	30.50	22	Sunrise.	29.74
Georgia.....Savannah .....	30.03	1	7 a. m.	30.36	21	2 p. m.	29.69
Sparta .....	29.38	1	7 a. m.	29.69	21	2 p. m.	29.12
Thomaston .....	29.41	27	7 a. m.	29.60	12	9 p. m.	29.17
Florida.....Atsena .....	30.14	13	7 a. m.	<i>c</i> 30.30	20	2 p. m.	29.85
Jacksonville .....	30.10	1	2 p. m.	30.35	19	9 p. m.	29.76
Salt Ponds ( <i>d</i> ) .....	29.73	13	2 p. m.	29.87	21	7 a. m.	29.53
Warrington .....	30.02	9	7 a. m.	<i>e</i> 30.22	22	9 p. m.	29.81
Alabama.....Auburn .....	29.36	1	7 a. m.	29.59	21	9 p. m.	29.09
Mississippi.....Columbus .....	29.78	9	7 a. m.	30.06	22	9 p. m.	29.43
Oxford .....	29.51	9	7 a. m.	29.75	22	2 p. m.	29.12
Texas.....New Braunfels ( <i>d</i> ) .....	28.76	10	7 a. m.	29.20	22	9 p. m.	28.48
Washington .....	30.01		2 p. m.	30.57		9 p. m.	29.43
Tennessee.....Glenwood .....	29.52	1	7 a. m.	29.79	22	9 p. m.	29.17
Kentucky.....Ballardsville .....	29.03	1	7 a. m.	29.34	15	2 p. m.	28.61
Paris .....	29.11	1	7 a. m.	29.50	12	2 p. m.	28.75
Springdale .....	29.43	10	7 a. m.	29.76	22	9 p. m.	29.12
Ohio.....Cincinnati, [Harper] .....	29.44	1	7 a. m.	29.85	22	2 p. m.	29.11
Cleveland .....	29.16	10	7 a. m.	29.54	22	7 a. m.	28.76
Dayton, [Fisher] .....	29.15	1	7 a. m.	29.58	22	2 p. m.	28.71
Germantown, [Groneweg] .....	29.17	1	7 a. m.	29.58	15	2 p. m.	28.84
Granville .....	28.92	1	7 a. m.	29.33	22	7 a. m.	<i>f</i> 28.53
Hillsborough .....	28.81	1	7 a. m.	29.21	12	2 p. m.	28.48
Oberlin .....	29.05	10	7 a. m.	29.51	12	2 p. m.	28.60
Urbana .....	28.72	10	2 p. m.	29.14	12	2 p. m.	28.36
Zanesville, [Holston] .....	29.09	1	7 a. m.	29.52	22	7 a. m.	28.75
Michigan.....Ann Arbor, [Woodruff] .....	29.05	10	7 a. m.	29.55	12	7 a. m.	28.60
Battle Creek .....	29.02	10	7 a. m.	29.48	12	7 a. m.	28.60
Detroit .....	29.48	10	7 a. m.	29.95	22	2 p. m.	29.06
Romeo, [Andrews] ( <i>b</i> ) .....	29.01	10	7 a. m.	29.44	12	7 a. m.	28.56
Indiana.....New Albany .....	29.49	1	7 a. m.	29.82	22	2 p. m.	29.21
New Harmony .....	29.60	10	7 a. m.	29.94	15	2 p. m.	29.25
Richmond .....	28.98	10	7 a. m.	29.40	12	2 p. m.	28.65
Illinois.....Manchester ( <i>b</i> ) .....	28.65	13	7 a. m.	29.12	15	2 p. m.	28.29
Upper Alton .....	29.38	10	7 a. m.	29.81	15	7 a. m.	29.00
Missouri.....St. Louis .....	29.39	10	7 a. m.	29.83	15	7 a. m.	29.00
Wisconsin.....Appleton .....	28.94	10	7 a. m.	29.46	2	2 p. m.	<i>g</i> 28.38
Beloit .....	29.11	10	7 a. m.	29.62	12	7 a. m.	28.60
Kenosha ( <i>h</i> ) .....	29.37						
Madison, [Schue] .....	28.99	10	7 a. m.	29.52	15	2 p. m.	28.42
Milwaukee, [Winkler] .....	29.19	10	7 a. m.	29.80	22	2 p. m.	28.42
Racine, [Seymour] ( <i>i</i> ) .....	29.30	10	9 a. m.	29.80	2	9 a. m.	28.86
Superior .....	29.24	19	2 p. m.	29.72	2	7 a. m.	28.67
Waukesha .....	29.06	10	7 a. m.	29.61	2	2 p. m.	28.34

*a* Same height at 2 p. m. on the 1st.*b* See notes to table of thermometer for this month.*c* Same height at 2 p. m. on the 13th.*d* Not corrected for temperature.*e* Same height at 2 p. m. on the 9th.*f* Same height at 2 p. m. on the 12th.*g* Same height at 9 p. m. on the 2d.*h* Observations very much interrupted.*i* Observations taken at 9 a. m. and 9 p. m.

## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Iowa.....Dubuque.....	29.16	10	7 a. m.	29.66	2	7 a. m.	28.61
.....Muscatine.....	29.35	9	9 p. m.	29.84	15	7 a. m.	28.85
.....Quasqueton (a).....	28.91	13	7 a. m.	29.55	2	7 a. m.	28.41
California.....Sacramento.....	29.98	2	7 a. m.	30.24	12	2 p. m.	29.67
.....Stockton (b).....	29.53	1	7 a. m.	<i>c</i> 29.72	12	7 a. m.	<i>d</i> 29.25
South America...Catharina Sophia, Surinam (a).....	29.75	5	2 p. m.	29.82	18	2 p. m.	29.67

*a* See notes to table of thermometer for this month.*b* Not corrected for temperature.*c* Same height at 7 a. m. on the 2d and 5th.*d* Same height at 2 and 9 p. m. on the 12th, and at 7 a. m. on the 13th.



## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.63	6	9 a. m.	29.95	28	9 a. m.	29.22
Montreal .....	29.70	1	7 a. m.	30.20	28	2 p. m.	29.14
St. Martin .....	29.70	1	7 a. m.	30.16	28	2 p. m.	29.09
Toronto (a) .....	29.59	5	10 p. m.	29.97	28	6 a. m.	29.12
Maine .....	29.52	14	7 a. m.	30.02	28	2 p. m.	29.10
Gardiner .....	29.72	14	7 a. m.	30.22	28	9 p. m.	29.20
Portland .....	29.75	1	7 a. m.	30.18	28	2 p. m.	29.21
Steuben .....	29.78	15	7 a. m.	30.22	28	9 p. m.	29.27
New Hampshire .. Concord (a) .....	29.55	14	7 a. m.	30.04	28	2 p. m.	29.01
Massachusetts .. Amherst .....	29.66	1	7 a. m.	30.14	28	2 p. m.	29.09
Bridgewater (a) .....	29.78	14	7 a. m.	30.33	28	7 p. m.	29.29
Cambridge .....	29.84	14	2 p. m.	30.35	28	2 p. m.	29.30
Nantucket .....	29.92	14	7 a. m.	30.37	18	9 p. m.	29.45
New Bedford .....	29.81	14	7 a. m.	30.29	28	2 p. m.	<sup>b</sup> 29.34
Newburyport .....	29.89	14	7 a. m.	30.39	28	2 p. m.	29.34
North Attleborough .....	29.70	14	7 a. m.	30.20	29	2 p. m.	29.15
Princeton .....	28.74	14	7 a. m.	29.23	28	2 p. m.	28.21
Westfield .....	30.07	1	7 a. m.	30.41	29	7 a. m.	29.88
Williamstown (a) .....	29.38	1	7 a. m.	29.63	28	2 p. m.	28.64
Worcester .....	29.36	14	7 a. m.	29.84	28	2 p. m.	28.91
Rhode Island .. Providence (a) .....	29.69	1	6 a. m.	30.20	28	1 p. m.	29.19
Connecticut .. Norwich .....	29.88	14	7 a. m.	30.44	1	7 a. m.	29.38
Pomfret .....	28.82	1	7 a. m.	29.27	28	2 p. m.	28.38
Wallingford .....	29.79	6	7 a. m.	30.31	28	2 p. m.	29.27
New York .. Blackwell's Island .....	29.91	22	7 a. m.	30.43	28	2 p. m.	29.40
Canton .....	29.35	1	7 a. m.	29.77	28	2 p. m.	28.83
Fishkill Landing .....	30.05	1	7 a. m.	30.55	28	2 p. m.	29.59
Flatbush .....	29.79	1	7 a. m.	30.26	28	2 p. m.	29.27
Geneva .....	29.34	-----	7 a. m.	29.72	-----	7 a. m.	28.82
New York city .....	29.91	14	7 a. m.	30.32	28	2 p. m.	29.40
North Salem .....	29.54	-----	7 a. m.	29.98	1	2 p. m.	29.04
Oswego .....	29.19	6	7 a. m.	29.60	28	7 a. m.	28.71
Ovid .....	28.80	6	7 a. m.	29.18	28	7 a. m.	28.31
Penn Yan (a) .....	29.20	6	Sunrise.	29.56	28	Sunrise.	28.71
Pompey Hill .....	28.15	-----	9 p. m.	28.47	-----	7 a. m.	27.73
Rochester, [Pratt] .....	29.39	5	9 p. m.	29.76	28	7 a. m.	28.94
Sag Harbor (a) .....	29.64	6	7 a. m.	<sup>c</sup> 30.03	■	7 a. m.	29.29
Spencertown .....	29.21	1	7 a. m.	29.65	28	2 p. m.	28.65
New Jersey .. Bloomfield .....	29.76	14	9 p. m.	30.23	28	2 p. m.	29.25
Burlington .....	29.79	6	7 a. m.	30.16	28	2 p. m.	29.38
Lambertville .....	29.99	1	7 and 2	30.35	28	2 p. m.	29.56
Newark (d) .....	29.82	6	7 a. m.	<sup>e</sup> 30.28	5	7 a. m.	29.25
Pennsylvania .. Bedford .....	29.06	14	7 a. m.	29.33	28	7 a. m.	28.70
Carlisle .....	29.11	6	7 a. m.	29.47	29	2 p. m.	28.65
Chromedale .....	29.77	1	7 a. m.	30.18	28	2 p. m.	29.32
Easton .....	29.60	22	7 a. m.	29.91	28	2 p. m.	29.29
Gettysburg .....	29.34	1	7 a. m.	29.71	28	7 a. m.	28.96
Harrisburg .....	29.66	■	7 a. m.	30.02	29	2 p. m.	29.24
Lewisburg .....	29.46	■	7 a. m.	29.85	28	7 a. m.	29.02
Morrisville (f) .....	30.03	1	7 a. m.	30.45	28	2 p. m.	29.55
Norristown .....	29.58	6	7 a. m.	30.03	28	2 p. m.	29.07
Philadelphia .....	29.79	1	7 a. m.	30.15	28	2 p. m.	29.39
Pittsburg .....	28.84	31	7 a. m.	<sup>g</sup> 29.12	29	7 a. m.	<sup>h</sup> 28.54
Somerset .....	27.59	22	7 a. m.	27.83	29	2 p. m.	27.28
Delaware .. Newark, [Martin] (a) .....	29.78	6	7 a. m.	30.10	28	7 a. m.	29.40
Maryland .. Frederick .....	29.59	6	7 a. m.	29.97	29	2 p. m.	29.18
Dist. of Columbia .. Washington .....	29.95	6	7 a. m.	30.34	29	2 p. m.	29.55
Virginia .. Alexandria .....	29.93	5	7 a. m.	30.28	28	7 a. m.	29.57

<sup>a</sup> See notes to table of thermometer for this month.<sup>b</sup> Same height at 9 p. m. on the 28th.<sup>c</sup> Same height at 2 p. m. on the 14th.<sup>d</sup> Observations taken at 7 a. m. and 6 p. m.<sup>e</sup> Same height at 6 p. m. on the 23d.<sup>f</sup> Not corrected for temperature.<sup>g</sup> Same height at 2 p. m. on the 31st.<sup>h</sup> Same height at 2 p. m. on the 29th.

## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Virginia ..... Portsmouth (a) .....	29.58	31	7 a. m.	b 29.90	29	7 a. m.	c 29.30
North Carolina..... Chapel Hill.....	29.37	31	7 a. m.	29.65	29	9 p. m.	29.14
..... Goldsborough .....	29.88	31	7 a. m.	30.20	28	2 p. m.	29.53
South Carolina..... All Saints .....	29.86	31	9 p. m.	30.16	19	7 a. m.	29.52
..... Camden .....	29.78	31	7 a. m.	30.07	19	2 p. m.	29.43
..... Charleston, [Dawson] .....				30.29			29.74
..... Charleston, [Johnson] .....	30.06	15	7 a. m.	30.33	5	7 a. m.	29.79
..... Edisto Island (d) .....	29.99	13	7 a. m.	30.10	18	9 p. m.	29.82
..... St. John's .....	30.05	31	2 p. m.	30.34	20	Sunrise.	29.75
Georgia..... Savannah .....	29.91	31	9 p. m.	30.17	18	2 p. m.	29.53
..... Sparta .....	29.27	14	7 a. m.	29.46	19	2 p. m.	28.99
..... Thomaston (d) .....	29.40	1	7 a. m.	e 29.60	21	7 a. m.	29.20
Florida..... Atsena (d) .....	29.74	31	9 p. m.	30.01	20	7 a. m.	29.46
..... Jacksonville.....	29.96	31	9 p. m.	30.21	18	2 p. m.	29.59
..... St. Augustine (d) .....	29.98	31	10 p. m.	30.21	18	2 p. m.	29.61
..... Salt Ponds (a) .....	29.62	0	2 p. m.	29.75	20	7 a. m.	29.37
..... Warrington .....	29.88	10	7 a. m.	30.03	19	2 p. m.	29.66
Alabama..... Auburn .....	29.23	31	9 p. m.	29.41	18	2 p. m.	28.92
..... Greensborough (d) .....	29.54	23	7 a. m.	29.74	20	2 p. m.	29.39
Mississippi..... Columbus .....	29.75	31	7 a. m.	29.91	17	2 p. m.	29.46
..... Oxford .....	29.44	31	7 a. m.	29.67	17	2 p. m.	29.22
Texas..... New Braunfels (a) .....	28.70	8	2 p. m.	28.94	4	9 p. m.	28.44
Tennessee..... Glenwood .....	29.46	31	7 a. m.	29.71	17	2 p. m.	29.12
Kentucky..... Ballardsville .....	29.00	31	9 p. m.	29.31	17	9 p. m.	28.73
..... Paris .....	29.07	31	2 p. m.	f 29.31	18	7 a. m.	g 28.81
..... Springdale .....	29.40	31	2 p. m.	29.63	17	9 p. m.	29.12
Ohio..... Bellefontaine .....	29.76	5	7 a. m.	29.84	19	2 p. m.	29.55
..... Cincinnati, [Harper] .....	29.40	31	7 a. m.	29.73	1	9 p. m.	29.11
..... Cleveland .....	29.16	22	2 p. m.	29.40	29	7 a. m.	h 28.86
..... Dayton, [Fisher] .....	29.13	31	7 a. m.	29.41	17	2 p. m.	28.82
..... Germantown, [Groneweg] .....	29.14	31	7 a. m.	29.43	17	2 p. m.	28.82
..... Granville .....	28.86	31	7 a. m.	29.18	28	2 p. m.	28.51
..... Hillsborough .....	28.78	31	7 a. m.	29.06	17	2 p. m.	28.50
..... Oberlin .....	29.06	31	7 a. m.	29.31	27	9 p. m.	28.70
..... Urbana .....	28.68	31	7 a. m.	28.93	29	7 a. m.	i 28.40
..... Zanesville, [Holston] .....	29.06	31	2 p. m.	29.33	29	7 a. m.	h 28.79
Michigan..... Ann Arbor, [Woodruff] .....	29.03	4	7 a. m.	29.32	27	2 p. m.	28.62
..... Detroit .....	29.49	28	7 a. m.	j 29.73	27	7 a. m.	29.16
..... Romeo, [Andrews] (d) .....	29.02	21	9 p. m.	k 29.29	27	9 p. m.	28.62
Indiana..... New Albany .....	29.43	31	9 p. m.	29.66	17	9 p. m.	29.12
..... New Harmony .....	29.56	31	7 a. m.	29.81	17	2 p. m.	29.21
..... Richmond .....	28.97	31	2 p. m.	29.21	17	2 p. m.	28.68
Illinois..... Manchester (d) .....	28.68	31	7 a. m.	l 28.96	1	7 a. m.	m 28.35
..... Upper Alton .....	29.39	26	7 a. m.	29.67	1	7 a. m.	29.03
Missouri..... St. Louis .....	29.45	31	7 a. m.	29.72	1	7 a. m.	29.09
Wisconsin..... Appleton .....	29.00	25	7 a. m.	29.26	27	2 p. m.	28.59
..... Beloit .....	29.14	25	7 a. m.	29.39	1	9 p. m.	28.73
..... Kenosha (n) .....	29.43						
..... Manitowoc .....	29.72			29.99			29.26
..... Milwaukee, [Winkler] .....	29.25	25	7 a. m.	29.49	2	7 a. m.	o 28.83
..... Racine, [Seymour] (p) .....	29.32	25	9 a. m.	29.50	1	9 p. m.	28.95
..... Superior .....	29.32	25	7 a. m.	q 29.60	1	9 p. m.	29.01
..... Waukesha .....	29.12	11	7 a. m.	29.47	1	7 a. m.	o 28.70

a Not corrected for temperature.

b Same height at 2 p. m. on the 31st.

c Same height at 7 a. m., 2 and 9 p. m. on the 3d; 2 and 9 p. m. on the 28th, and 2 p. m. on the 29th.

d See notes to table of thermometer for this month.

e Same height at 2 and 9 p. m. on the 1st.

f Same height at 9 p. m. on the 31st.

g Same height at 9 p. m. on the 17th and 2 p. m. on the 18th.

h Same height at 9 p. m. on the 27th.

i Same height at 9 p. m. on the 17th.

j Same height at 7 a. m. on the 22d and at 2 p. m. on the 5th.

k Same height at 9 p. m. on the 4th.

l Same height at 7 a. m. on the 26th.

m Same height at 1 p. m. on the 1st.

n Observations very much interrupted.

o Same height at 9 p. m. on the 1st.

p Observations taken at 9 a. m. and 9 p. m.

q Same height at 7 a. m. on the 4th.



## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Iowa ----- Dubuque -----	29.21	30	7 a. m.	29.46	1	9 p. m.	28.75
----- Muscatine -----	29.38	26	7 a. m.	29.61	1	2 p. m.	29.00
----- Quasqueton (a) -----	29.05	25	7 a. m.	29.26	14	9 p. m.	28.83
California ----- Sacramento -----	29.89	31	7 a. m.	30.08	19	2 p. m.	29.65
----- Stockton (b) -----	29.45	11	7 a. m.	c 29.60	19	2 p. m.	d 29.20
South America --- Catharina Sophia, Surinam (a) ---	29.75	25	2 p. m.	29.83	7	6 p. m.	29.65

a See notes to table of thermometer for this month.

b Not corrected for temperature.

c Same height at 2 and 9 p. m. on the 20; 7 a. m. and 2 and 9 p. m. on the 27th; 7 a. m. and 2 and 9 p. m. on the 28th, and 7 a. m. and 2 and 9 p. m. on the 31st.

d Same height at 9 p. m. on the 21st.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
British America . Hamilton (a) . . . . .	29.62	21	9 p. m.	29.87	19	9 p. m.	29.35
Montreal . . . . .	29.79	4	7 a. m.	30.20	4	9 p. m.	29.22
St. John's (a) . . . . .	29.65 <sup>2</sup>						
St. Martin . . . . .	29.65	5	9 p. m.	30.01	29	2 p. m.	29.20
Toronto (b) . . . . .	29.55	23	6 a. m.	29.78	29	2 p. m.	29.21
Maine . . . . . Carmel (b) . . . . .	29.58	6	7 a. m.	30.05	29	9 p. m.	29.18
Gardiner . . . . .	29.72	4	7 a. m.	30.17	29	2 p. m.	29.33
Portland . . . . .	29.77	6	7 a. m.	30.22	29	2 p. m.	29.36
Steuben . . . . .	29.84	6	7 a. m.	30.36	30	7 a. m.	<sup>c</sup> 29.43
New Hampshire . Concord . . . . .	29.57	4	7 a. m.	29.99	29	2 p. m.	29.19
Vermont . . . . . Norwich . . . . .	29.57	6	7 a. m.	29.98	29	2 p. m.	29.18
Massachusetts . Amherst . . . . .	29.69	4	7 a. m.	30.05	29	2 p. m.	29.32
Bridgewater (b) . . . . .	29.79	1	7 a. m.	30.24	29	7 p. m.	29.45
Cambridge (b) . . . . .	29.88	6	Sunrise	30.28	30	Sunrise	29.53
Nantucket . . . . .	29.93	6	7 a. m.	30.23	29	9 p. m.	29.64
New Bedford . . . . .	29.84	4	7 a. m.	30.18	29	9 p. m.	29.50
Newburyport . . . . .	29.89	4	7 a. m.	30.33	30	2 p. m.	29.47
North Attleborough . . . . .	29.74	4	7 a. m.	30.13	29	2 p. m.	29.40
Princeton . . . . .	28.80	4	7 a. m.	29.14	29	9 p. m.	28.48
Westfield . . . . .	30.04	4	7 a. m.	30.33	26	2 p. m.	29.90
Williamstown . . . . .	29.20	4	6 <sup>1</sup> a. m.	29.53	29	2 p. m.	28.88
Worcester . . . . .	29.41	5	9 p. m.	29.74	29	9 p. m.	29.10
Rhode Island . . Providence (b) . . . . .	29.71	4	6 a. m.	30.08	29	1 p. m.	29.38
Connecticut . . . Norwich . . . . .	29.91	5	9 p. m.	30.25	29	2 p. m.	29.58
Pomfret . . . . .	28.86	4	7 a. m.	29.17	29	9 p. m.	28.56
Wallingford . . . . .	29.81	4	7 a. m.	<sup>d</sup> 30.13	19	9 p. m.	29.49
New York . . . . Blackwell's Island . . . . .	29.97	1	7 a. m.	30.24	29	9 p. m.	29.68
Canton . . . . .	29.33	4	7 a. m.	<sup>e</sup> 29.59	29	9 p. m.	28.97
Flatbush . . . . .	29.80	1	7 a. m.	30.12	29	9 p. m.	29.50
Geneva . . . . .	29.34		2 p. m.	29.54		2 p. m.	29.03
Lowville (f) . . . . .	28.98		7 a. m.	29.91		2 p. m.	28.64
New York city . . . . .	29.94	1	7 a. m.	30.19	29	9 p. m.	29.66
North Salem . . . . .	29.56		7 a. m.	29.93		9 p. m.	29.25
Oswego . . . . .	29.19	23	7 a. m.	<sup>g</sup> 29.43	29	2 p. m.	28.89
Ovid . . . . .	28.82	6	7 a. m.	29.01	30	7 a. m.	28.60
Penn Yan (b) . . . . .	29.22	6	2 p. m.	29.44	29	9 p. m.	28.95
Pompey Hill . . . . .	28.20		2 p. m.	28.44		2 p. m.	27.96
Rochester, [Pratt] . . . . .	29.37	23	7 a. m.	29.59	29	2 p. m.	29.09
Spencertown . . . . .	29.23	6	7 a. m.	<sup>e</sup> 29.58	29	2 p. m.	<sup>h</sup> 28.95
Utica . . . . .	29.34	6	7 a. m.	29.63	29	2 p. m.	29.03
New Jersey . . . Bloomfield . . . . .	29.78	4	7 a. m.	<sup>e</sup> 30.04	30	2 p. m.	29.52
Burlington . . . . .	29.78	1	7 a. m.	30.08	30	7 a. m.	<sup>i</sup> 29.56
Lambertville . . . . .	30.01	1	7 a. m.	30.24	29	9 p. m.	29.82
Newark (j) . . . . .	29.85	1	7 a. m.	30.12	8	7 a. m.	29.46
Pennsylvania . . Bedford . . . . .	29.07	1	7 a. m.	29.31	9	7 a. m.	28.92
Canonsburg . . . . .	28.71	2	2 p. m.	29.35	8	2 p. m.	28.42
Carlisle . . . . .	29.14	1	7 a. m.	29.37	29	2 p. m.	28.93
Chromedale . . . . .	29.78	1	7 a. m.	30.07	29	9 p. m.	29.53
Easton . . . . .	29.69	1	7 a. m.	29.92	14	9 p. m.	29.51
Gettysburg . . . . .	29.37	1	7 a. m.	29.63	29	9 p. m.	29.15
Harrisburg . . . . .	29.67	1	7 a. m.	29.94	29	9 p. m.	29.41
Lewisburg . . . . .	29.46	1	7 a. m.	29.73	29	2 p. m.	29.22
Morrisville (k) . . . . .	30.03	1	7 a. m.	30.30	14	2 p. m.	<sup>i</sup> 29.80
Norristown . . . . .	29.57	21	9 p. m.	29.83	9	2 p. m.	<sup>l</sup> 29.37
Pittsburg . . . . .	28.89	1	7 a. m.	29.08	8	7 a. m.	<sup>m</sup> 28.71
Somerset . . . . .	27.64	22	7 a. m.	27.85	8	2 p. m.	27.44

<sup>a</sup> Observations taken at 9 a. m. and 9 p. m.<sup>b</sup> See notes to table of thermometer for this month.<sup>c</sup> Same height at 2 p. m. on the 16th.<sup>d</sup> Same height at 9 p. m. on the 5th.<sup>e</sup> Same height at 2 p. m. on the 6th.<sup>f</sup> For the last half of the month only.<sup>g</sup> Same height at 2 p. m. and 9 p. m. on the 23d.<sup>h</sup> Same height at 2 p. m. on the 30th.<sup>i</sup> Same height at 9 p. m. on the 29th.<sup>j</sup> Observations taken at 7 a. m. and 6 p. m.<sup>k</sup> Not corrected for temperature.<sup>l</sup> Same height at 9 p. m. on the 14th.<sup>m</sup> Same height at 2 p. m. on the 8th and at 9 p. m. on the 29th.



## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Maryland.....Frederick.....	29.64	1	7 a. m.	29.88	9	2 p. m.	29.41
Dist. of Columbia..Washington.....	29.96	1	7 a. m.	30.24	14	2 p. m.	29.72
Virginia.....Alexandria.....	29.94	1	7 a. m.	30.21	14	9 p. m.	29.74
Portsmouth.....	29.78	1	7 a. m.	30.14	14	7 a. m.	<i>a</i> 29.54
North Carolina.....Chapel Hill.....	29.40	1	2 p. m.	29.69	9	2 p. m.	29.18
South Carolina.....All Saints.....	29.94	1	7 a. m.	<i>b</i> 30.20	15	7 a. m.	29.74
Camden.....	29.82	1	7 a. m.	30.09	14	9 p. m.	29.63
Charleston, [Johnson].....	30.08	28	7 a. m.	30.31	11	7 a. m.	29.86
Charleston, [Dawson].....				30.40			29.97
Edisto Island ( <i>c</i> ).....	30.05	1	6 a. m.	<i>d</i> 30.23	15	6 a. m.	29.92
St. John's ( <i>c</i> ).....	30.13	21	2 p. m.	30.38	15	Sunrise	29.90
Georgia.....Savannah.....	29.99	22	7 a. m.	30.25	9	2 p. m.	29.82
Sparta.....	29.33	22	7 a. m.	29.53	9	2 p. m.	29.18
Thomaston ( <i>c</i> ).....	29.47	29	7 a. m.	29.65	12	7 a. m.	29.30
Florida.....Atsena.....	29.92	22	2 p. m.	30.13	15	7 a. m.	29.80
Jacksonville.....	30.04	22	7 a. m.	30.30	15	9 p. m.	29.88
St. Augustine.....	30.11	22	7 a. m.	30.38	14	9 p. m.	29.94
Salt Ponds ( <i>e</i> ).....	29.74	22	2 p. m.	29.90	11	7 a. m.	29.66
Warrington.....	29.98	22	2 p. m.	30.21	10	9 p. m.	<i>f</i> 29.83
Alabama.....Auburn.....	29.33	22	7 a. m.	29.59	9	2 p. m.	<i>g</i> 29.16
Greensborough.....	29.61	22	7 a. m.	29.87	9	9 p. m.	29.40
Mississippi.....Columbus.....	29.75	22	7 a. m.	30.03	9	9 p. m.	29.55
Oxford.....	29.50	22	7 a. m.	29.75	7	9 p. m.	29.28
Texas.....New Braunfels ( <i>e</i> ).....	28.65	22	7 a. m.	28.88	9	7 a. m.	<i>h</i> 28.53
Tennessee.....Glenwood.....	29.52	22	7 a. m.	29.80	9	7 a. m.	29.30
Walnut Grove ( <i>c</i> ).....	28.54	22	7 a. m.	28.66	22	2 p. m.	28.44
Kentucky.....Ballardsville.....	29.05	1	9 p. m.	29.29	9	2 p. m.	28.88
Paris.....	29.13	22	7 a. m.	29.38	8	2 p. m.	28.94
Springdale.....	29.47	22	7 a. m.	<i>i</i> 29.70	9	7 a. m.	29.29
Ohio.....Cincinnati, [Harper].....	29.45	1	7 a. m.	29.71	29	2 p. m.	29.24
Cleveland.....	29.23	22	7 a. m.	<i>j</i> 29.44	13	2 p. m.	29.04
Dayton, [Fisher].....	29.18	22	7 a. m.	29.40	12	7 a. m.	28.90
Germantown, [Groneweg].....	29.16	22	7 a. m.	29.41	29	2 p. m.	28.96
Germantown, [Binkerd].....	29.11	1	7 a. m.	29.47	29	2 p. m.	28.93
Granville.....	28.93	22	7 a. m.	29.16	8	2 p. m.	28.66
Hillsborough.....	28.82	22	7 a. m.	29.07	8	2 p. m.	<i>k</i> 28.67
Oberlin.....	29.05	22	7 a. m.	29.24	29	2 p. m.	28.80
Urbana.....	28.71	22	7 a. m.	28.94	8	2 p. m.	28.52
Zanesville, [Holston].....	29.09	1	7 a. m.	29.30	8	7 a. m.	28.89
Michigan.....Ann Arbor, [Woodruff].....	29.00	21	2 p. m.	29.27	29	2 p. m.	28.77
Battle Creek.....	29.01	22	7 a. m.	29.22	29	2 p. m.	28.79
Detroit.....	29.45	4	7 a. m.	29.75	29	9 p. m.	29.17
Romeo, [Andrews].....	28.97	1	9 p. m.	29.16	29	9 p. m.	28.70
Indiana.....New Albany.....	29.46	22	7 a. m.	29.69	9	7 a. m.	<i>l</i> 29.30
New Harmony.....	29.60	22	7 a. m.	29.85	9	7 a. m.	29.38
Illinois.....Manchester.....	28.67	22	7 a. m.	28.87	29	2 p. m.	<i>m</i> 28.49
Upper Alton.....	29.39	22	7 a. m.	29.62	28	2 p. m.	29.15
Missouri.....Palmyra.....	29.34	22	9 a. m.	29.55	29	Sunrise	<i>n</i> 29.11
St. Louis.....	29.46	22	7 a. m.	29.71	8	9 p. m.	29.26
Wisconsin.....Appleton.....	28.89	30	9 p. m.	29.14	29	2 p. m.	<i>n</i> 28.58
Beloit.....	29.11	30	9 p. m.	29.32	29	2 p. m.	28.84
Kenosha ( <i>o</i> ).....	29.41						
Madison, [Schue].....	28.95	30	9 p. m.	29.18	28	9 p. m.	28.67
Milwaukee, [Winkler].....	29.20	30	9 p. m.	29.42	29	2 p. m.	<i>n</i> 28.95

*a* Same height at 2 p. m. on the 14th.*b* Same height at 2 p. m. and 9 p. m. on the 1st.*c* See notes to table of thermometer for this month.*d* Same height at 6 a. m. on the 22d.*e* Not corrected for temperature.*f* Same height at 9 p. m. on the 11th.*g* Same height at 9 p. m. on the 9th.*h* Same height at 9 p. m. on the 11th and at 9 p. m. on the 8th.*i* Same height at 2 p. m. on the 21st.*j* Same height at 9 p. m. on the 21st.*k* Same height at 9 p. m. on the 7th.*l* Same height at 2 p. m. on the 9th.*m* Same height at 9 p. m. on the 8th.*n* Same height at 9 p. m. on the 28th.*o* Observations very much interrupted.

## No. 7.--BAROMETER, CORRECTED TO 32° F., JUNE, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Wisconsin ----- Racine, [Seymour] (a) -----	29.27	-----	9 p. m.	29.49	-----	9 p. m.	29.07
Superior -----	29.18	22	2 p. m.	29.56	29	7 a. m.	28.74
Iowa ----- Dubuque -----	29.18	30	9 p. m.	29.38	29	2 p. m.	28.82
Muscatine -----	29.35	1	7 a. m.	29.70	29	7 a. m.	29.12
Quasqueton (b) -----	28.99	22	7 a. m.	29.17	3	2 p. m.	28.83
California ----- Sacramento -----	29.85	2	7 a. m.	30.12	23	9 p. m.	29.63
Stockton (c) -----	29.45	7	7 a. m.	d 29.70	20	2 p. m.	e 29.25
South America --- Catharina Sophia, Surinam (b) ---	29.75	13	6 a. m.	29.83	19	6 p. m.	29.67
Colonia Tovar, Venezuela (b) -----	23.93	28	7 a. m.	24.00	24	2 p. m.	23.88

a Observations taken at 9 a. m. and 9 p. m.

b See notes to table of thermometer for this month.

c Not corrected for temperature.

d Same height at 2 p. m. on the 2d.

e Same height at 2 p. m. and 9 p. m. on the 15th and at 9 p. m. on the 20th.



## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton (a).....	29.69	22	9 a. m.	29.91	12	9 a. m.	29.37
Montreal.....	29.83	9	7 a. m.	30.10	18	2 p. m.	29.54
St. John's (a).....	29.70	31	9 a. m.	29.86	13	9 p. m.	29.34
St. Martin.....	29.67	22	9 p. m.	29.99	18	2 p. m.	29.35
Toronto (b).....	29.59	22	6 a. m.	29.84	12	2 p. m.	29.24
Maine.....Carmel.....	29.50	22	9 p. m.	29.77	19	2 p. m.	29.25
Gardiner.....	29.70	9	7 a. m.	c 30.00	19	7 a. m.	29.41
Portland.....	29.77	9	9 p. m.	30.08	19	2 p. m.	29.47
Steuben.....	29.80	9	7 a. m.	30.15	1	7 a. m.	29.41
New Hampshire—Concord.....	29.58	2	7 a. m.	29.84	18	9 p. m.	29.27
Vermont—Shelburn (d).....	29.47	22	7 a. m.	29.78	18	2 p. m.	29.13
Massachusetts—Amherst.....	29.70	22	7 a. m.	29.95	12	2 p. m.	29.39
Bridgewater (b).....	29.80	22	7 a. m.	30.09	18	7 p. m.	29.51
Cambridge (b).....	29.88	22	7 a. m.	30.13	18	2 p. m.	29.56
Nantucket.....	29.93	23	7 a. m.	30.18	4	2 p. m.	29.64
New Bedford.....	29.85	22	9 p. m.	30.12	4	2 p. m.	29.56
Newburyport.....	29.90	22	7 a. m.	30.19	18	9 p. m.	29.60
North Attleborough.....	29.76	23	7 a. m.	e 30.02	12	2 p. m.	29.45
Princeton.....	28.82	22	7 a. m.	e 29.06	3	9 p. m.	28.46
Westfield.....	30.07	22	7 a. m.	f 30.24	4	7 a. m.	g 29.99
Williamstown (b).....	29.24	22	6½ a. m.	29.49	4	6½ a. m.	28.97
Worcester.....	29.42	22	7 a. m.	29.66	12	2 p. m.	29.15
Rhode Island—Providence (b).....	29.76	24	6 a. m.	29.99	4	1 p. m.	29.47
Connecticut—Norwich.....	29.93	22	9 p. m.	30.18	12	7 a. m.	h 29.62
Pomfret.....	28.88	23	7 a. m.	29.11	6	2 p. m.	28.59
Wallingford.....	29.83	2	7 a. m.	30.07	12	7 a. m.	29.50
New York—Beverly (d).....	29.73	21	2 p. m.	30.20	12	7 a. m.	29.43
Blackwell's Island.....	29.99	22	7 a. m.	e 30.23	12	7 a. m.	29.66
Clinton.....	28.93	23	7 a. m.	29.14	12	2 p. m.	28.67
Flatbush.....	29.80	23	7 a. m.	30.09	14	7 a. m.	29.33
Fordham.....	29.73	23	7 a. m.	29.97	12	7 a. m.	29.39
Geneva.....	29.39	-----	7 a. m.	29.61	-----	2 p. m.	29.03
Lowville.....	29.03	-----	7 a. m.	29.24	-----	2 p. m.	28.78
New York city.....	29.96	23	7 a. m.	30.16	12	7 a. m.	29.63
North Salem.....	29.58	-----	9 p. m.	29.91	-----	7 a. m.	29.24
Oswego.....	29.26	1	9 p. m.	29.49	3	9 p. m.	29.02
Ovid.....	28.87	24	7 a. m.	29.11	12	2 p. m.	28.52
Penn Yan (b).....	29.27	22	9 p. m.	29.51	12	2 p. m.	28.94
Pompey Hill.....	28.26	-----	9 p. m.	28.47	-----	2 p. m.	28.00
Rochester, [Pratt].....	29.44	1	7 a. m.	29.66	12	2 p. m.	29.15
Sag Harbor.....	29.64	23	7 a. m.	i 29.88	12	7 a. m.	29.31
Spencertown.....	29.26	22	7 a. m.	29.50	4	7 a. m.	28.98
Utica.....	29.37	22	7 a. m.	29.63	12	2 p. m.	29.12
New Jersey—Bloomfield.....	29.79	23	7 a. m.	30.03	12	7 a. m.	29.46
Burlington, [Schmidt].....	29.80	24	7 a. m.	30.04	12	7 a. m.	29.53
Lambertville.....	30.04	24	7 and 2	30.24	12	7 a. m.	29.73
Newark (j).....	29.85	23	7 a. m.	k 30.09	12	7 a. m.	29.52
Pennsylvania—Bedford.....	29.12	22	7 a. m.	29.40	12	2 p. m.	28.83
Canonsburg.....	28.79	22	7 a. m.	29.05	12	2 p. m.	28.50
Carlisle.....	29.19	24	7 a. m.	29.42	12	2 p. m.	28.90
Chromedale.....	29.81	24	7 a. m.	30.05	4	7 a. m.	29.53
Easton.....	29.72	23	7 a. m.	29.94	12	2 p. m.	29.46
Gettysburg.....	29.42	22	7 a. m.	l 29.65	12	2 p. m.	29.12
Harrisburg.....	29.72	23	7 a. m.	m 29.93	12	2 p. m.	29.46
Lewisburg.....	29.51	23	7 a. m.	29.77	12	2 p. m.	29.21
Morrisville (n).....	30.06	22	7 a. m.	o 30.27	12	7 a. m.	29.75

a Observations taken at 7 a. m. and 9 p. m.

b See notes to table of thermometer for this month.

c Same height at 9 p. m. on the 8th of this month.

d For the last 23 days of the month only.

e Same height at 9 p. m. on the 22d.

f Same height at 7 a. m. on the 23d.

g Same height at 7 a. m. on the 13th, and 7 a. m. on the 31st.

h Same height at 9 p. m. on the 12th.

i Same height at 9 p. m. on the 23d.

j Observations taken at 7 a. m. and 6 p. m.

k Same height at 7 a. m. on the 2d.

l Same height at 7 a. m. on the 23d and 24th.

m Same height at 7 a. m. on the 24th.

n Not corrected for temperature.

o Same height at 2 p. m. on the 22d.

## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Norristown.....	29.72	23	7 a. m.	29.98	12	7 a. m.	29.41
Philadelphia.....	29.71	2	7 a. m.	30.00	30	2 p. m.	29.45
Pittsburg.....	28.94	21	7 a. m.	<i>a</i> 29.16	12	2 p. m.	28.65
Maryland.....Frederick.....	29.69	24	7 a. m.	29.95	12	2 p. m.	29.40
Dist. of Columbia.....Washington.....	29.99	24	7 a. m.	30.25	12	2 p. m.	29.71
Virginia.....Alexandria.....	29.97	24	7 a. m.	30.22	4	7 a. m.	29.71
Portsmouth.....	30.03	21	7 a. m.	<i>b</i> 30.19	4	7 a. m.	29.74
North Carolina.....Chapel Hill.....	29.43	24	7 a. m.	29.65	12	2 p. m.	29.18
South Carolina.....All Saints.....	29.95	23	2 p. m.	30.18	12	2 p. m.	29.71
Camden.....	29.84	22	7 a. m.	30.06	12	2 p. m.	29.56
Charleston, [Johnson].....	30.17	22	7 a. m.	<i>c</i> 30.35	12	7 a. m.	29.95
Charleston, [Dawson].....				30.36			29.95
St. John's ( <i>d</i> ).....	30.16	22	2 p. m.	30.37	12	Sunrise.	29.88
Georgia.....Savannah.....	30.00	27	7 a. m.	30.20	12	2 p. m.	29.75
Sparta.....	29.34	27	7 a. m.	29.52	12	2 p. m.	29.14
Thomaston.....	29.29	22	7 a. m.	<i>e</i> 29.48	11	2 p. m.	<i>f</i> 29.05
Florida.....Atsena.....	29.94	29	9 p. m.	30.15	11	9 p. m.	29.66
Jacksonville.....	30.09	27	7 a. m.	30.32	11	2 p. m.	29.81
St. Augustine.....	30.12	27	7 a. m.	30.33	11	2 p. m.	29.84
Salt Ponds.....	29.77	28	2 p. m.	29.87	8	7 a. m.	29.64
Warrington.....	30.00	27	2 p. m.	30.20	11	9 p. m.	29.73
Alabama.....Auburn.....	29.32	22	7 a. m.	<i>g</i> 29.48	12	2 p. m.	29.04
Greensborough.....	29.62	27	7 a. m.	29.81	12	9 p. m.	29.34
Mississippi.....Columbus.....	29.78	27	7 a. m.	29.96	11	9 p. m.	29.52
Texas.....New Braunfels ( <i>h</i> ).....	28.64	24	7 a. m.	<i>i</i> 28.80	10	2 p. m.	<i>j</i> 28.53
Tennessee.....Glenwood.....	29.55	21	7 a. m.	29.76	11	9 p. m.	<i>k</i> 29.23
Walnut Grove ( <i>d</i> ).....	28.42	24	7 a. m.	28.65	12	2 p. m.	28.16
Kentucky.....Ballardsville.....	29.07	21	2 p. m.	29.27	11	9 p. m.	28.76
Millersburg.....	29.32	23	9 p. m.	29.55	11	9 p. m.	29.07
Paris.....	29.16	22	7 a. m.	29.41	11	2 p. m.	<i>l</i> 28.84
Springdale.....	29.37	22	9 p. m.	29.71	11	9 p. m.	29.04
Ohio.....Cincinnati, [Harper].....	29.29	1	7 a. m.	29.62	12	2 p. m.	28.88
Cleveland.....	29.30	23	2 p. m.	29.50	12	7 a. m.	28.97
Dayton, [Fisher].....	29.20	21	7 a. m.	29.45	12	7 a. m.	28.87
Germantown, [Groneweg].....	29.18	21	7 a. m.	29.47	11	2 p. m.	28.85
Germantown, [Binkerd].....	29.11	21	7 a. m.	29.37	12	7 a. m.	28.80
Granville.....	28.98	21	7 a. m.	29.22	11	9 p. m.	28.54
Hillsborough.....	28.87	21	7 a. m.	<i>m</i> 29.10	11	9 p. m.	28.53
Oberlin.....	29.21	24	7 a. m.	29.35	12	7 a. m.	28.63
Urbana.....	28.78	20	9 p. m.	29.03	12	7 a. m.	28.42
Michigan.....Battle Creek.....	29.08	21	7 a. m.	29.37	12	7 a. m.	28.68
Detroit.....	29.52	24	7 a. m.	<i>n</i> 29.85	12	7 a. m.	<i>o</i> 29.09
Romeo, [Andrews] ( <i>d</i> ).....	29.04	21	9 p. m.	29.32	12	7 a. m.	28.61
Indiana.....New Harmony.....	29.62	21	7 a. m.	29.88	11	9 p. m.	29.30
Richmond.....	28.96	21	7 a. m.	29.26	11	2 p. m.	28.66
Illinois.....Manchester ( <i>d</i> ).....	28.70	21	7 a. m.	<i>p</i> 28.95	11	7 a. m.	28.36
Upper Alton.....	29.44	21	7 a. m.	29.70	11	2 p. m.	29.11
Missouri.....Palmyra.....	29.37	20	9 a. m.	<i>q</i> 29.64	11	Sunrise.	<i>r</i> 29.05
St. Louis.....	29.51	19	7 a. m.	29.77	12	7 a. m.	29.18
Wisconsin.....Appleton.....	28.96	20	7 a. m.	29.27	12	7 a. m.	<i>l</i> 28.59
Beloit.....	29.17	20	7 a. m.	29.49	11	2 p. m.	28.75
Kenosha ( <i>s</i> ).....	29.47						

*a* Same height at 2 p. m. on the 21st.*b* Same height at 9 p. m. on the 19th.*c* Same height at 7 a. m. on the 23d, 28th, and 29th.*d* See notes to table of thermometer for this month.*e* Same height at 7 a. m. on the 23d, and at 7 a. m. on the 24th.*f* Same height at 2 p. m. on the 13th.*g* Same height at 7 a. m. on the 28th.*h* Not corrected for temperature.*i* Same height at 7 a. m. on the 25th.*j* Same height at 2 and 9 p. m. on the 11th, 12th, and 13th.*k* Same height at 2 p. m. on the 11th.*l* Same height at 9 p. m. on the 11th.*m* Same height at 7 a. m. on the 23d.*n* Same height at 7 a. m. on the 19th.*o* Same height at 7 a. m. on the 27th.*p* Same height at 7 a. m. on the 23d.*q* Same height at 7 a. m. on the 21st.*r* Same height at 2 p. m. on the 11th and 19th.*s* Observations very much interrupted.



## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Wisconsin.....							
Madison, [Schue].....	29.03	20	7 a. m.	<i>a</i> 29.34	11	2 p. m.	28.61
Milwaukee, [Winkler].....	29.28	20	7 a. m.	<i>b</i> 29.59	11	9 p. m.	28.87
Racine, [Seymour] ( <i>c</i> ).....	29.33	20	9 a. m.	29.63	11	9 a. m.	28.97
Superior.....	29.24	20	7 a. m.	29.56	17	7 a. m.	28.95
Waukesha.....	29.10	20	2 p. m.	29.48	29	2 p. m.	28.66
Iowa.....							
Muscatine.....	29.44	21	7 a. m.	<i>d</i> 29.67	11	7 a. m.	<i>e</i> 29.13
California.....							
Sacramento.....	29.84	22	7 a. m.	30.04	8	2 p. m.	<i>f</i> 29.71
Stockton.....	29.42	5	7 a. m.	29.60	8	7 a. m.	<i>g</i> 29.30
South America.....							
Catharina Sophia, Surinam ( <i>h</i> ).....	29.77	13	2 p. m.	<i>i</i> 29.82	1	2 p. m.	<i>j</i> 29.69
Colonia Tovar, Venezuela.....	23.93	17	7 a. m.	23.99	1	2 p. m.	23.87

*a* Same height at 2 p. m. on the 20th.*b* Same height at 9 p. m. on the 21st.*c* Observations taken at 9 a. m. and 9 p. m.*d* Same height at 7 a. m. on the 22d.*e* Same height at 2 and 9 p. m. on the 11th.*f* Same height at 9 p. m. on the 7th.*g* Same height at 2 and 9 p. m. on the 7th, 8th, and 9th, 7 a. m. and 2 and 9 p. m. on the 12th, and 2 and 9 p. m. on the 24th.*h* See notes to table of thermometer for this month.*i* Same height at 6 p. m. on the 12th.*j* Same height at 6 a. m. on the 1st, and 6 p. m. on the 18th.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.61	31	9 p. m.	29.93	19	9 p. m.	29.25
Montreal .....	29.81	31	9 p. m.	30.18	12	9 p. m.	29.59
St. John's (b) .....	29.74½	9	9 p. m.	29.96	15	9 p. m.	29.52
St. Martin .....	29.65	31	9 p. m.	29.98	21	7 a. m.	c 29.40
Toronto (a) .....	29.52	26	6 a. m.	d 29.76	19	10 p. m.	29.17
Maine .....	29.68	1	9 p. m.	30.19	21	7 a. m.	29.39
Gardiner .....	29.73	27	9 p. m.	30.04	21	7 a. m.	29.40
Portland .....	29.82	28	7 a. m.	30.17	22	7 a. m.	29.47
Steuben .....	29.57	31	9 p. m.	29.77	7	7 a. m.	29.36
New Hampshire .. Concord (e) .....	29.54	1	7 a. m.	29.71	20	2 p. m.	29.33
Vermont .....	29.41	34	9 p. m.	29.80	21	7 a. m.	29.05
Norwich (a) .....	29.64	28	7 a. m.	29.96	21	7 a. m.	29.19
Massachusetts .. Amherst .....	29.76	28	7 a. m.	30.08	21	7 a. m.	29.24
Bridgewater (a) .....	29.81	28	Sunrise	30.16	21	Sunrise.	29.30
Cambridge (a) .....	29.85	27	9 p. m.	30.28	21	7 a. m.	29.45
Nantucket .....	29.78	28	7 a. m.	30.13	21	7 a. m.	29.22
New Bedford .....	29.86	28	7 a. m.	30.18	21	7 a. m.	29.38
Newburyport .....	29.68	31	9 p. m.	29.96	21	7 a. m.	29.15
North Attleborough .....	28.75	27	9 p. m.	29.07	21	7 a. m.	28.27
Princeton .....	30.02	27	7 a. m.	30.27	21	7 a. m.	29.87
Westfield .....	29.15	27	9 p. m.	29.45	20	6½ a. m.	28.68
Williamstown (a) .....	29.36	27	9 p. m.	29.72	21	9 p. m.	28.82
Worcester .....	29.68	28	6 a. m.	30.04	21	6 a. m.	29.13
Rhode Island .. Providence (a) .....	29.85	27	9 p. m.	30.20	21	7 a. m.	29.34
Connecticut .....	28.78	28	7 a. m.	29.06	21	7 a. m.	28.33
Norwich .....	29.76	27	9 p. m.	30.10	20	9 p. m.	29.25
Pomfret .....	29.63	1	7 a. m.	g 29.85	20	9 p. m.	29.19
Wallingford .....	29.87	28	9 p. m.	30.29	20	2 p. m.	29.36
New York .....	29.36	31	9 p. m.	29.56	19	2 and 9	28.90
Beverly (f) .....	28.48	31	9 p. m.	28.77	20	2 p. m.	28.12
Blackwell's Island .....	30.03	19	7 a. m.	30.50	20	9 p. m.	29.60
Buffalo (a) .....	29.73	27	9 p. m.	30.10	20	2 p. m.	29.22
Cazenovia .....	29.32		9 p. m.	29.62		7 a. m.	28.95
Fishkill Landing (a) .....	28.94		9 p. m.	29.28		7 a. m.	28.62
Flatbush .....	29.89	27	7 a. m.	30.18	20	2 p. m.	29.37
Geneva .....	29.50		7 a. m.	29.81		9 p. m.	29.00
Lowville .....	29.19	31	9 p. m.	29.50	20	2 p. m.	h 28.71
New York city .....	28.81	31	9 p. m.	29.09	20	7 a. m.	28.40
North Salem .....	29.20	31	9 p. m.	29.50	20	7 a. m.	28.83
Oswego .....	29.36	31	9 p. m.	29.67	20	9 p. m.	29.03
Ovid .....	29.57	27	9 p. m.	29.92	21	7 a. m.	29.06
Penn Yan (a) .....	29.23	27	7 a. m.	29.64	20	2 p. m.	28.78
Rochester, [Pratt] .....	29.34	31	9 p. m.	29.62	21	7 a. m.	29.02
Sag Harbor .....	29.69	27	7 a. m.	30.01	20	9 p. m.	29.25
Spencertown .....	29.74	27	7 a. m.	30.04	20	2 p. m.	29.33
Utica .....	29.94	27	9 p. m.	30.22	20	2 p. m.	29.50
New Jersey .....	29.77	31	6 p. m.	30.14	20	6 p. m.	29.34
Bloomfield .....	29.03	27	7 a. m.	29.33	20	7 a. m.	j 28.75
Burlington, [Schmidt] .....	28.74	17	2 p. m.	29.38	19	2 p. m.	28.32
Lambertville .....	29.11	27	7 a. m.	29.40	20	7 a. m.	28.75
Newark (i) .....	29.74	27	7 a. m.	30.06	20	7 a. m.	29.28
Pennsylvania .....	29.63	27	7 a. m.	29.93	20	7 a. m.	29.22
Bedford .....	29.34	27	7 a. m.	29.65	20	7 a. m.	28.96
Canonsburg .....	29.64	27	7 a. m.	29.93	20	7 a. m.	29.23
Carlisle .....	29.44	27	7 a. m.	29.76	20	7 a. m.	29.05
Chromedale .....	29.98	27	7 a. m.	l 30.25	20	7 a. m.	m 29.50
Easton .....	29.62	27	7 a. m.	29.95	20	7 a. m.	29.17
Gettysburg .....							
Harrisburg .....							
Lewisburg .....							
Morrisville (k) .....							
Norristown .....							

a See notes to table of thermometer for this month.

b Observations taken at 9 a. m. and 9 p. m. Not reported from the 26th to the 19th of the month.

c Same height at 9 p. m. on the 28th of the month.

d Same height at 6 a. m. on the 27th.

e Observations interrupted from the 19th to the 28th of the month.

f For the first 26 days of the month only.

g Same height at 7 a. m. on the 2d.

h Same height at 9 p. m. on the 20th.

i Observations taken at 7 a. m. and 6 p. m.

j Same height at 9 p. m. on the 19th.

k Not corrected for temperature.

l Same height at 2 and 9 p. m. on the 27th.

m Same height at 2 p. m. on the 20th.



## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Philadelphia.....	29.57	27	7 a. m.	29.85	20	7 a. m.	29.16
.....Pittsburg.....	28.88	26	7 a. m.	29.07	19	2 p. m.	28.45
.....Somerset.....	27.61	27	7 a. m.	27.79	19	9 p. m.	27.27
Maryland.....Frederick.....	29.63	27	7 a. m.	29.90	19	9 p. m.	29.25
Dist. of Columbia.....Washington.....	29.92	27	7 a. m.	30.23	20	7 a. m.	29.54
Virginia.....Alexandria.....	29.90	27	7 a. m.	30.20	20	2 p. m.	29.48
.....Ruthven.....	29.56	28	7 a. m.	<i>a</i> 29.86	19	9 p. m.	29.23
North Carolina.....Chapel Hill.....	29.37	28	7 a. m.	29.59	19	9 p. m.	29.09
.....Goldsborough.....	29.89	28	7 a. m.	30.19	19	9 p. m.	29.57
South Carolina.....All Saints.....	29.89	27	9 p. m.	30.10	19	9 p. m.	29.62
.....Camden.....	29.77	27	9 p. m.	30.00	19	2 p. m.	29.52
.....Charleston, [Johnson].....	30.13	29	7 a. m.	30.27	20	7 a. m.	29.95
.....Charleston, [Dawson].....				30.29			29.88
.....Edisto Island ( <i>b</i> ).....	30.01	27	2 p. m.	<i>a</i> 30.13	20	7 a. m.	<i>c</i> 29.88
.....St. John's ( <i>b</i> ).....	30.07	27	2 p. m.	30.30	20	Sunrise.	29.81
Georgia.....Savannah.....	29.93	27	9 p. m.	30.08	31	9 p. m.	29.62
.....Sparta.....	29.29	28	7 a. m.	<i>d</i> 29.41	31	9 p. m.	28.99
.....Thomaston ( <i>b</i> ).....	29.20	28	9 p. m.	29.38	31	2 p. m.	28.69
Florida.....Atsena.....	29.85	1	2 p. m.	30.03	31	7 a. m.	<i>e</i> 29.55
.....Jacksonville.....	30.00	1	7 a. m.	30.17	20	2 p. m.	29.80
.....St. Augustine.....	30.04	6	7 a. m.	30.22	20	2 p. m.	29.83
.....Salt Ponds ( <i>f</i> ).....	29.69	16	2 p. m.	29.84	28	7 a. m.	29.33
.....Warrington.....	29.96	2	7 a. m.	30.11	31	7 a. m.	29.53
Alabama.....Auburn.....	29.27	23	7 a. m.	29.47	31	2 p. m.	28.89
.....Greensborough ( <i>b</i> ).....	29.67	2	7 a. m.	<i>g</i> 29.79	19	9 p. m.	29.54
Mississippi.....Columbus.....	29.70	17	7 a. m.	29.87	13	2 p. m.	29.54
Texas.....New Braunfels ( <i>f</i> ).....	28.57	17	7 a. m.	28.70	13	9 p. m.	28.43
Tennessee.....Glenwood ( <i>b</i> ).....	29.50	17	7 a. m.	29.66	18	9 p. m.	29.23
.....Walnut Grove.....	28.39	26	9 p. m.	28.57	19	7 a. m.	28.14
Kentucky.....Ballardsville.....	29.03	26	7 a. m.	29.20	19	7 a. m.	28.75
.....Millersburg.....	29.22	28	7 a. m.	29.48	19	7 a. m.	28.88
.....Paris.....	29.09	11	2 p. m.	29.36	19	7 a. m.	28.84
.....Springdale.....	29.34	17	7 a. m.	29.53	19	7 a. m.	29.02
Ohio.....Cincinnati, [Harper].....	29.25	26	2 p. m.	29.60	19	7 a. m.	28.84
.....Cleveland.....	29.22	30	9 p. m.	29.40	19	7 a. m.	<i>h</i> 28.80
.....Dayton, [Fisher].....	29.19	26	7 a. m.	29.37	19	7 a. m.	28.76
.....Germantown, [Groneweg].....	29.17	26	7 a. m.	29.38	19	7 a. m.	28.76
.....Germantown, [Binkerd].....	29.06	26	7 a. m.	29.23	19	7 a. m.	28.73
.....Granville.....	28.94	17	7 a. m.	29.12	19	7 a. m.	28.50
.....Hillsborough.....	28.82	17	7 a. m.	<i>i</i> 29.00	19	7 a. m.	28.46
.....Oberlin ( <i>b</i> ).....	29.03	26	7 a. m.	29.29	19	7 a. m.	28.60
.....Urbana.....	28.73	16	9 p. m.	<i>j</i> 28.91	19	7 a. m.	28.30
Michigan.....Battle Creek.....	29.06	31	9 p. m.	29.28	19	7 a. m.	28.73
.....Detroit.....	29.50	5	7 a. m.	29.87	19	7 a. m.	29.05
.....Romeo, [Andrews] ( <i>b</i> ).....	28.99	32	9 p. m.	29.32	19	7 a. m.	<i>h</i> 28.63
Indiana.....New Harmony.....	29.60	26	7 a. m.	29.79	18	9 p. m.	29.31
.....Richmond.....	28.95	26	7 a. m.	29.11	19	7 a. m.	28.53
Illinois.....Manchester ( <i>b</i> ).....	28.71	26	7 a. m.	28.96	18	9 p. m.	28.44
.....Upper Alton.....	29.40	26	7 a. m.	29.60	28	7 a. m.	29.04
Missouri.....Palmyra.....	29.39	25	9 a. m.	29.60	18	3 p. m.	29.11
.....St. Louis.....	29.52	26	7 a. m.	29.71	18	2 p. m.	29.31
Wisconsin.....Appleton.....	28.96	31	9 p. m.	29.25	19	7 a. m.	28.72
.....Beloit.....	29.17	31	9 p. m.	29.44	18	9 p. m.	28.92
.....Kenosha ( <i>k</i> ).....	29.47						
.....Madison, [Schue].....	29.05	31	9 p. m.	29.35	18	9 p. m.	28.78
.....Manitowoc ( <i>l</i> ).....	29.75			30.04			29.29
.....Milwaukee, [Winkler].....	29.28	31	2 p. m.	<i>j</i> 29.54	18	9 p. m.	28.97

*a* Same height at 9 p. m. on the 27th.  
*b* See notes to table of thermometer for this month.  
*c* Same height at 9 p. m. on the 19th.  
*d* Same height at 9 p. m. on the 17th.  
*e* Same height at 9 p. m. on the 30th.  
*f* Not corrected for temperature.

*g* Same height at 7 a. m. on the 17th.  
*h* Same height at 2 p. m. on the 19th.  
*i* Same height at 2 p. m. on the 28th.  
*j* Same height at 9 p. m. on the 31st.  
*k* Observations very much interrupted.  
*l* Observations taken at 7 a. m., 1 p. m., and 9 p. m.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
Wisconsin ..... Superior .....	29.29	25	7 a. m.	29.62	1	2 p. m.	28.89
..... Waukesha .....	28.76	5	7 a. m.	<i>a</i> 29.05	19	2 p. m.	<i>b</i> 28.44
Iowa ..... Muscatine .....	29.43	31	9 p. m.	29.68	18	2 p. m.	29.11
California ..... Sacramento .....	29.83	29	7 a. m.	29.99	13	2 p. m.	29.66
Mexico ..... Vera Cruz ( <i>c</i> ) .....	29.92	17	9 a. m.	30.04	13	2 p. m.	29.76
South America ... Catharina Sophia, Surinam ( <i>d</i> ) .....	29.72	1	2 p. m.	<i>e</i> 29.79	21	-----	29.65
..... Colonia Tovar, Venezuela .....	23.91	1	9 p. m.	23.98	14	2 p. m.	23.83

*a* Same height at 7 a. m. on the 5th.  
*b* Same height at 9 p. m. on the 19th.  
*c* For the last 20 days only.

*d* See notes to table of thermometer for this month.  
*e* Same height at 6 p. m. on the 14th.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America.....							
Hamilton (a).....	29.66	1	9 a. m.	30.00	30	9 p. m.	29.20
Montreal.....	29.91	1	7 a. m.	30.32	30	9 p. m.	29.47
St. John's (a).....	29.76	30	9 a. m.	30.20	17	9 a. m.	29.00
St. Martin.....	29.74	4	2 p. m.	30.19	30	9 p. m.	29.28
Toronto (b).....	29.60	1	2 p. m.	29.97	30	10 p. m.	29.15
Wolfville.....	29.70	29	7 a. m.	30.04	24	2 p. m.	29.22
Maine.....							
Carmel (b).....	29.58	29	9 p. m.	29.84	24	2 p. m.	29.13
Gardiner.....	29.80	1	7 a. m.	30.05	11	9 p. m.	29.02
Portland.....	29.86	1	7 a. m.	30.13	24	2 p. m.	29.41
Steuben.....	29.91	29	7 a. m.	30.18	15	9 p. m.	29.33
New Hampshire.....	29.66	1	7 a. m.	29.96	24	7 a. m.	29.21
Vermont.....							
Norwich.....	29.65	3	7 a. m.	29.92	24	7 a. m.	29.26
Shelburn.....	29.55	1	7 a. m.	30.02	30	9 p. m.	28.90
Massachusetts.....							
Amherst.....	29.76	1	7 a. m.	30.09	30	9 p. m.	29.31
Bridgewater (b).....	29.88	1	7 a. m.	30.16	24	7 p. m.	29.47
Cambridge (b).....	29.94	1	7 a. m.	30.26	24	7 a. m.	29.51
Nantucket.....	30.01	1	2 p. m.	30.26	23	9 p. m.	29.66
New Bedford.....	29.92	1	7 a. m.	30.18	24	7 a. m.	29.50
Newburyport.....	29.99	1	7 a. m.	30.30	24	7 a. m.	29.53
North Attleborough.....	29.84	1	7 a. m.	30.13	24	7 a. m.	29.40
Princeton.....	28.88	1	7 a. m.	29.17	24	7 a. m.	28.46
Westfield.....	30.10	1	7 a. m.	30.38	24	7 a. m.	29.95
Williamstown.....	29.28	1	7 a. m.	29.60	30	9 p. m.	28.77
Worcester.....	29.49	1	9 p. m.	29.72	24	2 p. m.	29.09
Rhode Island.....							
Providence (b).....	29.80	1	Sunrise.	30.14	24	Sunrise.	29.37
Connecticut.....							
Norwich.....	30.00	1	7 a. m.	30.31	24	7 a. m.	29.58
Pomfret.....	29.34	3	7 a. m.	29.65	24	7 a. m.	28.95
Wallingford.....	29.88	1	7 a. m.	30.17	30	9 p. m.	29.43
New York.....							
Blackwell's Island.....	30.01	5	7 a. m.	30.28	30	7 a. m.	29.55
Buffalo.....	29.32	1	7 a. m.	29.65	30	9 p. m.	28.88
Cazenovia.....	28.57	1	7 a. m.	28.89	30	2 p. m.	28.08
Flatbush.....	29.87	5	7 a. m.	30.21	30	9 p. m.	29.41
Geneva.....	29.39	-----	7 a. m.	29.74	-----	9 p. m.	29.01
Lowville.....	29.04	-----	7 a. m.	29.41	-----	9 p. m.	28.56
McGrawville.....	28.44	1	7 a. m.	28.85	30	7 a. m.	27.70
New York city.....	30.00	5	7 a. m.	30.29	30	9 p. m.	29.56
North Salem.....	29.63	-----	9 p. m.	29.90	-----	9 p. m.	29.14
Oswego.....	29.27	1	7 a. m.	29.60	30	2 p. m.	28.84
Ovid.....	28.89	2	7 a. m.	29.70	30	2 p. m.	c 28.42
Penn Yan (b).....	29.25	1	2 p. m.	29.60	30	2 p. m.	d 28.83
Rochester, [Pratt].....	29.44	1	7 a. m.	29.82	30	9 p. m.	29.03
Sag Harbor.....	29.70	5	9 p. m.	29.96	30	9 p. m.	29.29
Spencertown.....	29.44	1	7 a. m.	29.77	30	9 p. m.	28.93
Utica.....	29.42	1	7 a. m.	29.77	24	7 a. m.	29.12
New Jersey.....							
Bloomfield.....	29.82	1	7 a. m.	30.09	30	9 p. m.	29.33
Burlington, [Schmidt].....	29.86	5	7 a. m.	30.14	30	9 p. m.	29.43
Lambertville.....	30.05	4	7 and 9	30.30	30	2 p. m.	29.60
Newark (e).....	29.93	5	7 a. m.	30.20	23	7 a. m.	29.44
Pennsylvania.....							
Bedford.....	29.13	4	7 a. m.	29.39	30	2 p. m.	28.72
Canonsburg.....	28.81	2	7 a. m.	29.07	30	2 p. m.	c 28.44
Carlisle.....	29.22	5	7 a. m.	29.48	30	2 p. m.	28.76
Chromedale.....	29.86	5	7 a. m.	30.16	30	2 p. m.	29.34
Easton.....	29.75	4	7 a. m.	30.00	30	2 p. m.	29.26
Gettysburg.....	29.45	5	7 a. m.	29.73	30	2 p. m.	29.01
Harrisburg.....	29.77	4	7 a. m.	30.01	24	7 a. m.	29.53
Lewisburg.....	29.53	5	7 a. m.	29.84	30	2 p. m.	29.03
Morrisville (f).....	30.08	4	7 a. m.	g 30.35	30	2 p. m.	29.54
Norristown.....	29.75	5	7 a. m.	30.07	30	2 p. m.	29.25

a Observations taken at 9 a. m. and 9 p. m.

b See notes to table of thermometer for this month.

c Same height at 9 p. m. on the 30th.

d Same height at sunset on the 30th.

e Observations taken at 7 a. m. and 6 p. m.

f Not corrected for temperature for the first 15 days of the month.

g Same height at 2 and 9 p. m. on the 4th, and at 7 a. m. and 2 and 9 p. m. on the 5th.

## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Philadelphia.....	29.69	5	7 a. m.	29.96	30	7 a. m.	29.31
.....Pittsburg.....	29.96	2	7 a. m.	29.19	30	2 p. m.	28.59
.....Somerset.....	27.68	5	7 a. m.	27.90	30	2 p. m.	<i>a</i> 27.31
Maryland.....Frederick.....	29.73	2	7 a. m.	30.06	30	2 p. m.	29.28
.....Ridge.....	29.93	5	7 a. m.	30.19	30	2 p. m.	29.43
Dist. of Columbia.....Washington.....	30.03	5	7 a. m.	30.34	30	2 p. m.	29.54
Virginia.....Alexandria.....	30.01	5	7 a. m.	30.31	30	2 p. m.	29.51
.....Portsmouth (b).....	29.95	17	7 a. m.	30.13	23	2 p. m.	29.73
.....Ruthven.....	29.70	4	2 p. m.	<i>c</i> 29.93	30	7 a. m.	29.30
North Carolina.....Chapel Hill.....	29.46	5	7 a. m.	29.69	30	2 p. m.	29.12
.....Goldsborough.....	29.98	7	7 a. m.	30.26	30	2 p. m.	29.54
South Carolina.....All Saints.....	30.00	4	2 p. m.	<i>d</i> 30.21	30	7 a. m.	29.65
.....Camden.....	29.89	5	7 a. m.	30.12	1	7 a. m.	29.52
.....Charleston, [Johnson].....	30.09	6	7 a. m.	<i>e</i> 30.28	<i>NO</i>	7 a. m.	29.77
.....Charleston, [Dawson].....				30.40			29.88
.....Columbia.....	29.76	3	7 a. m.	30.35	29	9 p. m.	29.42
.....Edisto Island.....	30.09	5	2 p. m.	<i>f</i> 30.23	30	2 p. m.	29.86
.....St. John's (g).....	30.15	5	2 p. m.	30.42	1	Sunrise	29.75
Georgia.....Savannah.....	30.04	4	9 p. m.	30.24	23	2 p. m.	29.72
.....Sparta.....	29.37	5	7 a. m.	29.53	29	2 p. m.	<i>h</i> 29.19
.....Thomaston.....	29.29	5	7 a. m.	29.49	29	9 p. m.	29.05
Florida.....Atena.....	29.89	5	2 p. m.	30.06	23	2 p. m.	29.61
.....Jacksonville.....	30.09	5	7 a. m.	30.26	23	7 a. m.	29.85
.....St. Augustine.....	30.11	5	7 a. m.	<i>i</i> 30.30	23	2 p. m.	29.77
.....Salt Ponds.....	29.67	1	2 p. m.	29.80	24	7 a. m.	29.50
.....Warrington (g).....	29.99	7	7 a. m.	30.18	29	Sunset.	29.82
Alabama.....Auburn.....	29.37	7	7 a. m.	29.54	29	2 p. m.	29.14
Mississippi.....Columbus.....	29.84	24	7 a. m.	<i>j</i> 29.96	28	2 p. m.	29.66
.....Natchez.....	29.89	17	7 a. m.	<i>k</i> 30.03	22	2 p. m.	<i>l</i> 29.77
.....Port Gibson.....	29.87	25	7 a. m.	30.02	28	2 p. m.	29.69
Texas.....New Braunfels (m).....	28.70	24	7 a. m.	29.08	3	9 p. m.	28.50
Tennessee.....Glenwood.....	29.59	24	7 a. m.	29.71	29	2 p. m.	29.36
.....Knoxville.....	29.12	4	7 a. m.	29.30	30	7 a. m.	28.83
Kentucky.....Ballardsville.....	29.11	2	7 a. m.	20.24	28	2 p. m.	28.83
.....Paris.....	29.19	2	7 a. m.	29.36	28	2 p. m.	28.92
.....Springdale.....	29.42	2	7 a. m.	29.56	29	2 p. m.	29.19
Ohio.....Cincinnati, [Harper].....	29.50	2	7 a. m.	29.69	28	2 p. m.	29.23
.....Cleveland.....	29.23	1	2 p. m.	29.45	30	2 p. m.	28.85
.....Dayton, [Fisher].....	29.23	2	2 a. m.	29.44	28	2 p. m.	28.90
.....Germantown, [Groneweg].....	29.23	2	7 a. m.	29.43	30	2 p. m.	28.96
.....Granville.....	28.99	2	7 a. m.	29.21	30	7 a. m.	28.66
.....Hillsborough.....	28.89	2	7 a. m.	29.08	30	2 p. m.	28.58
.....Oberlin.....	29.10	2	7 a. m.	29.34	30	2 p. m.	28.79
.....Urbana.....	28.77	2	7 a. m.	28.97	28	2 p. m.	28.47
.....West Bedford.....	28.54	20	9 p. m.	28.84	18	7 a. m.	<i>n</i> 28.28
Michigan.....Battle Creek.....	29.08	1	7 a. m.	29.38	28	2 p. m.	28.80
.....Detroit.....	29.49	1	7 a. m.	<i>o</i> 29.80	28	2 p. m.	29.17
.....Romeo, [Andrews] (g).....	29.03	1	7 a. m.	<i>p</i> 29.34	28	1 p. m.	28.67
Indiana.....New Harmony.....	29.70	2	7 a. m.	29.84	28	7 a. m.	29.46
.....Richmond.....	29.10	2	7 a. m.	29.18	7	2 p. m.	29.06
Illinois.....Manchester (g).....	28.78	1	7 a. m.	<i>q</i> 29.00	27	9 p. m.	28.56
Missouri.....Palmyra.....	29.44	1	9 a. m.	29.68	31	3 p. m.	29.12
.....St. Louis.....	29.58	21	7 a. m.	29.77	28	7 a. m.	29.39
Wisconsin.....Appleton.....	28.93	3	7 a. m.	29.22	18	7 a. m.	28.53
.....Beloit.....	29.19	1	7 a. m.	29.47	28	2 p. m.	28.88

*a* Same height at 9 p. m. on the 30th.*b* For 11 days only—14th to 24th.*c* Same height at 9 p. m. on the 5th.*d* Same height at 2 and 9 p. m. on the 5th.*e* Same height at 7 a. m. on the 7th.*f* Same height at 9 p. m. on the 4th and 5th.*g* See notes to table of thermometer for this month.*h* Same height at 9 p. m. on the 29th.*i* Same height at 9 p. m. on the 5th, and 2 p. m. on the 6th.*j* Same height at 7 a. m. on the 25th.*k* Same height at 9 p. m. on the 11th.*l* Same height at 9 p. m. on the 20th.*m* Not corrected for temperature.*n* Same height at 2 p. m. on the 18th.*o* Same height at 2 p. m. on the 1st.*p* Same height at 9 p. m. on the 1st.*q* Same height at 7 a. m. on the 23d and 24th.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Wisconsin..... Kenosha (a) .....	29.45						
Manitowoc .....	29.70			30.08			29.29
Milwaukee, [Winkler] .....	29.26	1	7 a. m.	<i>b</i> 29.58	28	2 p. m.	28.90
Superior .....	29.24	23	7 a. m.	29.64	18	7 a. m.	28.76
Waukesha .....	28.72	1	7 a. m.	29.05	28	2 p. m.	28.41
Iowa..... Muscatine .....	29.46	1	7 a. m.	<i>c</i> 29.71	17	2 p. m.	<i>d</i> 29.20
California..... Sacramento .....	29.84	2	7 a. m.	30.07	19	2 p. m.	29.57
Mexico..... Vera Cruz .....	29.97	8	7 a. m.	30.08	19	2 p. m.	29.82
South America ... Catharina Sophia, Surinam (e) .....	29.71	14	2 p. m.	29.90	25	2 p. m.	<i>f</i> 29.64
Colonia Tovar, Venezuela .....	23.89	7	9 p. m.	23.94	23	7 a. m.	23.85

*a* Observations very much interrupted.*b* Same height at 2 p. m. on the 1st.*c* Same height at 9 p. m. on the 21st.*d* Same height at 9 p. m. on the 17th.*e* See notes to table of thermometer for this month.*f* Same height at 9 p. m. on the 24th.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
British America—Hamilton (a) .....	20.73	15	9 a. m.	30.14	1	9 a. m.	29.25
Montreal .....	29.99	15	7 a. m.	30.44	31	2 p. m.	29.47
St. John's (b) .....	29.70?						
St. Martin .....	29.82	15	7 a. m.	30.25	28	9 p. m.	29.31
Toronto (a) .....	29.72	15	7 a. m.	30.17	1	7 a. m.	29.22
Wolfville .....	29.68	15	7 a. m.	30.33	31	2 p. m.	29.00
Maine .....							
Carmel .....	29.61	17	7 a. m.	29.99	31	2 p. m.	29.10
Gardiner .....	29.81	15	7 a. m.	30.19	28	2 p. m.	c 29.31
Portland .....	29.90	15	7 a. m.	30.28	31	2 p. m.	29.37
Steuben .....	29.92	17	9 p. m.	30.29	31	2 p. m.	29.35
New Hampshire—Concord .....	29.69	15	7 a. m.	30.07	31	2 p. m.	29.22
Vermont .....							
Norwich .....	29.71	15	7 a. m.	30.08	31	2 p. m.	29.23
Shelburn .....	29.64	15	7 a. m.	30.07	30	2 p. m.	28.99
Massachusetts—Amherst .....	29.84	8	7 a. m.	30.24	31	9 p. m.	29.34
Bridgewater (a) .....	29.97	25	2 p. m.	30.44	1	7 a. m.	29.50
Cambridge (a) .....	29.98	15	7 a. m.	30.35	1	7 a. m.	29.51
Nantucket .....	30.04	15	2 p. m.	30.34	31	7 a. m.	c 29.60
New Bedford .....	29.97	15	2 p. m.	30.31	1	7 a. m.	c 29.50
Newburyport .....	30.03	15	7 a. m.	30.39	31	2 p. m.	29.52
North Attleborough .....	29.88	15	7 a. m.	30.22	31	2 p. m.	29.40
Princeton .....	28.90	8	7 a. m.	d 29.19	31	2 p. m.	28.40
Westfield .....	30.14	15	7 a. m.	30.47	1	7 a. m.	29.92
Williamstown .....	29.34	15	7 a. m.	29.70	1	7 a. m.	28.88
Worcester .....	29.53	15	7 a. m.	29.86	1	7 a. m.	29.10
Rhode Island—Providence (a) .....	29.85	8	Sunrise.	30.18	1	Sunrise.	29.40
Connecticut—Norwich .....	30.05	8	7 a. m.	30.38	31	2 p. m.	29.61
Pomfret .....	29.43	15	7 a. m.	29.75	31	2 p. m.	28.95
Wallingford .....	29.95	15	7 a. m.	30.30	1	7 a. m.	e 29.51
New York—Blackwell's Island .....	30.08	25	7 a. m.	30.41	1	9 p. m.	29.39
Buffalo .....	29.43	15	7 a. m.	29.82	1	7 a. m.	28.97
Cazenovia .....	28.64	15	7 a. m.	29.01	30	2 p. m.	28.20
Flatbush .....	29.94	15	9 p. m.	30.31	30	2 p. m.	29.50
Geneva .....	29.55		7 a. m.	29.96		2 p. m.	29.07
Lowville .....	29.12		7 a. m.	29.54		2 p. m.	28.47
McGrawville .....	28.38	16	7 a. m.	28.80	31	9 p. m.	27.60
New York city .....	30.08	15	2 p. m.	30.39	30	2 p. m.	29.70
North Salem .....	29.69		7 a. m.	30.03		2 p. m.	29.27
Oswego .....	29.38	15	7 a. m.	29.80	1	7 a. m.	c 28.96
Ovid .....	28.95	15	7 a. m.	29.37	27	9 p. m.	28.50
Penn Yan (a) .....	29.35	15	2 p. m.	29.74	1	7 a. m.	28.90
Rochester, [Pratt] .....	29.55	15	7 a. m.	29.92	1	7 a. m.	29.11
Sag Harbor .....	29.77	8	9 p. m.	30.06	1	7 a. m.	29.34
Spencertown .....	29.43	8	7 a. m.	29.80	30	2 p. m.	28.92
New Jersey—Bloomfield .....	29.91	15	9 p. m.	30.20	30	2 p. m.	29.48
Burlington, [Schmidt] .....	29.95	15	9 p. m.	30.19	1	7 a. m.	29.52
Lambertville .....	30.08	15	2 and 9	30.43	30	2 p. m.	29.61
Newark (f) .....	30.03	15	7 a. m.	30.32	30	6 p. m.	29.57
Pennsylvania—Bedford (g) .....	29.18	8	7 a. m.	h 29.43	30	9 p. m.	28.84
Canonsburg .....	28.87	20	7 a. m.	i 29.13	1	7 a. m.	28.53
Carlisle .....	29.30	15	9 p. m.	29.58	30	2 p. m.	28.84
Chromedale .....	29.94	15	9 p. m.	30.24	30	2 p. m.	29.48
Easton .....	29.82	15	7 a. m.	30.10	30	2 p. m.	29.41
Gettysburg .....	29.55	15	2 p. m.	29.82	30	2 p. m.	29.08
Harrisburg (a) .....	29.83	15	2 p. m.	30.13	30	2 p. m.	29.39
Lewisburg .....	29.62	15	7 a. m.	29.94	30	2 p. m.	29.19
Morrisville .....	30.13	15	9 p. m.	30.43	30	2 p. m.	29.69
Nazareth .....	29.52	15	9 p. m.	29.81	30	2 p. m.	29.08
Norristown .....	29.85	15	9 p. m.	30.17	30	9 p. m.	29.46

a See notes to table of thermometer for this month.

b Observations taken at 9 a. m. and 9 p. m. Not reported from the 11th to the 17th, nor after the 24th.

c Same height at 9 p. m. on the 31st of the month.

d Same height at 7 a. m., and at 2 and 9 p. m. on the 15th.

e Same height at 9 p. m. on the 28th.

f Observations taken at 7 a. m. and 6 p. m.

g Observations interrupted from the 14th to the 25th of the month.

h Same height at 7 a. m. on the 9th.

i Same height at 9 p. m. on the 15th.



## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1856.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....	Philadelphia.....	29.78	8	7 a. m.	30.02	30	2 p. m.	29.37
	Pittsburg.....	29.01	15	7 a. m.	29.29	30	7 a. m.	28.69
	Somerset.....	27.71	15	2 p. m.	27.94	1	7 a. m.	27.34
Maryland.....	Frederick.....	29.82	15	9 p. m.	30.11	30	2 p. m.	29.33
	Ridge.....	29.98	25	7 a. m.	30.25	30	9 p. m.	29.58
Dist. of Columbia.....	Washington.....	30.06	15	9 p. m.	30.39	-----	2 p. m.	29.67
Virginia.....	Alexandria.....	30.09	15	9 p. m.	30.35	30	2 p. m.	29.68
	Portsmouth.....	30.13	2	9 p. m.	30.46	17	2 p. m.	29.68
	Ruthven.....	29.74	20	7 a. m.	29.99	30	9 p. m.	29.36
North Carolina.....	Chapel Hill.....	29.54	21	7 a. m.	29.72	30	9 p. m.	29.21
	Goldsborough.....	30.05	20	7 a. m.	30.29	30	9 p. m.	29.71
	Murfreesborough.....	29.41	19	7 a. m.	<i>a</i> 29.65	23	2 p. m.	29.08
South Carolina.....	All Saints.....	30.06	20	7 a. m.	<i>b</i> 30.25	14	9 p. m.	29.80
	Camden.....	29.96	20	7 a. m.	30.18	14	2 p. m.	29.66
	Charleston, [Johnson].....	30.14	3	7 a. m.	<i>c</i> 30.31	14	7 a. m.	29.88
	Charleston, [Dawson].....	-----	-----	-----	30.42	-----	-----	29.97
	Columbia.....	29.84	25	7 a. m.	30.56	14	2 p. m.	29.50
	Edisto Island.....	30.10	4	7 a. m.	30.22	14	9 p. m.	29.92
	St. John's, ( <i>d</i> ).....	30.17	20	2 p. m.	30.41	14	9 p. m.	29.86
Georgia.....	Savannah.....	30.10	20	9 p. m.	30.29	14	2 p. m.	29.79
	Sparta.....	29.44	21	7 a. m.	29.63	14	2 p. m.	29.16
	Thomaston.....	29.33	21	7 a. m.	29.46	14	9 p. m.	29.03
Florida.....	Atsena.....	29.90	4	7 a. m.	<i>e</i> 30.06	14	9 p. m.	29.72
	Jacksonville.....	30.14	5	7 a. m.	30.31	14	2 p. m.	29.84
	St. Augustine.....	30.15	4	7 a. m.	30.35	14	9 p. m.	29.92
	Salt Ponds ( <i>f</i> ).....	29.67½	4	2 p. m.	29.82	12	7 a. m.	<i>g</i> 29.58
	Warrington ( <i>d</i> ).....	30.04	3	noon.	<i>h</i> 30.16	14	Sunset.	29.80
Alabama.....	Auburn.....	29.42	21	7 a. m.	29.57	14	2 p. m.	29.12
	Greensborough.....	29.70	21	7 a. m.	29.89	14	7 a. m.	29.47
Mississippi.....	Columbus.....	29.87	21	7 a. m.	30.04	24	2 p. m.	29.63
	Natchez.....	29.86	16	7 a. m.	30.11	10	2 p. m.	29.63
	Port Gibson.....	29.91	16	7 a. m.	30.18	10	2 p. m.	<i>i</i> 29.68
Texas.....	New Braunfels ( <i>f</i> ).....	28.83	16	7 a. m.	29.26	5	9 p. m.	28.52
Tennessee.....	Glenwood.....	29.55	3	7 a. m.	29.87	14	7 a. m.	29.21
	Knoxville.....	29.16	21	7 a. m.	29.40	14	7 a. m.	<i>j</i> 28.86
Kentucky.....	Ballardsville.....	29.15	15	9 p. m.	29.36	1	2 p. m.	<i>k</i> 28.90
	Millersburg.....	29.31	20	7 a. m.	29.51	1	7 a. m.	<i>l</i> 29.05
	Paris.....	39.24	20	7 a. m.	<i>m</i> 29.44	1	2 p. m.	28.98
	Springdale.....	29.46	15	2 p. m.	<i>m</i> 29.70	1	2 p. m.	29.21
Ohio.....	Cincinnati, [Harper].....	29.56	21	7 a. m.	<i>m</i> 29.79	29	9 p. m.	29.28
	Cleveland.....	29.25	15	7 a. m.	29.50	1	7 a. m.	28.90
	College Hill.....	29.14	21	7 a. m.	29.45	29	9 p. m.	28.85
	Dayton, [Fisher].....	29.27	15	2 p. m.	29.53	29	9 p. m.	29.00
	Germantown, [Groneweg].....	29.29	15	7 a. m.	29.57	29	9 p. m.	29.98
	Germantown, [Binkerd].....	29.20	15	7 a. m.	29.47	29	9 p. m.	28.92
	Granville.....	29.04	15	7 a. m.	29.32	29	9 p. m.	28.70
	Hillsborough.....	28.93	15	9 p. m.	29.17	1	2 p. m.	28.66
	Oberlin.....	29.20	15	2 p. m.	29.50	29	9 p. m.	28.81
	Urbana.....	28.81	15	9 p. m.	39.10	2	7 a. m.	28.52
	West Bedford.....	28.53	15	7 a. m.	28.83	27	2 p. m.	28.25
Michigan.....	Battle Creek.....	29.13	15	7 a. m.	29.56	1	7 a. m.	28.79
	Detroit.....	29.58	7	7 a. m.	29.79	1	2 p. m.	29.21
	Romeo, [Andrews] ( <i>d</i> ).....	29.11	15	7 a. m.	29.50	1	7 a. m.	28.68
Indiana.....	New Harmony.....	29.70	15	7 a. m.	30.02	24	2 p. m.	29.37
	Richmond ( <i>d</i> ).....	29.03	15	Sunrise.	29.27	29	2 p. m.	28.73
Illinois.....	Manchester ( <i>d</i> ).....	28.79	15	7 a. m.	29.37	24	1 p. m.	28.39
	Cape Girardeau.....	29.69	15	Sunrise.	29.96	21	3 p. m.	29.30

*a* Same height at 7 a. m. on the 20th and 21st of the month.*b* Same height at 9 p. m. on the 20th, and at 7 a. m. on the 21st.*c* Same height at 7 a. m. on the 21st.*d* See notes to table of thermometer for this month.*e* Same height at 9 p. m. on the 20th.*f* Not corrected for temperature.*g* Same height at 7 a. m. on the 24th.*h* Same height at noon on the 21st.*i* Same height at 9 p. m. on the 9th.*j* Same height at 2 p. m. on the 14th.*k* Same height at 9 p. m. on the 1st.*l* Same height at 2 p. m. on the 1st.*m* Same height at 9 p. m. on the 15th.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1856.

NAME OF STATION.		MEAN.	MAXIMUM.		MINIMUM.		
			DATE.		DATE.		HEIGHT.
			Day.	Hour.			
		<i>Inches.</i>					<i>Inches.</i>
Missouri.....	Palmyra.....	29.44	15	Sunrise.	29.90	21 3 p. m.	28.91
	St. Louis.....	29.59	15	7 a. m.	30.35	24 2 p. m.	29.14
Wisconsin.....	Appleton.....	29.02	14	2 p. m.	<i>a</i> 29.49	31 9 p. m.	28.66
	Beloit.....	29.22	15	7 a. m.	29.71	31 9 p. m.	28.83
	Kenosha ( <i>b</i> ).....	29.53					
	Manitowoc ( <i>c</i> ).....	29.79			30.30		29.33
	Milwaukee, [Winkler].....	29.33	15	7 a. m.	<i>d</i> 29.80	31 9 p. m.	28.95
	Racine, [Durham] ( <i>e</i> ).....	29.30	15	2 p. m.	29.62	1 7 a. m.	<i>f</i> 28.87
	Superior.....	29.30	14	7 a. m.	30.01	25 7 a. m.	28.89
	Waukesha.....	28.80	14	9 p. m.	29.28	1 2 p. m.	28.46
Iowa.....	Muscatine.....	29.51	15	7 a. m.	29.96	24 2 p. m.	29.05
California.....	Sacramento.....	30.02	27	7 a. m.	30.29	1 9 p. m.	29.72
Mexico.....	Vera Cruz.....	30.03	16	10 a. m.	30.23	2 2 p. m.	29.79
West Indies.....	Port of Spain, Trinidad.....	29.87	5	7 a. m.	29.98	26 2 p. m.	29.74
South America.....	Catharina Sophia, Surinam ( <i>g</i> ).....	29.68	5	6 p. m.	29.79	26 6 a. m.	<i>h</i> 29.61
	Colonia Tovar, Venezuela.....	23.88	4	9 p. m.	23.95	21 7 a. m.	23.80

*a* Same height at 7 a. m. on the 14th, and at 2 p. m. on the 15th.*b* Observations very much interrupted.*c* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*d* Same height at 2 p. m. on the 15th.*e* Not corrected for temperature.*f* Same height at 2 p. m. on the 1st.*g* See notes to table of thermometer for this month.*h* Same height at 6 p. m. on the 21st, 22d, and 25th.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
British America .. Hamilton (a) .....	29.63	5	9 a. m.	4	9 a. m.
Montreal .....	29.96	6	7 a. m.	16	7 a. m.
St. Martin .....	29.81	6	7 a. m.	4	9 p. m.
Toronto (a) .....	29.64	6	7 a. m.	1	2 p. m.
Wolfville .....	29.72	7	7 a. m.	5	7 a. m.
Maine .....	29.62	7	7 a. m.	29	9 p. m.
Carmel (a) .....	29.81	6	9 p. m.	4	9 p. m.
Gardiner .....	29.86	7	7 a. m.	4	9 p. m.
Portland .....	29.87	7	7 a. m.	5	7 a. m.
Steuben .....	29.67	7	7 a. m.	29	9 p. m.
New Hampshire .. Concord .....	29.66	6	9 p. m.	4	9 p. m.
Vermont .....	29.59	6	9 p. m.	4	9 p. m.
Norwich .....	29.78	6	9 p. m.	4	9 p. m.
Shelburn .....	29.91	6	7 p. m.	29	7 p. m.
Massachusetts .. Amherst .....	29.98	8	9 p. m.	29	9 p. m.
Bridgewater (a) .....	30.05	7	7 a. m.	29	9 p. m.
Cambridge (a) .....	29.94	7	7 a. m.	29	9 p. m.
Nantucket .....	29.99	7	7 a. m.	26	9 p. m.
New Bedford .....	29.85	6	9 p. m.	29	9 p. m.
Newburyport .....	28.84	6	9 p. m.	29	2 p. m.
North Attleborough .....	29.86	6	9 p. m.	29	2 p. m.
Princeton .....	29.29	7	7 a. m.	29	9 p. m.
Westfield .....	29.49	7	2 p. m.	29	2 p. m.
Williamstown .....	29.82	5	10 p. m.	29	10 p. m.
Worcester .....	30.00	7	7 a. m.	29	9 p. m.
Rhode Island .. Providence (a) .....	29.40	6	9 p. m.	29	9 p. m.
Connecticut .....	29.92	7	7 a. m.	29	2 p. m.
Norwich .....	30.08	5	9 p. m.	29	2 p. m.
Pomfret .....	29.35	5	7 a. m.	4	2 p. m.
Wallingford .....	29.56	5	7 a. m.	29	2 p. m.
New York .....	30.19	21	7 a. m.	29	2 p. m.
Blackwell's Island .....	29.91	7	7 a. m.	29	2 p. m.
Buffalo .....	29.04	-----	7 a. m.	-----	2 p. m.
Cazenovia .....	30.04	6	9 p. m.	29	2 p. m.
Fishkill Landing (a) .....	29.65	-----	7 a. m.	-----	9 p. m.
Flatbush .....	29.31	6	7 a. m.	29	2 p. m.
Lowville .....	28.87	6	7 a. m.	29	2 p. m.
New York city .....	29.24	6	7 a. m.	29	2 p. m.
North Salem .....	29.49	5	7 a. m.	4	2 p. m.
Oswego .....	29.77	6	9 p. m.	29	2 p. m.
Ovid .....	29.34	6	2 p. m.	4	9 p. m.
Penn Yan (a) .....	30.03	5	8 a. m.	29	2 p. m.
Rochester, [Pratt] .....	29.50	7	7 a. m.	29	2 p. m.
Sag Harbor .....	29.87	5	7 a. m.	29	7 a. m.
Spencertown .....	29.97	7	7 a. m.	29	2 p. m.
Troy .....	30.06	5	9 p. m.	29	2 p. m.
Utica .....	30.01	7	7 a. m.	29	6 p. m.
New Jersey .....	29.20	5	7 a. m.	4	2 p. m.
Bloomfield .....	28.98	6	7 a. m.	29	2 p. m.
Burlington, [Schmidt] .....	28.83	5	7 a. m.	29	7 a. m.
Lambertville .....	29.28	5	7 a. m.	29	2 p. m.
Newark (f) .....	29.92	6	2 p. m.	29	2 p. m.
Pennsylvania .....	29.79	7	7 a. m.	29	2 p. m.
Bedford (h) .....	29.51	7	7 a. m.	29	2 p. m.
Berwick (i) .....	29.82	7	7 a. m.	29	2 p. m.
Canonsburg .....	29.58	5	7 a. m.	29	2 p. m.
Carlisle .....	30.12	5	2 p. m.	29	2 p. m.
Chromedale .....					
Easton .....					
Gettysburg .....					
Harrisburg .....					
Lewisburg .....					
Morrisville .....					

<sup>a</sup> See notes to table of thermometer for this month.<sup>b</sup> Same height at 9 p. m. on the 6th.<sup>c</sup> Same height at 9 p. m. on the 29th.<sup>d</sup> Same height at 2 p. m. on the 6th.<sup>e</sup> Same height at 9 p. m. on the 29th.<sup>f</sup> Observations taken at 7 a. m. and 6 p. m.<sup>g</sup> Same height at 6 p. m. on the 6th.<sup>h</sup> For the first 17 days only.<sup>i</sup> Not corrected for temperature.<sup>j</sup> Same height at 2 and 9 p. m. on the 6th.

## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1856.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
Pennsylvania	Nazareth	29.48	5	9 p. m.	30.00	29	2 p. m.	28.76
	Norristown	29.84	7	7 a. m.	30.33	29	2 p. m.	29.05
	Philadelphia	29.75	7	7 a. m.	<i>a</i> 30.20	29	2 p. m.	29.18
	Pittsburg	28.96	6	7 a. m.	29.35	29	7 a. m.	28.27
	Somerset	27.67	5	7 a. m.	28.02	29	7 a. m.	27.02
Delaware	Newark, [Craven]	29.84	7	7 a. m.	<i>a</i> 30.35	29	2 p. m.	29.14
Maryland	Frederick	29.81	7	7 a. m.	30.26	29	2 p. m.	29.11
	Ridge, ( <i>b</i> )	29.99	5	7 a. m.	30.48	29	1 p. m.	29.32
Dist. of Columbia	Washington	30.12	7	7 a. m.	30.60	29	2 p. m.	29.42
Virginia	Alexandria	30.10	7	7 a. m.	30.56	29	2 p. m.	29.41
	Portsmouth	30.07	6	2 p. m.	30.60	4	2 p. m.	20.69
	Ruthven ( <i>b</i> )	29.75	5	2 p. m.	30.25	29	2 p. m.	29.10
North Carolina	Chapel Hill	29.54	5	2 p. m.	29.91	29	2 p. m.	28.81
	Goldsbrough	30.08	6	7 a. m.	30.51	29	2 p. m.	29.45
	Murfreesborough	29.47	5	9 p. m.	29.94	29	2 p. m.	28.91
South Carolina	All Saints	30.08	6	7 a. m.	<i>c</i> 30.44	29	2 p. m.	29.59
	Camden	29.97	5	7 a. m.	30.36	29	7 a. m.	29.46
	Charleston, [Johnson]	30.25	5	7 a. m.	30.55	29	2 p. m.	29.83
	Charleston, [Dawson]				30.55			29.83
	Edisto Island	30.11	18	7 a. m.	30.27	29	7 a. m.	29.73
Georgia	St John's ( <i>b</i> )	30.22	5	2 p. m.	30.58	29	Sunrise.	29.86
	Savannah	30.12	6	7 a. m.	30.44	29	2 p. m.	29.71
	Sparta	29.44	6	7 a. m.	29.73	29	7 a. m.	29.02
	Thomaston	29.34	5	7 a. m.	29.67	29	7 a. m.	28.90
	Atsena	29.91	5	9 p. m.	30.08	29	2 p. m.	29.71
Florida	Jacksonville	30.18	5	7 a. m.	30.52	29	2 p. m.	29.82
	St. Augustine ( <i>b</i> )	30.19	5	10 p. m.	30.41	29	2 p. m.	29.90
	Salt Ponds ( <i>d</i> )	29.73	23	2 p. m.	29.86	20	7 a. m.	29.60
	Warrington	30.04	5	7 a. m.	30.36	28	9 p. m.	29.73
	Auburn	29.41	5	7 a. m.	29.70	28	9 p. m.	29.03
Alabama	Greensborough	29.70	5	7 a. m.	30.05	28	9 p. m.	29.20
	Columbus	29.88	5	7 a. m.	30.28	28	9 p. m.	29.32
	Natchez	29.91	5	7 a. m.	30.30	28	2 p. m.	29.36
Texas	Port Gibson	29.97	5	7 a. m.	30.34	28	9 p. m.	29.48
	New Braunfels ( <i>d</i> )	28.98	8	7 a. m.	29.45	2	9 p. m.	28.53
	Glenwood	29.48	5	2 p. m.	29.81	28	9 p. m.	28.79
Tennessee	Walnut Grove ( <i>b</i> )	28.54	6	7 a. m.	28.84	16	2 p. m.	28.19
	Ballardsville	29.13	27	9 p. m.	29.50	21	2 p. m.	28.57
	Millersburg	29.36	5	9 p. m.	29.63	21	2 p. m.	28.98
Kentucky	Paris	29.24	5	9 p. m.	29.57	28	9 p. m.	28.63
	Springdale	29.46	5	7 a. m.	<i>e</i> 29.82	21	2 p. m.	28.86
	Cincinnati, [Harper]	29.55	5	7 a. m.	29.91	28	9 p. m.	29.01
Ohio	Cleveland	29.17	5	9 p. m.	29.45	4	7 a. m.	28.75
	College Hill	29.12	5	7 a. m.	29.48	21	2 p. m.	28.54
	Germantown, [Groneweg]	29.26	9	7 a. m.	29.62	28	9 p. m.	28.59
	Germantown, [Binkerd]	29.18	5	9 p. m.	29.49	29	7 a. m.	28.67
	Granville	28.99	6	7 a. m.	29.35	29	7 a. m.	28.34
	Hillsborough	28.90	5	9 p. m.	29.23	29	7 a. m.	28.31
	Oberlin ( <i>b</i> )	29.15	5	9 p. m.	29.51	4	7 a. m.	28.60
	Urbana	28.77	5	7 a. m.	<i>e</i> 29.12	29	7 a. m.	28.16
	West Bedford	28.29	6	7 a. m.	28.62	29	7 a. m.	27.75
	Battle Creek	29.10	9	7 a. m.	29.45	1	7 a. m.	28.62
	Copper Falls Mines ( <i>b</i> )	28.53	14	7 a. m.	<i>f</i> 28.90	1	7 a. m.	27.80
	Detroit	29.52	5	7 a. m.	29.89	1	7 a. m.	29.01
Indiana	Romeo ( <i>b</i> )	29.01	5	9 p. m.	29.33	29	7 a. m.	28.37
	New Harmony	29.70	9	7 a. m.	30.12	28	9 p. m.	29.07
	Richmond	29.00	9	7 a. m.	29.32	21	2 p. m.	28.39

*a* Same height at 9 p. m. on the 6th.*b* See notes to table of thermometer for this month.*c* Same height at 2 p. m. on the 6th.*d* Not corrected for temperature.*e* Same height at 9 p. m. on the 5th.*f* Same height at 2 p. m. on the 14th.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1856.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Illinois.....	Manchester (a).....	28.83	8	9 p. m.	29.28	21	1 p. m.	28.20
	Upper Alton.....	29.54	8	9 p. m.	29.90	28	9 p. m.	29.05
Missouri.....	Cape Girardeau.....	29.68	5	9 a. m.	30.11	28	9 p. m.	29.05
	Palmyra.....	29.46	8	3 p. m.	b 29.87	22	9 a. m.	28.78
	St. Louis.....	29.60	8	2 p. m.	30.38	21	7 a. m.	29.01
Wisconsin.....	Appleton.....	28.97	18	7 a. m.	29.29	1	7 a. m.	28.36
	Beloit.....	29.17	8	9 p. m.	29.57	21	2 p. m.	28.21
	Madison, [Schue].....	28.95	8	9 p. m.	29.39	21	2 p. m.	28.13
	Manitowoc (c).....	29.71			30.11			28.84
	Milwaukee, [Winkler].....	29.27	8	9 p. m.	29.66	21	9 p. m.	28.63
	Racine, [Durham] (d).....	29.13	12	2 p. m.	29.71	21	9 p. m.	28.30
	Superior.....	29.31	5	7 a. m.	f 29.63	1	7 a. m.	28.42
	Waukesha.....	28.74	18	7 a. m.	b 29.08	21	2 p. m.	27.92
Iowa.....	Muscatine.....	29.50	8	2 p. m.	29.94	1	9 p. m.	29.06
California.....	Sacramento.....	30.06	18	9 p. m.	30.34	22	9 p. m.	29.75
Mexico.....	Vera Cruz.....	30.08	5	9 <sup>1</sup> a. m.	30.41	20	2 p. m.	29.85
West Indies.....	Port of Spain, Trinidad.....	29.85	18	7 a. m.	g 29.93	9	2 p. m.	29.75
South America.....	Catharina Sophia, Surinam (a).....	29.62	1	2 p. m.	29.74	7	2 p. m.	29.53
	Colonia Tovar, Venezuela.....	23.76	1	7 a. m.	23.85	7	2 p. m.	23.68
Azores.....	Horta, Fayal.....	29.94	17	9 p. m.	f 30.22	30	7 a. m.	h 29.50

*a* See notes to table of thermometer for this month.*b* Same height at 9 p. m. on the 8th.*c* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*d* Not corrected for temperature.*e* Observations taken at 9 a. m. and 9 p. m.*f* Same height at 7 a. m. on the 18th.*g* Same height at 7 a. m. on the 19th.*h* Same height at 2 p. m. on the 30th.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.64	18	9 a. m.	30.35	14	9 a. m.	28.63
Montreal .....	29.98		7 a. m.	30.86		9 p. m.	29.07
St. Martin .....	29.83	20	9 p. m.	30.74	14	9 p. m.	28.72
Toronto (a) .....	29.71	18	2 p. m.	30.44	3	6 a. m.	28.74
Wolfville .....	29.73	20	7 a. m.	30.66	4	7 a. m.	28.97
Maine .....							
Carmel (a) .....	29.50	19	7 a. m.	30.30	14	9 p. m.	28.50
Gardiner .....	29.77	19	2 p. m.	30.52	15	7 a. m.	29.05
Portland .....	29.79	19	7 a. m.	30.54	25	7 a. m.	29.04
Steuben .....	29.83	19	9 p. m.	30.58	3	9 p. m.	28.76
New Hampshire .. Concord .....	29.62	19	7 a. m.	30.38	14	9 p. m.	28.65
Shelburne (a) .....	29.80	19	7 a. m.	30.52	15	7 a. m.	28.96
Vermont .....							
Norwich .....	29.64	19	7 a. m.	30.40	24	9 p. m.	29.10
Shelburn .....	29.59	19	7 a. m.	30.65	14	9 p. m.	28.19
Massachusetts .. Amherst .....	29.75	19	7 a. m.	30.56	3	2 p. m.	28.77
Bridgewater (a) .....	29.85	19	7 a. m.	30.62	14	7 p. m.	28.89
Cambridge (a) .....	29.96	19	7 a. m.	30.70	24	3 p. m.	29.20
Nantucket .....	30.00	19	7 a. m.	<i>b</i> 30.70	24	2 p. m.	29.14
New Bedford .....	29.88	19	7 a. m.	30.63	14	9 p. m.	29.01
Newburyport .....	29.94	19	7 a. m.	30.75	24	9 p. m.	29.21
North Attleborough .....	29.79	19	7 a. m.	30.56	■	2 p. m.	28.89
Princeton .....	28.76	19	7 a. m.	29.48	14	9 p. m.	27.76
Westfield .....	29.88	19	7 a. m.	30.66	■	9 p. m.	29.20
Williamstown .....	29.27	19	7 a. m.	30.03	14	9 p. m.	28.18
Worcester .....	29.47	18	9 p. m.	30.02	25	2 p. m.	28.77
Rhode Island .. Providence (a) .....	29.77	19	Sunrise	30.55	■	1 p. m.	28.85
Connecticut .....							
Norwich .....	29.97	19	7 a. m.	30.71	14	9 p. m.	29.05
Pomfret .....	29.31	19	7 a. m.	30.06	14	9 p. m.	28.38
Wallingford .....	29.89	19	7 a. m.	30.67	3	2 p. m.	28.79
New York .....							
Blackwell's Island .....	30.00	19	9 p. m.	30.62	14	2 p. m.	29.16
Buffalo .....	29.36	18	2 p. m.	30.08	14	2 p. m.	28.35
Cazenovia .....	28.56	18	9 p. m.	29.27	14	2 p. m.	27.50
Fishkill Landing (c) .....	30.19	19	7 a. m.	30.93	3	2 p. m.	29.30
Flatbush .....	29.88	19	7 a. m.	30.66	3	2 p. m.	28.92
Lowville .....	29.03		9 p. m.	29.77		2 p. m.	27.94
Mexico (d) .....	29.70						
New York city .....	30.03	18	9 p. m.	30.78	3	2 p. m.	29.05
North Salem .....	29.62		7 a. m.	30.34		9 p. m.	28.75
Oswego .....	29.32	18	9 p. m.	30.11	14	2 p. m.	28.20
Ovid .....	28.94	18	9 p. m.	29.63	11	2 p. m.	28.37
Penn Yan (a) .....	29.24	18	Sunset	29.92	14	Sunset	28.33
Rochester, [Pratt] .....	29.47	18	7 a. m.	30.08	14	2 p. m.	28.48
Sag Harbor .....	29.71	19	7 a. m.	30.44	3	2 p. m.	28.72
Spencertown .....	29.29	19	7 a. m.	30.05	24	7 a. m.	28.34
Troy .....	30.02	19	7 a. m.	30.84	14	9 p. m.	29.03
New Jersey .....							
Bloomfield .....	29.89	19	7 a. m.	30.59	3	9 p. m.	29.29
Burlington, [Schmidt] .....	29.98	19	7 a. m.	30.64	3	2 p. m.	29.07
Lambertville (e) .....	29.99	18	9 p. m.	30.69	14	5 p. m.	29.05
Newark .....	29.99	19	7 a. m.	30.72	14	6 p. m.	29.10
Pennsylvania .. Berwick (e) .....	29.27	18	9 p. m.	30.00	3	2 p. m.	28.42
Canonsburg .....	28.84	18	2 p. m.	29.41	3	7 a. m.	27.95
Carlisle .....	29.24	18	9 p. m.	29.90	14	2 p. m.	28.31
Chromedale .....	29.90	19	7 a. m.	<i>f</i> 30.62	14	2 p. m.	29.02
Easton .....	29.75	19	7 a. m.	30.45	3	2 p. m.	28.90
Gettysburg .....	29.51	18	9 p. m.	30.14	14	2 p. m.	28.56
Harrisburg .....	29.81	18	9 p. m.	30.51	3	2 p. m.	28.93
Lewisburg .....	29.57	18	9 p. m.	30.26	14	2 p. m.	28.55
Morrisville .....	30.13	19	7 a. m.	30.89	3	2 p. m.	29.17
Nazareth (a) .....	29.45	19	7 a. m.	30.17	14	2 p. m.	28.50
Norristown .....	29.89	19	7 a. m.	<i>f</i> 30.67	■	2 p. m.	28.84

<sup>a</sup> See notes to table of thermometer for this month.<sup>b</sup> Same height at 2 p. m. on the 19th.  
Not corrected for temperature.<sup>d</sup> For the last 26 days of the month only.<sup>e</sup> Observations taken at 7 a. m. and 6 p. m.<sup>f</sup> Same height at 9 p. m. on the 18th.



## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania .. Philadelphia .....	29.76	18	9 p. m.	30.48	14	2 p. m.	28.97
Pittsburg .....	28.96	18	7 a. m.	29.50	14	2 a. m.	28.05
Somerset .....	27.66	18	9 p. m.	28.08	14	2 p. m.	26.88
Delaware .. Newark, [Craven] (a) .....	29.82	18	7 a. m.	30.46	14	2 p. m.	28.90
Maryland .. Frederick .....	29.80	18	9 p. m.	30.47	14	2 p. m.	28.81
Ridge (a) .....	30.01	19	8 p. m.	30.68	3	1 p. m.	29.11
Dist. of Columbia .. Washington .....	30.12	19	7 a. m.	30.79	14	2 p. m.	29.14
Virginia .. Alexandria .....	30.09	19	7 a. m.	30.76	14	2 p. m.	29.10
Portsmouth .....	30.09	19	7 a. m.	30.66	3	2 p. m.	29.14
Ruthven .....	29.75	19	7 a. m.	30.35	14	2 p. m.	28.93
North Carolina .. Chapel Hill .....	29.54	19	7 a. m.	30.01	3	7 a. m.	28.88
Goldsborough .....	30.07	19	7 a. m.	30.64	3	2 p. m.	29.38
Murfreesborough .....	29.53	19	7 a. m.	30.06	3	7 a. m.	28.73
South Carolina .. Ali Saints .....	30.08	19	7 a. m.	30.51	3	2 p. m.	29.53
Camden .....	29.99	19	7 a. m.	30.45	3	7 a. m.	29.39
Charleston, [Johnson] .....	30.23	19	7 a. m.	30.59	3	2 p. m.	29.82
Charleston, [Dawson] .....				30.58			29.82
Edisto Island (a) .....	30.14	18	8 a. m.	b 30.51	3	2 p. m.	29.67
St. John's (a) .....	30.19	19	Sunrise	30.55	3	Sunrise	29.77
Georgia .. Savannah .....	30.14	9	9 p. m.	30.49	3	7 a. m.	29.72
Sparta .....	29.46	17	9 p. m.	29.80	2	9 p. m.	29.04
Thomaston .....	29.39	15	7 a. m.	29.69	4	7 a. m.	28.94
Florida .. Atsena .....	29.90	17	9 p. m.	30.14	3	7 a. m.	c 29.69
Jacksonville .....	30.20	18	7 a. m.	30.52	3	2 p. m.	29.84
St. Augustine (a) .....	30.20	18	8 a. m.	d 30.48	14	2 p. m.	29.89
Salt Ponds (e) .....	29.78	17	2 p. m.	29.96	3	7 a. m.	f 29.63
Warrington .....	30.11	17	7 a. m.	30.39	2	9 p. m.	29.69
Alabama .. Auburn .....	29.44	17	7 a. m.	29.71	2	9 p. m.	29.06
Greensborough .....	29.72	29	7 a. m.	30.08	3	2 p. m.	29.38
Mississippi .. Columbus .....	29.94	17	7 a. m.	30.27	2	2 p. m.	29.19
Natchez .....	29.93	7	7 a. m.	30.34	2	7 a. m.	29.38
Port Gibson .....	30.01	16	9 p. m.	30.48	2	7 a. m.	g 29.42
Texas .. Washington (e) .....	29.54	21	7 a. m.	30.09	14	7 a. m.	28.97
Tennessee .. Glenwood .....	29.66	23	7 a. m.	30.04	2	2 p. m.	28.87
Walnut Grove (h) .....	28.50	9	7 a. m.	28.81	2	9 p. m.	27.90
Kentucky .. Ballardsville .....	29.12	18	7 a. m.	29.44	2	9 p. m.	28.33
Millersburg .....	29.34	18	7 a. m.	i 29.66	3	2 p. m.	28.46
Paris .....	29.27	18	7 a. m.	29.63	2	9 p. m.	28.42
Springdale .....	29.50	6	2 p. m.	29.93	2	9 p. m.	28.65
Ohio .. Cincinnati, [Harper] .....	29.59	18	7 a. m.	29.98	2	9 p. m.	28.72
Cleveland .....	29.19	18	7 a. m.	29.58	14	7 a. m.	28.38
College Hill .....	29.11	18	7 a. m.	29.55	2	9 p. m.	28.26
Germantown [Groneweg] .....	29.30	18	7 a. m.	29.77	2	9 p. m.	28.39
Germantown, [Binker] .....	29.26	18	7 a. m.	29.68	2	9 p. m.	28.40
Granville .....	29.03	18	7 a. m.	29.52	14	7 a. m.	28.18
Hillsborough .....	28.92	18	7 a. m.	29.35	2	9 p. m.	28.08
Urbana .....	28.80	18	7 a. m.	29.24	14	7 a. m.	27.95
West Bedford .....	28.30	9	9 p. m.	28.52	14	7 a. m.	27.71
Michigan .. Battle Creek .....	29.14	18	7 a. m.	29.68	2	9 p. m.	28.24
Copper Falls Mines .....	28.65	17	2 p. m.	29.21	11	2 p. m.	27.97
Romeo (a) .....	29.02	18	7 a. m.	29.59	14	1 p. m.	28.02
Indiana .. New Harmony .....	29.76	23	7 a. m.	30.17	2	2 p. m.	28.80
Richmond .....	29.03	18	7 a. m.	29.45	2	9 p. m.	28.11
Illinois .. Chicago .....	29.43	17	9 p. m.	29.88	2	9 p. m.	28.44
Manchester (a) .....	28.89	6	7 a. m.	j 29.35	2	1 p. m.	k 28.11
Upper Alton .....	29.51	23	7 a. m.	29.92	2	2 p. m.	28.65
Missouri .. Cape Girardeau .....	29.72	23	9 a. m.	30.16	2	3 p. m.	28.83

a See notes to table of thermometer for this month.

b Same height at 9 p. m. on the 9th.

c Same height at 2 p. m. on the 3d.

d Same height at 9 p. m. on the 17th.

e Not corrected for temperature.

f Same height at 7 a. m. on the 9th.

g Same height at 2 p. m. on the 2d.

h Observations interrupted from the 13th to the 24th.

i Same height at 2 p. m. on the 18th.

j Same height at 7 a. m. on the 7th.

k Same height at 9 p. m. on the 2d.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1856.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches</i>
Missouri ..... Palmyra .....	29.46	23	Sunrise	29.91	2	3 p. m.	28.58
..... St. Louis .....	29.62	6	7 a. m.	30.30	2	2 p. m.	28.66
Wisconsin ..... Appleton .....	29.05	17	9 p. m.	29.57	3	7 a. m.	28.18
..... Beloit .....	29.21	17	7 a. m.	29.68	2	9 p. m.	28.29
..... Madison, [Sterling] (a) .....	29.02	17	9 p. m.	29.54	2	9 p. m.	28.16
..... Manitowoc (b) .....	29.37			30.33			28.83
..... Milwaukee, [Winkler] .....	29.31	17	9 p. m.	29.79	3	7 a. m.	28.31
..... Racine, [Durham] (c) .....	29.18	17	9 p. m.	d 29.68	3	7 a. m.	28.18
..... Superior .....	29.39	17	7 a. m.	29.92	11	2 p. m.	28.80
..... Waukesha .....	28.80	18	7 a. m.	e 29.23	3	7 a. m.	27.88
Iowa ..... Muscatine .....	29.52	22	9 p. m.	29.96	2	2 p. m.	f 28.92
California ..... Sacramento .....	30.22	19	9 p. m.	30.62	29	9 p. m.	29.70
Mexico ..... Vera Cruz .....	30.17	21	6 a. m.	30.53	2	6 a. m.	29.89
West Indies ..... Port of Spain, Trinidad .....	29.89	31	2 p. m.	30.01	24	2 p. m.	29.82
South America ..... Catharina Sophia, Surinam (a) .....	29.59	11	2 p. m.	29.67	20	6 p. m.	29.51
Azores ..... Horta, Fayal .....	29.85	14	7 a. m.	30.60	5	2 p. m.	g 29.06

a See notes to table of thermometer for this month.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Not corrected for temperature.

d Same height at 9 p. m. on the 16th.

e Same height at 7 a. m. on the 17th.

f Same height at 9 p. m. on the 2d.

g Same height at 9 p. m. on the 6th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) -----	15.32	-----	16.90	16.11	18	32	18	29.50	9	—11	9	—5.50	-----
Montreal -----	7.31	14.06	9.99	10.45	17	33	24	24.62	5	—15	5	—11.62	5.0
Red River Settlement. -----	—13.32	—5.48	—10.16	—9.65	17	22	22	16.00	3	—40	6	—33.33	3.3
St. Martin -----	3.20	15.02	6.35	8.19	30	29	30	19.90	5	—21	5	—11.90	4.2
Toronto (b) -----	13.19	20.67	14.60	16.12	16	33	17	29.95	9	—12	9	—4.63	6.6
Wolfville -----	14.47	20.99	16.86	17.44	17	38	17	32.80	29	—5	5	6.13	4.7
MAINE—													
Carmel -----	3.25	20.13	6.82	10.06	8	40	8	23.67	5	—20	5	—7.00	4.5
Fryeburg -----	0.77	21.40	-----	11.18	17	35	17	26.50	5	—23	5	—11.25	4.5
Gardiner -----	7.48	21.31	13.77	14.19	17	c 33	17	29.33	10	—16	9	d —0.67	5.0
Perry -----	11.10	21.39	14.03	15.50	8	33	17	25.33	5	e —4	5	2.67	4.0
Portland -----	10.05	23.39	14.26	15.90	29	34	17	27.17	10	—5	9	—1.00	4.9
Steuben -----	8.39	19.45	13.77	13.87	8	33	8	26.33	5	—9	5	—1.67	6.2
Windham -----	2.94	13.97	6.29	7.73	23	f 30	3	21.33	5	e —12	9	—6.00	4.2
NEW HAMPSHIRE—													
Concord -----	9.77	22.87	15.81	16.15	18	38	18	31.33	7	—14	9	—2.00	4.2
Londonderry -----	12.03	22.74	14.97	16.58	24	36	18	30.00	9	—7	9	—3.00	4.2
Manchester -----	9.63	22.93	16.16	16.24	18	36	18	29.00	7	—14	9	—2.67	5.1
Stratford -----	7.74	19.03	15.55	14.10	3	31	3	28.33	5	—14	5	—2.33	-----
VERMONT—													
Brandon -----	6.23	18.63	10.30	11.72	18	33	3	28.00	5	—22	5	—7.67	5.0
Burlington -----	8.97	19.81	10.77	13.18	18	38	3	31.00	5	—13	5	—5.67	3.4
Craftsbury -----	4.74	15.13	8.23	9.37	29	29	29	22.00	5	—20	5	—8.00	6.1
MASSACHUSETTS—													
Amherst -----	9.23	21.61	14.48	15.11	17	35	13	30.67	9	—11	9	—5.80	4.5
Boston (g) -----	13.87	26.39	17.29	19.18	18	40	13	32.67	9	—6	9	—3.00	3.0
Lawrence (h) -----	11.38	-----	-----	-----	-----	29	-----	-----	-----	—5	-----	-----	-----
Mendon -----	12.03	20.71	14.71	15.48	14	36	13	31.67	9	—9	9	—6.67	4.7
Nantucket -----	26.25	30.99	26.84	28.02	13	i 41.5	13	39.17	9	7.5	9	10.50	4.3
New Bedford -----	17.26	25.63	19.89	20.92	13	39	13	36.33	9	—5	9	—2.33	5.6
Newburyport -----	12.33	22.64	15.84	16.94	17	32	13	30.50	9	—10	25	2.40	7.1
North Attleborough -----	13.61	24.89	16.98	18.49	13	47	13	37.47	9	—6.9	9	—1.20	4.2
Princeton -----	11.62	18.35	14.40	14.79	18	30	3	27.33	9	—13	9	—7.90	4.7
Richmond -----	11.29	20.65	19.19	17.04	3	j 34	13	30.00	9	—12	9	—8.67	5.9
Southwick (k) -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8.4
Springfield -----	10.45	26.84	16.39	17.89	18	42	18	36.67	6	—12	9	—5.33	4.1
Westfield -----	10.94	22.65	16.61	16.73	18	35	3	30.67	9	—11	9	—6.33	3.9
Williamstown -----	10.4	19.0	13.9	14.43	3	33	3	32.00	7	—8.4	9	—5.60	6.1
Worcester -----	12.06	22.74	16.58	17.13	18	53	18	35.33	9	—8	9	—5.33	3.8
RHODE ISLAND—													
Acquidnetset (k) -----	12.80?	-----	24.42?	18.61?	-----	-----	-----	-----	-----	-----	-----	-----	-----
Providence (l) -----	14.4	24.6	16.9	18.63	13	37	13	34.00	9	—8	9	—4.33	4.1
CONNECTICUT—													
New London -----	17.06	27.55	20.68	21.76	13	m 41	10	37.00	9	—4	9	0.00	4.5
Pomfret -----	13.13	22.68	16.48	17.43	29	34	3, 13	31.33	9	—10	9	—7.00	4.8
Saybrook -----	18.10	25.39	21.68	21.72	13	38	13	36.67	9	—4	9	—0.67	4.9
NEW YORK—													
Angelica -----	7.16	20.00	9.94	12.37	18	n 34	17	27.67	26	—31	9	—9.33	6.1
Baldwinsville -----	13.06	19.97	16.03	16.35	3	34	18	28.67	9	—6	9	—4.33	7.9
Beverly -----	13.26	20.62	18.13	17.34	18	35	13	33.33	9	—8	9	—3.00	4.9
Blackwell's Island -----	20.97	26.61	23.52	23.70	3	38	3	36.00	9	—4	9	0.00	6.8
Canton -----	8.84	17.81	10.55	12.40	3	33	17	28.33	20	—20	5	—8.00	6.4
Clinton -----	12.71	18.34	15.09	15.38	18	33	29	27.00	9	—9.5	9	—4.17	8.0
Fishkill Landing -----	12.13	24.35	16.61	17.69	29	40	13	34.33	10	—5	9	—2.67	3.9
Flatbush -----	18.09	26.29	20.91	21.76	19	40	13	34.67	9	—3	9	—0.76	5.6
Geneva -----	15.05	20.73	16.48	17.42	-----	34	18	29.33	-----	—6	9	3.00	7.6

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 6 a. m., 2 p. m., and 10 p. m.

c Same temperature on the 16th.

d Same temperature on the 4th.

e Same temperature on the 10th.

f Same temperature on the 30th.

g Observations taken at 10 a. m., 1 p. m., and 6 p. m.

h Observations taken at 6 a. m.

i Same temperature on the 19th.

j Same temperature on the 29th.

k Month very incomplete.

l Observations taken at sunrise, 1 p. m., and 10 p. m.

m Same temperature on the 18th.

n Same temperature on the 3d.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
NEW YORK—Continued.	°	°	°	□		°		°		□		°	
Homer.....	9.32	19.29	11.41	13.34	3	35	3	27.67	9	—13	9	6.33	8.1
Liberty.....	10.65	21.30	13.42	15.12	13	32.5	13	30.17	9	—16	9	3.33	6.2
Lodi.....	12.13	19.77	13.52	15.14	2	39	18	29.67	9	—10	9	5.33	7.7
Morrisania.....	15.61	25.81	19.29	20.23	13	a 38	13	35.33	9	—9	9	4.00	5.3
New York city.....	18.95	25.78	21.81	22.18	26	37	13	33.93	9	—5	9	0.73	5.0
Oswego.....	14.61	20.84	17.68	17.71	3	35	17	28.67	9	—3	9	0.33	---
Ovid.....	13.81	18.68	15.48	15.99	7	33	18	28.33	9	—9	9	4.67	7.8
Penn Yan (b).....	12.71	24.45	17.77	18.31	3	a 41	3	33.00	9	—8	9	3.00	7.4
Plattsburg.....	9.87	17.97	12.52	13.45	3	40	8	32.00	5	c—14	5	8.33	5.5
Rochester, [Harkness].....	14.3	21.2	16.8	17.43	---	33	---	---	---	8	---	---	---
Rochester, [Pratt].....	14.9	20.5	17.8	17.73	1	d 32	3	29.50	9	—6	9	4.00	8.9
Sag Harbor.....	19.58	28.84	23.10	23.84	13	41	13	36.67	9	1	8	3.00	4.9
Smithville.....	7.83	19.19	12.35	13.12	3	32	17	e 27.00	20	—18	20	4.67	7.2
Spencertown.....	9.10	20.19	13.06	14.12	29	36	13	30.33	9	—22	9	14.33	5.3
Wampsville.....	13.77	23.68	15.83	17.76	3	38	29	30.00	5	—6	9	1.00	8.3
Watertown.....	8.45	18.52	11.65	12.87	17	36	17	28.67	10	—13	10	8.00	6.4
NEW JERSEY—													
Bloomfield.....	17.40	25.93	19.96	21.10	18	39	13	f 35.67	9	—9	9	6.00	4.1
Burlington.....	17.32	26.19	19.94	21.15	19	f 38	3	33.00	9	—5	9	3.00	7.5
Lambertville.....	13.21	27.84	15.20	18.75	19	42	3	35.17	9	—10	9	6.08	4.6
Newark (g).....	---	---	---	21.56	19	39.5	18	33.37	9	—7.3	9	1.13	9.1
PENNSYLVANIA—													
Bedford.....	12.00	22.78	15.92	16.90	18	41	18	30.33	26	—15	9	6.00	5.6
Berwick.....	12.55	26.38	21.00	19.98	22	42	21	A 34.00	14	—19	13	5.33	4.8
Canonsburg.....	7.84	21.13	12.71	13.89	7	36	28	27.33	26	—20	9	9.00	---
Carlisle.....	12.06	23.84	15.76	17.22	19	39.5	3	30.83	9	—12.5	9	6.17	5.3
Chromedale.....	16.68	26.21	20.07	20.99	19	40	3	34.50	9	—11	9	7.20	5.0
Easton.....	9.13	24.00	13.85	15.66	3	39	3	31.00	9	—12	9	5.67	3.3
Fleming (i).....	14.50	25.70	---	20.10	1	39	---	---	9	—15	---	---	---
Gettysburg.....	10.94	25.90	17.61	18.15	19	42	3	30.67	9	—16	9	5.43	5.2
Harrisburg (j).....	20.03	28.96	24.37	24.45	19	59	29	31.33	7	7	5	16.67	5.7
Lewisburg.....	9.14	23.37	14.92	15.81	3	38	13	30.47	9	—16	9	7.77	6.3
Meadville.....	7.65	22.87	11.87	14.13	18	36	27	27.67	26	—22	9	10.00	6.6
Morrisville.....	16.42	28.29	20.13	21.61	19	41	13	33.67	9	—6	9	1.33	3.8
Moss Grove.....	8.81	19.23	11.17	13.07	18	35	27	24.67	9	—22	9	14.00	6.3
Nazareth.....	12.42	25.45	14.90	17.59	29	k 37	3	31.33	9	—16	9	7.92	4.8
Norristown.....	16.09	26.22	20.70	21.00	18	38	3	34.50	9	—6	9	2.67	4.6
North Whitehall (m).....	11.94	25.90	21.74	19.86	18	40	3	35.67	9	—14	9	4.67	4.2
Paradise.....	---	---	---	14.00	---	---	---	---	---	---	---	---	---
Philadelphia.....	19.80	27.50	23.50	23.60	19	42	9	35.67	9	—5	9	1.00	5.6
Pittsburg.....	12.29	18.90	17.68	16.29	27	36	27	30.67	9	—13	9	7.67	---
Pocopson.....	15.85	25.50	19.87	20.40	18	39	9	33.33	9	—11	9	7.00	5.5
Randolph.....	8.94	20.26	12.16	13.78	18	34	27	24.33	9	—22	9	13.33	7.0
Shamokin.....	---	---	---	---	18	48	---	---	10	—18	---	---	---
Troy Hill.....	11.35	21.48	16.97	16.60	18	36	27	28.33	26	—18	9	6.33	---
West Haverford.....	18.71	27.87	---	23.29	19	42	19	35.50	9	—5	9	1.50	5.2
DELAWARE—													
Newark, [Crawford] (n).....	17.70?	27.07?	18.43?	21.07?	28	36?	27	30.67?	9	—7?	10	6.00?	---
MARYLAND—													
Annapolis, [Goodman].....	---	---	---	23.46	19	44	---	---	10	—6	---	---	---
Annapolis, [Zumbrock].....	19.70	28.16	24.01	23.95	13	40	14	31.60	9	—2	9	2.07	5.0
Bladensburg (n).....	15.06	30.05	19.92	21.68	19	48	19	33.33	7	—5	9	2.50	4.9
Chestertown.....	15.53	27.32	21.32	21.39	19	42	3	34.00	9	—2.5	9	0.50	4.4
Frederick.....	16.41	26.94	20.97	21.44	28	40	3	33.37	9	—8	9	0.50	5.2
Sykesville.....	13.19	27.65	18.23	19.69	18	45	19	34.33	9	—20	9	7.00	4.8

a Same temperature on the 18th.

b Observations taken at sunrise, 2 p. m., and sunset.

c Same temperature on the 20th.

d Same temperature on the 2d.

e Same temperature on the 3d and 16th.

f Same temperature on the 3d.

g Observations taken at 9 a. m., noon, and 3 p. m.

A Same temperature on the 7th.

i Observations taken at sunrise and noon.

j Observations interrupted from the 6th to the 14th of the month.

k Same temperature on the 18th and 19th.

l Same temperature on the 19th.

m Observations taken at sunrise, noon, and sunset.

n Month incomplete.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date.	M'n temp.	Date.	Temp.	Date	Mean temp.	
DISTRICT OF COLUMBIA—	°	°	°	°		°		°		°			
Washington .....	15.80	27.55	21.33	21.56	19	44.5	3	34.00	9	— 4	9	0 16	3.8
VIRGINIA—													
Alexandria .....	16.13	28.05	21.63	21.94	19	42	3	34.67	9	— 4.5	9	— 0.17	4.4
Berrysville (a) .....	14.11	31.25	19.92	21.56	4	51	3	35.50	26	— 8	10	6.75	6.4
Buffalo .....	12.52	27.64	20.32	20.18	18	49	27	35.33	10	— 12	9	— 0.67	5.5
Crichton's Store (b) .....	24.25	32.30	33.30	29.95	31	44	28	39.67	10	8	10	16.33	4.0
Garysville (c) .....	13.19	25.61	25.77	21.52	18	d 48	19	40.33	10	— 6	10	7.33	---
Huntersville .....													4.0
Kenawha (e) .....	17.65	28.94	24.03	23.54	19	46	19	34.67	24	— 2	9	4.00	---
Lewisburg (f) .....	18.00	30.84	23.74	24.19	18	d 50	19	40.00	10	— 8	10	g 4.00	6.3
Peach Grove Lodge .....	13.94	28.35	18.29	20.19	18	h 45	27	36.33	9	— 15	9	— 3.33	3.2
Rougemont (i) .....	14.64		21.73	18.18	28	35	28	30.00	10	— 15	10	— 8.00	---
Smithfield (j) .....				26.44	19	54	19	43.00	9	— 2	9	6.50	---
Trout Run Valley .....	8.39	29.90	14.26	17.52	19	52	19	32.00	9	— 20	9	— 6.67	3.0
Winchester .....	16.19	30.84	21.00	22.68	19	50	19	37.33	9	— 6	9	4.00	5.2
NORTH CAROLINA—													
Chapel Hill .....	22.19	37.00	27.48	28.89	19	60	19	46.00	10	7	10	14.67	5.5
Goldsborough .....	27.81	38.71	31.61	32.71	18	68	19	48.83	10	13	10	18.00	5.0
SOUTH CAROLINA—													
Aiken .....	29.48	41.23	33.71	34.81	18	61	18	48.67	22	15	22	22.33	---
All Saints .....	33.68	42.87	36.87	37.81	19	58	19	49.33	10	21	10	25.67	5.2
Camden .....	25.87	40.35	31.29	32.50	19	62	19	46.33	23	12	10	22.00	5.5
Charleston, [Dawson] .....	35.25	43.58	39.32	39.38		54				23			---
St. John's (k) .....	31.48	43.79	36.72	37.33	18	66	18	47.33	23	13	23	32.67	---
GEORGIA—													
Savannah .....	35.1	45.3	38.9	39.76	18	59	20	48.40	23	22	22	28.20	5.8
Sparta .....	27.61	38.55	31.52	32.56	18	54	18	43.67	23	13	22	21.00	6.1
Thomaston (l) .....	32.03	34.85?	35.56?	34.14?	3	m 41	30	38.00?	22	19	22	23.00?	6.0
Whitemarsh Island .....	25.52	44.61	39.71	36.61	19	57	12	50.00	22	22	22	27.67	5.4
Zebulon .....	30.54	39.93	38.61	36.36	2	n 50	3	47.00	10	16	22	o 28.00	3.8
FLORIDA—													
Atsena .....	45.29	50.90	49.13	48.44	2	70	2	63.67	22	29	23	32.67	5.6
Jacksonville .....	43.32	53.70	46.06	47.69	3	70	3	63.60	22	24	23	33.33	5.5
Salt Ponds .....	62.77	66.87		64.82	2	p 82	3	79.00	24	50	23	51.50	6.3
Warrington (g) .....	36.90	47.10	45.19	43.06	7	61	7	55.33	22	22	23	32.00	5.5
ALABAMA—													
Auburn .....	29.23	40.40	34.80	34.81	18	51	19	p 42.67	22	16	22	22.00	5.4
Greene Springs (k) .....	29.87	42.36	33.67	35.30	18	56	7	r 43.67	10	s 17	22	27.67	8.2
MISSISSIPPI—													
Columbus .....	27.79	38.19	31.87	32.62	18	56	18	43.00	23	13	22	20.83	---
Port Gibson .....	31.65	39.81	35.42	35.62	31	53	6	48.00	20	18	20	23.67	7.9
Oxford .....	22.81	34.19	27.94	28.31	18	54	18	41.67	23	6	22	12.67	4.9
LOUISIANA—													
New Orleans (t) .....	40.35	47.13	47.39	44.96	26	67	7	64.00	22	27	10	31.33	---
TEXAS—													
Austin .....	28.42	44.58	36.71	36.57	13	64	24	50.00	16	14	27	26.67	5.2
New Braunfels .....	33.13	48.68	37.42	39.74	13	63	24	53.67	16	18	26	25.67	6.2
Pin Oak (c) .....	31.90	41.81	42.06	38.59	13	u 62	31	52.00	16	18	26	24.33	2.2
TENNESSEE—													
Glenwood .....	20.98	30.19	25.52	25.56	18	57	18	45.93	9	— 15	9	3.93	---
KENTUCKY—													
Ballardsville .....	14.94	23.65	19.39	19.33	18	47	18	39.67	10	— 16	9	— 8.67	7.9
Danville .....	18.35	30.74	23.23	24.10	18	51	18	41.33	9	— 12	9	— 6.00	5.0
Millersburg .....	15.19	25.35	20.42	20.32	12	56	12	40.33	10	— 14	9	— 3.00	5.8

a Observations taken at sunrise, 9 a. m., and 3 and 9 p. m.

b Observations taken at 9 a. m., noon, and 4½ p. m.

c Observations taken at sunrise, noon, and sunset.

d Same temperature on the 19th of the month.

e Observations taken at sunrise, 1 p. m., and sunset.

f Observations taken at 7 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 9th.

h Same temperature on the 27th.

i Observations taken at sunrise and sunset.

j Observations taken by register thermometer.

k Observations taken at sunrise, 2 p. m., and 9 p. m.

l Month incomplete, except at 7 a. m.

m Same temperature on the 19th, 25th and 30th.

n Same temperature on the 3d, 18th, and 19th.

o Same temperature on the 21st.

p Same temperature on the 3d.

q Observations taken at 7½ a. m., noon, and sunset.

r Same temperature on the 2d.

s Same temperature on the 22d and 23d.

t Observations taken at 9 a. m., noon, and 3 p. m.

u Same temperature on the 25th.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
KENTUCKY—Continued.	□	○	□	○		○		□		□			
Paris	14. 19	24. 13	19. 97	19. 43	18	44	18	37. 00	10	—15	10	— 8. 00	6. 1
Springdale	13. 97	27. 60	22. 79	21. 45	18	49	18	38. 17	10	—22	9	— 8. 50	5. 9
OHIO—													
Bellefontaine	8. 20	17. 36	11. 81	12. 46	27	31	27	24. 10	9	—25. 5	9	—15. 33	5. 2
Cheviot (a)	12. 94	25. 97	20. 00	19. 64	18	52	18	41. 33	9	—20	9	— 8. 67	---
Cincinnati, [Harper]	14. 90	29. 26	21. 61	21. 92	3	65	27	36. 00	9	—14	9	— 6. 33	6. 2
Cincinnati, [Telegraph] (b)	17. 16	26. 45	21. 68	21. 76	18	48	18	35. 67	9	—12	9	— 4. 67	5. 1
Cincinnati, [Lea]				20. 48	18	46			9	—12			
Cleveland	10. 19	21. 03	15. 00	15. 40	12	37	12	26. 33	9	—17. 5	9	— 8. 00	7. 1
College Hill	12. 08	22. 79	17. 74	17. 54	18	47	18	38. 83	9	—21. 7	9	—11. 90	5. 4
Dayton, [Cooper F. Sem.]				19. 22	18	42			9	—19			
Gallipolis	13. 13	28. 10	19. 48	20. 23	18	44	27	34. 67	9	—10	9	— 2. 33	---
Germantown, [Groneweg]	9. 27	22. 32	15. 35	15. 65	18	41	27	29. 75	9	—25	9	—14. 12	5. 8
Granville (c)	7. 42	20. 95	13. 92	14. 09	18	40	18	25. 33	9	—20	9	—10. 67	5. 7
Hillsborough	15. 89	21. 26	16. 97	18. 04	18	43	18	34. 67	9	—18	9	— 9. 83	5. 6
Hiram	9. 03	20. 18	12. 10	13. 98	18	41	18	29. 13	9	—25	9	—16. 00	4. 9
Oberlin	10. 80	23. 20	15. 30	16. 43	12	33	29	29. 00	9	—14	8	— 5. 67	5. 4
Perrysburg (e)	11. 84	22. 68	15. 87	16. 79	18	38	16	28. 33	9	—18	9	— 6. 33	---
Portsmouth (f)	15. 35	26. 48	22. 94	21. 59	18	41	27	35. 00	10	—10	9	— 1. 33	6. 1
Savannah	7. 39	20. 90	13. 35	13. 88	18	39	13	25. 00	9	—22	9	—11. 00	6. 1
Unionville	14. 32	22. 84	15. 77	17. 64	12	33	17	27. 33	9	—14	9	— 4. 00	7. 6
Urbana	7. 90	22. 58	12. 90	14. 46	18	42	27	27. 00	9	—23	9	—14. 00	5. 8
MICHIGAN—													
Ann Arbor, [Woodruff]	8. 10	19. 50	11. 35	12. 98	---	20	13	25. 67	9	—24	9	—13. 00	6. 3
Ann Arbor, [Winchell] (g)									9	—24	9	—14. 33	---
Battle Creek	8. 26	22. 26	12. 32	14. 28	14	35	14	28. 00	9	—21	9	— 9. 00h	6. 6
Cooper	8. 67	16. 10	10. 06	11. 59	26	31	28	23. 33	9	—17	9	— 7. 00	7. 1
Copper Falls Mines (i)				9. 16		29				—20			
Eagle River (j)	10. 58	12. 61	11. 39	11. 53	13	k 26	13	24. 67	7	—10	7	— 4. 00	---
Grand Rapids, [Currier]	11. 61	19. 90	15. 87	15. 79	17	36	18	k 25. 67	8	— 9	8	— 8. 67	6. 8
Monroe, [Whelpley]													5. 8
Romeo (e)	8. 93	17. 92	10. 82	12. 56	18	28	18	26. 50	9	—22	9	—14. 33	6. 3
St. James	9. 32	19. 70	11. 92	13. 65	22	38	17	29. 33	8	— 9	8	— 8. 00	5. 7
Saugatuck	13. 48	23. 13	16. 74	17. 78	17	36	17	26. 67	8	— 5	8	— 3. 33	8. 3
INDIANA—													
New Harmony	16. 06	27. 10	21. 23	21. 46	18	51	18	37. 67	9	—12	9	— 3. 33	5. 8
ILLINOIS—													
Athens	6. 48	22. 55	10. 87	13. 30	31	42	17	28. 00	9	—28	9	—13. 33h	5. 2
Augusta	5. 84	17. 54	10. 97	10. 45	17	37	17	27. 33	9	—25	8	—15. 00	4. 9
Brighton (m)	12. 26		17. 10	14. 68	17	42	17	35. 00	9	—22	9	—16. 00	---
Manchester (e)	8. 55	24. 39	12. 58	15. 17	17	45	17	31. 67	9	—25	9	—12. 00	5. 3
Ottawa (n)	10. 71	22. 42	11. 61	14. 91	14	38	19	27. 00	19	—18	8	—10. 67	1. 7
Pekin (o)				12. 58		34				—25			---
Peoria (p)	10. 41	22. 82	18. 83	16. 43		36. 5	17	28. 06		—20	8	—11. 31	---
Upper Alton	12. 48	25. 16	16. 23	17. 96	17	46	17	36. 33	9	—18	9	— 8. 00	4. 2
MISSOURI—													
St. Louis	15. 0	25. 1	20. 2	20. 10	17	51	17	40. 67	9	—13. 5	9	— 4. 50	4. 3
WISCONSIN—													
Appleton	2. 03	14. 87	7. 35	8. 08	17	31	14	23. 67	9	—25	8	—21. 67	---
Beloit	4. 03	15. 19	7. 74	8. 99	14	q 30	14	22. 67	9	—26	8	—19. 67	3. 1
Janesville	0. 45	15. 26	6. 22	7. 31	14	31	14	22. 00	9	—29	8	—22. 00	5. 6
Kenosha	8. 97	17. 73	12. 77	13. 16	18	36	18	27. 15	9	—22 h	8	—17. 00	4. 5
Manitowoc				13. 00		40				—22			---
Milwaukee, [Winkler]	4. 82	16. 21	9. 60	10. 21	18	33	14	25. 00	9	—23	8	—21. 00	5. 0

- a Observations taken at 7 a. m., 1 p. m., and 7 p. m.  
b Observations taken at 10 a. m., 1 p. m., and 6 p. m.  
c For the first 24 days of the month only.  
d Same temperature on the 15th.  
e Observations taken at 7 a. m., 1 p. m., and 9 p. m.  
f Observations taken at 7 a. m., 2½ p. m., and 6 p. m.  
g Observations taken only on the 8th, 9th, and 10th of the month.  
h Same temperature on the 8th.  
i Observations taken at 6 a. m., noon, and 6 p. m.

- j Observations taken at 9 a. m., 3 p. m., and 9 p. m.  
k Same temperature on the 17th.  
l Same temperature on the 13th and 16th.  
m Observations taken morning and evening.  
n Observations taken at 8 a. m., 2 p. m., and 9 p. m.  
o Observations taken at sunrise and 1 p. m.  
p Observations taken at sunrise, 2 p. m., and after sunset, and at midnight.  
q Same temperature on the 18th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Milwaukee, [Pomeroy] .....	4.84	19.68	9.52	11.35	17	37	17	<i>a</i> 24.33	9	—26	8	—15.67	---
Platteville .....	1.00	14.16	5.36	6.84	16	30	16	<i>a</i> 20.67	9	—28 <i>b</i>	8	—26.00	5.0
Racine, [Seymour] .....	---	---	---	11.74	---	---	19	25.00	---	---	8	—22.00	6.6
Superior .....	—0.67	13.46	5.37	6.05	16	47	16	30.67	8	—27	8	—18.00	5.5
IOWA—													
Bellevue ( <i>c</i> ) .....	5.00	19.00	10.00	11.33	---	33	---	---	---	—22	---	---	---
Dubuque .....	5.29	15.21	11.27	10.59	17	<i>d</i> 30	14	23.33	8	—20	8	—18.00	4.5
Fort Madison ( <i>e</i> ) .....	13.00	21.92	14.31	16.41	31	40	31	<i>f</i> 25.33	9	—25	8	—16.67	9.2
Muscatine .....	2.16	14.81	5.87	7.61	16	32	19	23.33	9	—26	8	—21.00	3.4
Pella .....	—0.90	13.23	3.90	5.41	17	31	16	19.67	9	—26 <i>b</i>	8	—23.33	---
Pleasant Plain ( <i>g</i> ) .....	4.61	17.03	9.41	11.21	16	39	16	28.50	9	—24	8	—17.75	---
Poultney .....	—0.42	14.32	4.23	6.04	16	29	14	22.33	8	—26	8	—22.00	4.9
Quasqueton .....	1.91	10.25	4.02	5.39	12	26.5	12	16.80	10	—27	8	—22.00	5.6
MINNESOTA—													
Hazlewood .....	—7.07	5.82	—1.41	—0.89	16	30	16	18.33	8	—29	8	—24.00	3.8
CALIFORNIA—													
Sacramento .....	43.42	52.74	48.32	48.16	16	59	30	54.33	1	32 <i>h</i>	2	38.33	4.6
San Francisco ( <i>i</i> ) .....	47.00	54.42	49.33	50.25	30	58	30	54.33	26	41	25	47.33	5.8
Stockton ( <i>j</i> ) .....	43.94	50.06	47.29	47.10	12	<i>k</i> 56	31	53.33	1	29	5	37.33	---
MEXICO—													
City of Mexico ( <i>l</i> ) .....	54.04	65.11	49.11	56.08	2	75	2	66.67	20	46	28	53.67	6.3
Mirador ( <i>m</i> ) .....	---	---	---	66.01	---	---	---	72.95	---	---	---	59.00	---
WEST INDIES—													
Up Park Camp, Jamaica. ( <i>n</i> ) .....	---	---	---	78.95	---	94	---	---	---	64	---	---	4.4

*a* Same temperature on the 14th.*b* Same temperature on the 8th.*c* Observations taken at 7 a. m., 2 p. m., and 8 p. m.*d* Same temperature on the 18th.*e* Observations taken at 6 a. m., noon, and 7 p. m.*f* Same temperature on the 16th.*g* Observations taken at sunrise, noon, sunset, and 9 p. m.*h* Same temperature on the 2d and 3d.*i* For the last 11 days of the month only.*j* Observations taken at 8 a. m., 2 p. m., and 8 p. m.*k* Same temperature on the 16th, 17th, and 31st.*l* Observations interrupted for most part during the first half of the month.*m* Observations taken at 7 a. m. and 2 and 8 p. m.*n* Observations taken at 9½ a. m. and 3½ p. m.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST WIND.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
°	°	°	°	°	°	°	°	°	°	°	°	°	
BRITISH AMERICA—													
Hamilton	15.00		18.00		11	35	11	34.00	13	—10	13	—6.00	
Montreal	10.28	19.66	15.74	15.23	11	39.5	11	31.67	13	—19	13	—8.83	5.8
Red River Settlement	—8.41	4.74	—5.11	—2.93	20	35	20	28.33	2	—36	2	—30.00	4.8
St. John's, Newfoundland (a)	26.07	30.50	28.64	28.40	17	41	17	37.33	16	13			
St. Martin	8.57	20.54	11.58	13.56	27	33	11	32.80	13	—21	13	11.20	5.4
Toronto (b)	11.10	21.82	14.65	15.86	22	34.5	20	29.87	13	—18.7	13	—6.88	
Wolfville	17.12	25.06	21.98	21.39	12	43	12	40.17	14	—2	13	9.00	4.3
MAINE—													
Carmel (c)	8.04	25.96	12.92	15.64	12	46	12	33.33	1	—19	13?	—14.00?	4.9
Fryeburg	8.10	23.76		15.93	22	40	12	35.00	14	—27	14	6.50	4.4
Gardiner	12.31	26.27	17.31	18.63	12	45	23	33.67	1	—5	13	0.67	5.1
Perry	14.31	24.83	19.96	19.37	12	42	17	33.33	14	—4	13	0.67	4.3
Portland	12.55	26.58	16.96	18.70	23	43	23	32.33	14	—6	13	1.00	4.9
Steuben	12.55	23.71	18.24	18.16	12	37	12	33.67	14	—9	13	—3.33	5.2
Windham	6.41	22.10	12.52	13.68	12	45	12	29.67	14	—22	14	—6.67	3.3
NEW HAMPSHIRE—													
Concord	12.10	25.83	17.34	18.42	22	41	21	32.33	15	—12	13	0.00	3.6
Londonderry	13.24	24.59	16.83	18.22	23	45	21	32.67	14	—7	13	—1.00	4.1
Stratford	9.72	22.14	15.28	15.71	23	44	11	30.67	13	—14	13	—6.00	6.2
VERMONT—													
Brandon	9.46	23.75	14.88	16.03	11	43	11	36.17	14	—16	13	—6.33	5.1
Burlington	11.00	23.72	15.79	16.84	23	39	16	30.33	13	—17	13	—6.67	3.7
Craftsbury	6.93	17.62	10.83	11.79	23	43	11	30.00	13	—21	13	—13.00	5.2
MASSACHUSETTS—													
Amherst	13.77	25.32	18.61	19.23	23	39	21	32.80	14	—11	13	1.00	4.4
Boston (e)	19.17	29.97	20.27	23.14	23	50	23	37.33	14	—3	13	3.33	3.3
Lawrence (f)	14.93			14.93		37				—8			
Mendon	14.90	24.93	18.69	19.50	23	40	23	33.33	14	—6	13	0.33	4.3
Nantucket	25.58	32.16	26.62	28.12	23	42	23	37.93	14	—7	13	13.00	3.6
New Bedford	18.96	26.74	22.14	22.63	16	41	11	35.67	14	—1	13	4.83	5.3
Newburyport	15.69	23.56	17.77	19.01	21	39	21	32.00	14	—6.7	4	7.00	g 8.1
North Attleborough	17.96	26.90	19.93	21.60	23	44	23	34.30	14	—4.5	14	4.07	3.3
Princeton	13.97	20.88	15.07	16.64	23	37	23	32.40	14	—8	3	—4.00	4.9
Southwick													g 5.3
Richmond	12.45	24.41	17.24	18.03	11	46	11	35.33	13	—12	13	—0.67	5.6
Springfield	24.24	35.52	29.72	29.83	23	49	26	44.17	14	—6	9	—3.17	4.1
Westfield	14.79	25.00	19.69	19.83	22	40	22	34.00	15	—4	13	1.00	4.8
Williamstown	13.26	23.00	17.26	17.84	23	43	23	31.30	3	0	14	1.20	6.5
Worcester	16.05	26.29	19.69	20.68	12	57	12	38.67	14	—8	13	0.50	4.1
RHODE ISLAND—													
Acquidnetset (g)	14.78?			14.78?									
Providence (h)	19.20	28.90	20.00	22.70	22	41	23	34.00	14	—3	13	3.33	4.7
CONNECTICUT—													
New London	20.59	31.24	23.24	25.02	23	47	11	38.00	14	2	13	6.67	4.4
Norwich (j)	18.83	30.00	22.59	23.81	23	42	21	34.67	14	—3	14	6.00	3.7
Pomfret	15.93	25.07	18.76	19.92	23	46	23	35.00	14	—5	13	0.00	4.3
Saybrook	19.96	27.17	22.86	23.33	7	40	11	35.33	3	12	13	6.00	4.2
NEW YORK—													
Angelica	5.18	22.25	12.46	13.29	22	44	23	32.00	14	—40	13	—13.33	4.1
Baldwinsville	13.34	22.34	18.10	17.92	11	40	11	35.67	13	—7	13	—1.00	7.3
Beverly	16.41	25.04	21.12	20.86	22	42	23	35.33	14	—4	13	5.00	5.1
Blackwell's Island	22.52	28.43	25.62	25.52	22	42	23	38.00	14	4	3	9.00	5.8
Canton	9.14	22.34	16.03	15.84	11	42	11	36.33	13	—20	13	—11.67	6.2
Clinton	13.45	20.71	17.86	17.34	11	45	11	37.33	13	—15	13	—6.00	7.1
Fishkill Landing	16.41	29.86	20.72	22.33	22	44	21	36.33	14	—4	3	4.33	3.3
Flatbush	19.23	28.99	23.25	23.82	22	42	15	33.90	4	2.3	3	7.56	5.0

a Observations taken at 8 a. m., 3 p. m., and 9 p. m., for the last 14 days of the month only.

b Observations taken at 6 a. m., 2 p. m., and 10 p. m.

c Mean of the coldest day computed from the observations at 7 a. m. and 9 p. m., there being no observations at 2 p. m. on that day.

d Same temperature on the 16th.

e Observations taken at 10 a. m., 2 p. m., and 6 p. m.

f Observations taken at 6 a. m.

g Month incomplete.

h Observations taken at sunrise, 1 p. m., and 10 p. m.

i Same temperature on the 23d.

j For the last 17 days of the month only.

k Same temperature on the 12th.

l Same temperature on the 14th.

m Same temperature on the 3d.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Fordham .....	19.79	30.13	23.93	24.62	22	43	23	36.00	14	0	13	8.33	---
Geneva .....	14.12	22.31	19.43	18.62	---	43	23	34.33	---	—15	13	—1.67	6.8
Homer .....	8.06	21.55	14.00	14.54	11	42	11	33.67	13	—14	13	—5.67	7.6
Liberty .....	11.03	22.28	15.55	16.29	22	42	23	30.33	13	b—9	13	—4.67	5.8
Lodi .....	12.31	22.52	15.59	16.80	11	46	11	37.00	13	—8	13	—4.33	6.7
Madrid (c) .....	8.04	17.30	14.38	13.24	11	36	11	33.33	13	—18	13	—10.00	6.9
Morrisania .....	18.76	29.41	21.21	22.79	22	44	23	38.00	14	—4	13	3.67	5.5
New York city ..	20.92	28.36	24.12	24.46	22	41	23	38.36	4	2	3	7.93	4.7
Oswego .....	13.83	23.31	18.21	18.45	11	47	11	38.33	13	—10	13	—1.00	4.4
Ovid .....	14.10	21.17	17.86	17.71	11	44	11	37.33	13	—6	13	—3.00	6.6
Penn Yan (d) .....	11.55	20.86	20.14	19.32	23	47	23	35.67	14	—9	13	—2.00	6.7
Plattsburg .....	11.41	21.45	12.83	15.23	21	37	21	30.67	13	—16	13	—7.00	4.5
Rochester, [Harkness] .....	14.4	23.9	18.7	19.00	---	42	---	---	---	—6	---	---	---
Rochester, [Pratt] .....	14.40	21.90	18.70	18.33	22	39	11	35.70	14	—5	15	—1.20	8.3
Sag Harbor .....	20.86	32.03	23.86	25.58	23	50	22	38.33	4	—1	13	7.33	4.4
Smithville .....	8.65	22.65	15.13	15.48	16	37	16	31.67	13	—30	13	—11.00	6.5
Spencertown .....	12.17	24.41	16.59	17.72	11	f 40	11	34.00	14	—13	13	—4.00	4.7
Wampsville .....	13.76	26.66	17.62	19.35	11	58	11	44.00	13	—15	13	—3.00	7.7
Waterford (h) .....	16.39	27.80	21.11	21.91	---	40	---	---	---	—4	---	---	---
Watertown .....	11.56	28.83	16.97	19.12	22	g 48	11	36.67	13	—27	3	—4.00	7.0
NEW JERSEY—													
Bloomfield .....	18.76	30.14	22.47	23.79	21	50	21	38.00	14	—2	3	5.67	4.9
Burlington .....	18.97	29.03	23.66	23.88	11	45	23	35.67	4	b 0	3	5.67	8.5
Lambertville .....	16.39	30.82	21.86	23.02	13	46	23	35.50	14	—4.75	3	3.83	5.2
Newark .....	---	---	---	24.28	23	45	12	35.62	14	—1	4	6.13	---
PENNSYLVANIA—													
Bedford .....	16.78	29.66	22.52	22.99	23	48	23	35.00	14	—17	4	1.67	6.4
Canonsburg .....	14.17	26.79	16.69	19.22	22	45	23	35.33	14	—22	5	—7.67	---
Carlisle .....	15.78	27.29	20.32	21.13	23	46	23	37.33	14	—8	3	1.00	5.3
Chromedale .....	19.28	28.84	23.32	23.81	22	42	23	35.10	14	—5	3	7.40	5.1
Easton .....	17.78	33.69	20.75	24.07	29	54	23	38.67	14	—6½	13	4.00	4.9
Fleming (i) .....	16.86	30.48	---	15.78	11	48	---	---	14	—9	---	---	---
Gettysburg .....	15.34	30.97	21.41	22.57	23	52	23	39.33	14	—9	3	—0.67	5.1
Harrisburg .....	20.16	29.59	25.12	24.96	22	45	29	37.33	14	2	13	j 9.00	5.0
Lancaster .....	---	---	---	32.00	11	61	---	---	14	—25	---	---	---
Lewisburg (k) .....	13.33	26.98	19.82	20.04	22	43	21	35.27	14	—21	13	—0.73	6.4
Meadville .....	8.86	27.83	13.31	16.67	22	49	26	29.33	14	—27	13	—13.00	6.3
Morrisville .....	18.38	32.90	22.62	24.63	22	49	23	35.67	6	—2	3	8.33	3.9
Moss Grove .....	10.48	23.72	14.86	16.35	11	l 36	11	32.00	13	—18	13	—8.67	5.7
Nazareth .....	14.69	27.90	17.86	20.15	22	g 45	23	37.67	14	—9	3	1.67	5.2
Norristown .....	20.43	30.22	25.04	25.23	11	m 43	23	36.70	14	0	13	7.33	5.8
North Whitehall .....	15.62	29.21	24.93	23.25	22	44	23	36.33	10	b—6	13	5.00	---
Paradise .....	---	---	---	32.00	---	---	---	---	---	---	---	---	---
Philadelphia .....	22.36	31.19	26.62	26.72	22	48	23	40.20	4	b 3	13	8.20	5.8
Pittsburg .....	16.72	26.90	21.17	21.60	11	42	7	36.33	14	—15	3	—1.67	---
Pocopson .....	18.86	29.91	23.21	23.99	23	n 44	23	36.67	14	—1	13	6.00	5.8
Randolph .....	9.93	23.34	12.48	15.25	22	50	11	32.33	3	—17	13	10.00	---
Troy Hill .....	15.48	26.83	20.45	20.92	11	o 40	23	p 35.33	14	—22	3	4.67	---
West Haverford .....	20.93	32.45	---	26.69	11	50	23	39.00	4	b 2	4	7.50	5.3
DELAWARE—													
Newark, [Crawford] (g) .....	20.56	30.26	24.50	25.10	11	46	29	33.67	4	b—1	13	7.00	5.1
MARYLAND—													
Annapolis, [Goodman] .....	---	---	---	28.10	23	53	---	---	14	—2.5	---	---	---
Annapolis, [Zumbrock] (r) ..	23.97	30.79	26.41	27.06	22	48	22	41.33	14	0	13	8.50	5.2

a Same temperature on the 21st.

b Same temperature on the 14th.

c For the first 22 days of the month only.

d Observations taken at sunrise, 2 p. m., and sunset.

e Same temperature on the 11th.

f Same temperature on the 16th and 22d.

g Same temperature on the 23d.

h Observations taken at 7 a. m., 1 p. m., 6 p. m., and 10 p. m.

i Observations taken at sunrise and noon.

j Same temperature on the 3d.

k Observations taken at 6 a. m., 2 p. m., and 10 p. m.

l Same temperature on the 21st and 29th.

m Same temperature on the 22d.

n Same temperature on the 26th.

o Same temperature on the 7th, 22d, and 23d.

p Same temperature on the 7th.

q Month incomplete.

r Observations taken at 7½ a. m., 2 p. m., and 9 p. m.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—Continued.	□	□	○	○		□		○		□		○	
Bladensburg (a).....	19.53	35.75	23.30	26.19	23	55	8	34.00	14	—1.25	3	9.33	4.9
Chestertown.....	20.96	30.48	22.64	24.69	22	45	23	38.00	4	0	4	5.67	4.8
Frederick.....	21.43	32.14	25.62	26.39	23	48	23	46.33	14	—5	3	7.97	5.0
Sykesville.....	17.72	31.76	22.72	24.04	23	53	23	39.67	14	—8	4	3.33	4.4
DISTRICT OF COLUMBIA—													
Washington.....	21.72	32.41	26.81	26.98	23	52	23	42.67	4	6.2	4	8.00	4.4
VIRGINIA—													
Alexandria.....	22.69	33.52	27.54	27.92	23	53	23	44.00	4	2.5	4	7.80	4.8
Berryville (a).....	19.53	27.85	24.06	23.81	25	45	25	37.00	4	—4	4	3.00	4.4
Buffalo.....	21.28	34.45	26.24	27.32	26	55	26	42.00	5	—9	4	—0.33	5.7
Crack Whip.....	19.17	33.90	26.21	26.43	23	52	23	42.00	13	—8	5	0.67	2.7
Crichton's Store (c).....	33.75	41.48	42.10	39.11	23	62	23	58.00	4	9	4	14.67	5.3
Garysville (d).....	24.74	36.74	34.81	32.10	23	62	23	53.33	4	0	4	10.00	---
Huntersville.....													4.4
Kanawha (e).....	24.45	34.17	29.79	29.47	26	52	27	42.33	4	f 0	4	5.33	---
Lewisburg.....	22.10	35.76	28.41	28.76	26	50	7	4.00	19	0	4	9.33	6.4
Peach Grove Lodge.....	19.69	35.24	23.31	26.08	22	58	30	40.00	5	—13	4	g—1.67	3.7
Rougemon (h).....	31.82		42.50	37.16	23	53	23	46.50	1	25	28	28.00	---
Smithfield.....				32.65	23	50	26	45.50	4	1	4	10.50	---
Winchester.....	22.48	37.07	25.69	28.41	23	54	23	45.00	14	0	4	8.00	5.5
NORTH CAROLINA—													
Chapel Hill.....	29.79	45.41	35.83	37.01	23	65	23	54.33	4	5	4	11.67	5.5
Goldsborough.....	34.63	48.07	39.76	40.82	23	66	16	59.00	4	11	4	16.00	4.6
SOUTH CAROLINA—													
Aiken.....	38.14	53.15	45.00	45.43	29	70	28	59.00	5	12	4	23.67	---
All Saints.....	40.55	52.48	45.00	46.01	27	68	27	60.00	5	17	5	26.00	4.0
Camden.....	34.65	52.97	41.75	43.12	28	64	16	60.33	5	0	4	19.67	5.1
Charleston, [Johnson].....	43.10	53.66	47.79	48.18	28	70	28	61.33	5	22	4	29.67	---
Charleston, [Dawson].....	43.10	53.65	44.34	47.03		70				22			---
Edisto Island (j).....	46.14	55.48	48.33	49.98	28	72	28	62.33	14	34	14	37.67	3.9
St. John's (k).....	38.97	50.58	45.24	41.60	16	70	16	60.67	5	16	5	25.67	---
GEORGIA—													
Savannah.....	42.90	56.50	48.80	49.40	28	73	28	62.97	5	19.6	5	29.00	4.0
Sparta.....	35.14	51.83	43.31	43.43	29	64	16	59.33	5	0	4	18.00	4.5
Thomas on.....	41.76	49.40	49.57	46.91	28	65	29	61.00	4	10	4	18.50	4.6
Whitmarsh Island.....	44.24	56.58	48.35	50.06	16	70	16	62.00	5	22	4	30.00	4.1
Zebulon.....	40.58	53.10	48.64	47.44	28	70	29	64.00	4	8	4	16.00	2.8
FLORIDA—													
Atsena.....	50.45	56.79	54.79	54.01	29	75	29	68.00	5	26	4	33.67	4.3
Gainesville.....	46.41	64.34	53.62	54.79	29	79	26	66.33	5	21	4	33.00	3.2
Jacksonville.....	44.06	63.24	52.75	53.35	28	79	28	65.67	5	26	5	33.33	4.4
Salt Ponds.....	63.34	69.34		66.36	28	81	28	76.50	5	45	5	49.00	---
Warrington.....	45.86	56.30	53.97	52.04	27	74	27	65.00	4	15	4	25.67	5.4
ALABAMA—													
Auburn.....	29.00	52.62	46.21	45.94	16	69	16	61.33	4	0	4	17.00	4.3
Greene Sp.ings (k).....	39.40	54.80	46.80	47.00	28	72.5	16	62.17	4	8	4	17.33	7.8
MISSISSIPPI—													
Columbus.....	36.29	50.52	43.05	43.29	28	73	16	59.83	4	4.5	4	12.67	---
Oxford.....	33.03	46.00	38.31	39.11	28	65	15	53.67	4	—1	3	7.33	5.1
Port Gibson.....	39.93	52.97	49.24	47.38	28	73	28	63.67	4	12	4	18.33	6.3
LOUISIANA—													
New Orleans.....	52.79	60.55	59.55	57.63	28	80	28	76.67	5	n 26	4	30.00	---
TEXAS—													
Austin.....	37.21	56.76	45.96	46.64	16	83	16	61.00	4	12	3	22.33	5.7
New Braunfels.....	41.34	60.19	48.66	50.06	15	77	16	65.33	3	18	3	26.00	6.3
Pin Oak (o).....	40.83	53.69	53.86	49.46	16	80	16	70.00	3	16	3	23.33	2.6

a Month incomplete.

b Same temperature on the 6th and 14th.

c Observations taken at 9 a. m., noon, and 4 p. m.

d Observations taken at sunrise, 2 p. m., and sunset.

e Observations taken at 7 a. m., 1 p. m., and sunset.

f Same temperature on the 5th.

g Same temperature on the 3d.

h Observations taken at sunrise and sunset.

i Same temperature on the 28th.

j For the last 21 days of the month only.

k Observations taken at sunrise, 2 p. m., and 9 p. m.

l Same temperature on the 29th.

m Same temperature on the 27th.

n Same temperature on the 4th.

o Observations taken at sunrise, noon, and sunset.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TENNESSEE—	°	°	°	°		°		°		°			
Glenwood Cottage .....	28.23	38.95	32.83	33.34	16	53	27	45.80	4	— 3	3	2.53	6.5
KENTUCKY—													
Ballardsville .....	22.38	30.55	26.38	26.44	26	54	26	44.00	4	—14	3	— 6.67	6.6
Danville .....	23.48	36.72	28.97	29.72	26	53	26	43.33	4	—15	3	— 5.33	5.2
Millersburg .....	22.34	32.14	26.17	26.88	26	50	26	41.33	5	—15	3	— 4.00	6.8
Paris .....	22.79	32.11	26.62	27.17	26	51	26	42.33	5	—13	3	— 4.33	6.0
Springdale .....	24.24	35.52	29.72	29.83	26	56	26	44.17	4	—22	3	— 3.17	6.0
OHIO—													
Bellefontaine .....	13.86	25.00	20.24	19.70	26	56	26	40.67	4	—18	4	— 6.33	5.7
Cheviot .....	19.72	32.41	24.76	25.63	26	56	26	45.67	3	—15	3	— 4.67	5.9
Cincinnati, [Lea] .....				27.66	26	54			4	—12	3	— 2.00	
Cincinnati, [Harper] .....	21.48	35.28	27.17	27.98	26	59	23	39.67	4	—13	3	— 1.33	6.0
Cincinnati, [Telegraph] (a) ..	21.90	32.93	27.90	27.58	26	58	23	40.00	4	—10	3	— 1.67	5.8
Cleveland .....	13.09	25.22	17.38	18.56	22	47	23	32.83	19	—13	13	— 3.33	7.0
College Hill .....	18.88	30.29	23.72	24.29	26	54	26	44.83	3	—17.5	3	— 8.00	5.5
Dayton, [Cooper F. Sem.] .....				24.50	26	53			4	—21			
Gallipolis .....	21.52	34.90	26.41	27.61	26	56	26	43.00	5	— 4	3	— 3.67	
Germantown, [Groneweg] .....	14.67	29.30	19.17	21.05	26	50	26	39.65	4	—30	3	—11.87	6.4
Granville .....	16.75	28.14	21.32	22.07	26	49	26	40.67	14	—18	4	— 2.33	6.3
Hillsborough .....	18.59	29.66	23.17	23.80	26	49	26	41.67	4	—14	3	— 5.33	5.2
Hiram .....	14.93	25.21	15.43	18.52	22	43	11	34.33	13	—14	13	— 8.00	4.5
Oberlin .....	14.90	27.21	18.79	20.30	22	48	11	36.67	19	—13	13	— 1.33	5.8
Perrysburg (b) .....	16.38	28.86	20.38	21.87	22	48	11	36.00	3	—10	3	— 1.00	
Portsmouth .....	24.07	33.45	29.28	28.93	26	58	26	48.00	4	— 8	4	— 2.00	6.7
Savannah .....	12.52	25.86	17.55	18.64	22	50	26	35.00	14	—21	14	— 4.33	6.2
Unionville .....	16.72	27.31	18.38	20.80	22	47	11	36.00	14	—11	13	— 2.67	6.8
Urbana .....	13.21	30.10	18.86	20.72	22	c 50	26	39.67	4	—22	4	— 7.00	6.6
MICHIGAN—													
Ann Arbor, [Woodruff] .....	9.45	23.52	14.24	15.74	22	42	11	32.33	19	—19	13	— 9.00	6.6
Ann Arbor, [Winchell] .....	11.89	24.36	13.59	16.61	20	d 42	11	32.67	19	—14 e	13	— 7.67	6.5
Battle Creek .....	10.66	27.24	13.86	17.25	21	d 44	20	32.33	13	—17	13	— 9.00	6.4
Cooper .....	13.48	23.93	14.93	17.45	22	40	20	30.67	13	— 8	13	— 2.67	5.0
Copper Falls Mines .....				2.12		36.50				—20			
Eagle River (f) .....	10.79	15.93	9.97	12.23	21	42	21	30.33	12	—16	12	—14.00	
Grand Rapids, [Currier] .....	11.03	21.97	14.24	15.75	28	38	20	30.00	3	—24	13	— 5.00	6.2
Romeo (g) .....	9.88	21.63	13.06	14.86	20	37	11	30.41	3	—14	13	— 6.83	6.5
St. James .....	7.92	15.92	9.73	11.19	20	h 40	21	27.00	13	—19.5	12	— 9.83	4.8
Saugatuck .....	14.45	25.24	16.41	18.70	20	43	20	33.67	13	—10	13	— 4.00	7.6
INDIANA—													
New Harmony .....	19.93	33.16	24.62	25.90	26	54	26	45.33	4	—20	3	— 9.33	6.3
Richmond .....				22.53			26	37.34	4	—24	4	— 7.33	6.2
ILLINOIS—													
Athens .....	14.07	30.48	18.00	20.85	26	56	26	41.67	3	—28	3	—14.33	5.5
Augusta .....	13.55	25.86	17.82	19.08	26	52	26	41.00	3	—28	3	—14.67	5.0
Manchester (i) .....	15.38	32.79	18.86	22.34	10	55	26	41.67	3	—25	3	—11.67	6.0
Ottawa (j) .....	17.14	29.66	17.74	21.51	23	46	20	36.00	3	—16	3	— 6.00	3.8
Pekin (k) .....				18.53		50				—25			
Upper Alton .....	17.90	34.89	22.57	25.12	26	58	26	44.00	3	—18	3	— 7.33	4.8
Warsaw .....	17.03			17.03	16	l 37			3	—24			
West Salem .....	17.97	34.00	24.55	25.51	26	60	26	44.67	3	—19	3	— 7.33	6.3
MISSOURI—													
Hannibal (m) .....	24.45	32.17	22.62	26.41	26	50	26	43.33	4	— 5 n	3	— 3.00	6.2
St. Louis .....	21.60	32.80	25.50	26.63	26	55	26	45.67	3	—15	3	— 5.67	5.8
WISCONSIN—													
Appleton .....	7.93	22.86	13.97	14.92	21	o 42	26	p 29.67	4	—17	2	— 8.33	

a Observations taken at 9 a. m., 1 p. m., and 6 p. m.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Same temperature on the 26th.

d Same temperature on the 22d.

e Same temperature on the 12th and 13th.

f Observations taken at 9 a. m., 3 p. m., and 9 p. m.

g Observations taken at 9 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 21st and 29th.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Observations taken at 8 a. m., 2 p. m., and 9 p. m.

k Observations taken at sunrise and 1 p. m.

l Same temperature on the 28th.

m Observations taken at 9 a. m., 2 p. m., and 9 p. m.

n Same temperature on the 3d.

o Same temperature on the 22d.

p Same temperature on the 20th.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	□	□	□	□		□		□		□		○	
Beloit .....	8.79	22.45	12.83	14.69	22	a 40	28	32.00	3	—24	3	—11.00	2.8
Janesville .....	7.27	22.79	10.44	13.50	22	b 40	27	32.67	3	—25	3	—13.33	5.7
Kenosha .....	12.26	23.81	15.79	17.29	21	39	26	32.00	3	—16	2	—8.50	4.2
Manitowoc .....				19.00		49				—16			
Milwaukee, [Winkler] .....	9.86	22.07	13.14	15.02	22	40	27	c 29.33	2	—18	2	—12.00	4.6
Milwaukee, [Pomeroy] .....	10.31	24.79	13.69	16.26	21	41	26	32.00	2	—18 d	2	—12.67	---
Platteville .....	9.41	22.96	14.69	15.69	26	44	27	33.67	3	—26	2	—14.67	4.9
Racine, [Seymour] .....				14.21			20	31.00			3	—14.00	6.9
Superior .....	5.26	20.83	13.41	13.17	20	45	22	e 30.00	22	—30	2	—9.67	2.6
IOWA—													
Bellevue (f) .....	12.00	28.00	17.00	19.00	---	42	---		---	—26	---		---
Dubuque .....	11.83	23.52	16.48	17.28	21	41	22	33.33	3	—20 g	3	—9.00	3.7
Fort Madison (h) .....	14.10	26.21	19.07	19.79	15	48	22	37.00	3	—26	3	—14.33	7.8
Muscatine .....	9.83	22.28	12.86	14.99	25	42	22	34.33	4	—29	4	—14.33	5.1
Pella .....	9.72	23.59	13.69	15.66	25	44	15	35.00	4	—28	3	—17.67	---
Pleasant Plain (i) .....	11.93	26.31	15.48	17.90	25	53	25	38.00	3	—22 g	3	—10.50	---
Poultney .....	6.89	22.29	13.41	14.20	22	39	26	j 30.67	3	—25	2	—15.00	4.9
Quasqueton (k) .....	4.50	18.10	6.28	9.56	25	39	27	30.85	8	—27	3	—14.67	4.9
MINNESOTA—													
Hazlewood .....	5.52	21.22	9.59	12.11	21	l 42	25	31.00	2	—24	2	—21.00	5.7
CALIFORNIA—													
Sacramento .....	47.03	58.66	53.17	52.95	24	m 60	16	57.33	7	42 m	7	44.33	2.6
San Francisco .....	48.69	58.34	48.38	51.80	24	68	24	59.33	2	43 n	2	47.00	3.0
Stockton .....	46.72	56.76	52.00	51.82	15	54	17	56.33	7	42	29	o 48.00	---
MEXICO—													
City of Mexico .....	54.21	69.62	57.48	60.44	29	79	29	a 67.00	3	30	12	52.00	8.1
Mirador (p) .....				69.35	---		---	78.04	---		---	54.12	---
WEST INDIES—													
Up Park Camp, Jamaica (q) .....				79.65	---	74	---		---	68	---		4.0
SOUTH AMERICA—													
Catharina Sophia, Surinam (r) .....	77.52	87.48	81.41	82.14	3	s 94	14	85.33	8	72	19	77.67	2.7

a Same temperature on the 28th.  
b Same temperature on the 25th, 27th, and 28th.  
c Same temperature on the 22d.  
d Same temperature on the 3d.  
e Same temperature on the 20th.  
f Observations taken at 7 a. m., 2 p. m., and 8 p. m.  
g Same temperature on the 4th.  
h Observations taken at 6 a. m., noon, and 7 p. m.  
i Observations taken at sunrise, noon, sunset, and 9 p. m.  
j Same temperature on the 19th.

k Month incomplete.  
l Same temperature on the 25th.  
m Same temperature on the 28th and 29th.  
n Same temperature on the 5th.  
o Same temperature on the 8th and 28th.  
p Observations taken at 7 a. m., 2 p. m., and 8 p. m.  
q Observations taken at 2½ a. m. and 3½ p. m.  
r Observations taken at 6 a. m., 2 p. m., and 6 p. m.  
s Same temperature on the 2d and 4th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	□	○	○	○		○		□		○		○	
Hamilton (a) .....	24.03	.....	24.55	24.29	24	37	24	36.50	9	— 3	9	— 1.50	....
Montreal .....	16.84	29.28	22.16	22.75	25	48	25	37.33	10	—11	9	— 1.90	6.1
Red River Settlement.....	1.77	19.23	6.55	9.18	20	44	22	32.00	8	—32	8	—20.67	3.9
St. John's (b) .....	23.00	28.17	23.57	24.91	29	36	29	31.67	6	—13	13	15.00	....
St. Martin .....	11.94	30.63	17.37	19.98	25	53	21	36.20	10	—16	9	— 1.53	5.1
Stanbridge .....	14.23	28.39	19.00	20.54	24	52	20	33.67	10	—26	10	— 7.67	5.6
Toronto (c) .....	17.77	28.49	22.49	22.92	21	39.5	24	34.35	9	—13.6	8	— 1.03	5.2
Wolfville .....	20.37	31.08	25.63	25.69	20	47	22	35.00	10	— 2	10	9.67	3.4
MAINE—													
Carmel .....	12.76	32.93	16.04	20.58	21	d49	25	38.50	10	—20	10	— 4.33	3.7
Cornish (e) .....	24.08	39.08	26.80	29.99	22	52	21	37.67	28	—13	28	16.67	5.3
Fryeburg .....	14.50	33.00	.....	23.75	22	f47	23	36.50	10	—25.5	10	— 8.60	3.1
Gardiner .....	19.23	33.79	23.48	25.50	16	44	16	34.50	10	—10	10	— 1.33	3.1
Perry .....	17.55	30.61	23.00	23.72	22	g40	26	32.67	10	—10	10	6.67	3.2
Portland .....	18.97	34.88	23.31	25.72	25	49	25	35.83	10	— 7	10	1.67	4.2
Steuben .....	17.84	29.42	22.39	23.22	26	55	26	40.67	10	— 2	9	3.00	4.7
NEW HAMPSHIRE—													
Concord .....	18.58	33.87	25.94	26.13	24	47	25	37.67	10	—14	10	— 3.00	2.7
Londonderry .....	18.55	33.06	24.00	25.20	24	49	20	37.33	10	— 8	10	0.33	3.0
Manchester .....	18.68	33.97	25.84	26.16	21	53	21	39.00	10	—11	10	— 0.67	4.1
Stratford (i) .....	18.17	31.45	21.68	23.73	25	42	21	31.67	28	— 8	27	12.00	6.7
North Barnstead.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.6
VERMONT—													
Brandon .....	16.81	29.96	21.49	22.75	24	44	24	35.17	10	—17	9	— 2.50	5.0
Burlington .....	17.87	32.94	22.61	24.47	22	51	22	33.33	10	—15	9	— 1.67	3.7
Craftsbury .....	13.42	25.55	17.55	18.84	24	42	23	33.00	10	—11	9	— 2.00	6.1
Norwich .....	11.77	32.00	20.16	21.31	20	49	22	35.33	10	—25	10	— 6.67	3.4
Shelburn .....	17.26	31.97	22.23	23.82	20	48	20	36.67	10	—22	10	— 0.67	4.5
MASSACHUSETTS—													
Amherst .....	20.12	33.03	24.49	25.88	24	45	22	36.67	10	— 9	10	3.80	4.3
Boston (j) .....	22.26	36.29	26.58	28.38	24	50	24	k38.00	10	— 3	10	5.00	2.3
Cambridge (l) .....	21.19	32.67	26.88	26.91	24	43	26	f35.67	10	— 3	10	3.33	4.6
Lawrence (m) .....	17.90	.....	.....	17.90	.....	30	.....	.....	.....	— 7	.....	.....	....
Mendon .....	20.81	31.61	23.74	25.39	24	44	24	34.33	10	— 5	10	2.33	3.9
Nantucket .....	30.94	36.87	31.26	33.02	18	44	24	39.50	10	—13	10	15.17	3.7
New Bedford .....	24.8	34.3	28.1	29.06	21	46.5	27	38.67	10	— 1	10	6.67	4.7
Newburyport .....	20.4	34.5	25.1	26.66	24	43	26	36.65	9	— 0.6	10	4.97	7.5
North Attleborough.....	23.43	32.98	29.54	28.65	24	44	21	37.00	10	— 2	10	3.83	3.3
Princeton .....	19.16	26.96	20.81	22.31	24	40	21	33.50	9	— 5	10	— 1.00	4.0
Richmond .....	17.55	32.29	23.03	24.29	21	54	21	38.67	9	—10	10	— 0.33	5.2
Southwick .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.5
Springfield .....	21.74	37.00	25.26	28.00	20	50	23	39.00	10	— 5	10	3.67	3.8
Taunton .....	25.16	37.32	28.80	31.43	24	52	21	40.33	10	— 3	10	6.33	2.6
Westfield .....	19.94	32.16	25.00	25.66	22	n42	22	36.00	10	— 2	10	3.33	4.9
Williamstown .....	18.7	29.9	21.8	23.46	24	42	21	33.60	10	— 7.5	9	0.40	5.8
Worcester .....	20.87	33.68	25.71	26.75	24	o42	25	p35.67	10	— 4	10	6.33	3.8
RHODE ISLAND—													
Acquidneset (q) .....	33.50?	41.50?	17.00?	30.66?	.....	.....	.....	.....	.....	.....	.....	.....	....
Providence (r) .....	23.1	34.7	25.5	27.76	24	46	22	36.00	10	— 2	10	4.33	3.6
CONNECTICUT—													
Georgetown .....	21.78	35.00	25.45	27.41	18	f46	21	38.00	10	— 0	10	6.00	4.2
New London .....	27.23	36.87	28.52	30.87	20	48	21	41.67	9	— 8	10	8.33	3.3
Norwich .....	24.68	34.26	26.84	28.59	24	47	15	37.33	10	— 2	10	5.67	2.7
Pomfret .....	21.03	31.23	24.03	25.43	24	46	24	36.33	10	— 3	10	1.00	3.9
Saybrook .....	25.77	33.23	28.48	29.16	22	42	21	37.00	10	— 2	10	8.33	4.0

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 8 a. m., 3 p. m., and 9 p. m. No report from the 15th to the 31st.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Same temperature on the 22d.

e For the last 12 days of the month only.

f Same temperature on the 21st.

g Same temperature on the 25th, 26th, 30th, and 31st.

h Same temperature on the 11th.

i Observations for the most part taken during the last 12 days of the month.

j Observations taken at 10 a. m., 2 p. m., and 6 p. m.

k Same temperature on the 20th.

l Observations taken at sunrise, 3 p. m., and 9 p. m.

m Observations taken at 6 a. m.

n Same temperature on the 24th and 25th.

o Same temperature on the 25th and 26th.

p Same temperature on the 24th.

q Very incomplete.

r Observations taken at 6 a. m., 1 p. m., and 10 p. m.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—	°	°	°	°		°		°		°		°	
Angelica.....	15.35	33.48	19.32	22.72	23	58	24	42.33	10	—28	9	—7.33	5.4
Baldwinsville.....	20.39	29.16	22.97	24.17	25	44	25	<sup>a</sup> 35.67	9	—5	9	—0.33	6.7
Beverly.....	23.07	33.66	27.42	28.05	21	43	20	37.00	10	0	10	7.00	4.7
Blackwell's Island.....	28.29	35.00	31.71	31.66	21	44	23	39.33	10	6	10	8.00	5.7
Canton.....	16.64	31.38	22.96	23.66	25	48	25	42.67	10	—14	9	—3.00	5.7
Clinton.....	18.67	26.87	21.58	22.37	22	42	24	35.00	9	—12	9	2.67	6.6
Eden.....	18.42	29.77	21.06	23.08	22	47	23	36.00	8	—13	9	—6.00	5.8
Fishkill Landing.....	21.45	38.23	26.42	28.70	20	<sup>b</sup> 48	20	38.67	10	—1	10	6.67	3.6
Flatbush.....	26.21	36.16	29.94	30.77	20	45	26	38.33	10	4.2	10	10.10	4.9
Geneva.....	20.95	29.85	23.48	24.76	—	49	24	39.83	—	—5	9	0.33	6.0
Liberty.....	16.55	27.77	19.82	21.38	21	41	13	47.00	10	—9	9	1.50	4.7
Lodi.....	19.06	29.87	19.87	22.93	24	50	24	38.67	9	—8	9	—1.33	6.4
Madrid (c).....	23.05	37.41	23.48	27.98	25	50	25	42.27	11	6	13	18.83	6.5
Mexico.....	21.78	31.13	24.38	25.76	—	40	25	35.47	—	—11	9	2.70	6.6
Morrisania.....	25.61	36.32	27.39	29.77	17	50	25	39.00	10	1	10	7.67	4.3
New York city.....	27.52	35.63	30.51	31.22	21	45	23	38.86	10	5.4	10	10.96	4.4
North Salem.....	20.16	33.95	25.85	26.65	—	46	21	35.33	—	—2	10	5.33	4.4
Oswego.....	18.81	29.03	21.10	22.98	19	42	24	35.00	9	—6	9	2.00	6.7
Ovid.....	20.52	27.55	22.35	23.47	24	48	24	38.67	9	—3 <sup>d</sup>	9	0.00	6.2
Penn Yan (e).....	17.68	31.75	24.94	24.79	24	46	24	37.67	10	—12	9	2.00	6.6
Plattsburg.....	18.03	29.13	21.52	22.89	23	<del>46</del>	23	38.00	10	—10	9	2.67	5.1
Rochester, [Harkness].....	23.1	30.8	25.9	26.60	—	45	—	—	—	—	—	—	—
Rochester, [Pratt].....	21.53	29.51	24.48	25.17	23	45	24	37.80	9	—3	9	1.00	6.1
Sag Harbor.....	26.74	38.13	28.97	31.28	15	47	21	38.67	10	3	10	8.33	4.4
Smithville.....	14.38	29.09	19.38	20.95	20	<sup>f</sup> 44	24	36.67	9	—20 <sup>d</sup>	10	—6.67	4.8
Spencertown.....	18.16	32.00	21.97	24.04	20	47	20	38.00	10	—10	10	—3.00	4.1
Wampsville.....	20.90	34.03	21.97	25.63	21	52	25	39.33	9	—10	9	0.33	6.8
Watertown.....	18.39	38.16	20.58	25.71	20	<sup>b</sup> 56	25	39.33	9	—20	9	—6.67	5.9
Waterford (g).....	20.73	33.54	20.00	25.59	—	45	—	—	—	—6	—	—	—
NEW JERSEY—													
Bloomfield.....	25.34	37.42	29.29	30.68	15	58	15	42.00	10	2	10	9.67	3.9
Burlington.....	24.77	37.48	29.39	30.55	21	<sup>h</sup> 47	21	38.00	10	4	10	10.00	6.4
Lambertville.....	23.32	38.27	30.41	30.67	21	51	25	39.42	10	—0.75	10	9.33	5.8
Newark.....	—	—	—	30.56	20	50	25	38.00	10	2.5	10	7.75	—
PENNSYLVANIA—													
Bedford.....	21.98	32.24	28.28	27.50	21	54.5	20	41.33	10	—8	10	6.00	4.9
Cannonsburg.....	20.39	34.68	23.00	26.02	21	50	20	40.67	10	—12	10	4.00	—
Carlisle.....	21.81	36.45	27.58	28.61	21	55	21	40.17	10	—4	10	5.67	4.2
Chromedale.....	36.18	37.31	29.71	34.40	27	48.5	25	39.00	10	5	10	11.50	4.2
Easton.....	21.92	42.12	27.43	30.49	21	57	23	42.33	10	0	10	8.33	4.8
Fleming (j).....	22.92	39.00	—	30.96	20	58	—	—	10	—6	—	—	—
Gettysburg.....	22.45	39.26	27.97	29.89	21	58	21	42.33	10	—5	10	7.00	4.7
Harrisburg.....	27.13	39.27	32.00	32.80	21	50	25	41.00	11	8	9	16.67	4.4
Lewisburg (k).....	18.99	35.35	24.75	26.03	23	47	25	36.93	10	—8	10	4.73	5.1
Meadville.....	17.58	34.13	18.61	23.44	20	55	20	40.67	10	—16	9	—5.00	5.1
Morrisville.....	25.65	39.29	29.48	31.47	20	49	25	40.00	10	4	10	8.00	3.9
Moss Grove.....	16.39	29.43	20.13	21.98	20	50	20	39.33	10	—12	9	—3.00	5.2
Nazareth.....	21.58	37.84	22.71	27.38	23	52	23	37.33	9	3	10	8.00	4.2
Norristown.....	26.91	37.29	30.29	31.50	21	47	21	39.00	10	3.8	10	10.93	4.0
North Whitehall (j).....	20.32	35.68	30.16	28.72	20	48	23	38.00	10	—6	10	7.00	—
Paradise.....	—	—	—	29.00	—	—	—	—	—	—	—	—	—
Philadelphia.....	28.5	38.7	32.9	33.36	20	49	21	42.67	10	4.5	10	11.5	4.8
Pittsburg.....	23.00	33.13	26.26	27.46	24	<sup>i</sup> 48	20	41.00	10	—4	10	5.33	—
Pocopson.....	25.35	38.15	29.84	31.11	20	50	25	39.00	10	3	10	10.67	4.9
Shamokin.....	—	—	—	—	20	62	—	—	10	—7	—	—	—
Troy Hill.....	22.42	35.13	28.10	28.55	20	50	20	41.67	10	—4	10	5.33	—
West Haverford.....	27.29	39.61	—	33.41	20	52	21	45.00	10	6	10	12.50	4.9

<sup>a</sup> Same temperature on the 21st and 24th.<sup>b</sup> Same temperature on the 21st.<sup>c</sup> For the last 21 days of the month only.<sup>d</sup> Same temperature on the 10th.<sup>e</sup> Observations taken at sunrise, 2 p. m., and sunset.<sup>f</sup> Same temperature on the 21st and 23d.<sup>g</sup> Observations taken at 7 a. m., 1 p. m., 6 p. m., and 10 p. m.<sup>h</sup> Same temperature on the 4th.<sup>i</sup> Same temperature on the 24th.<sup>j</sup> Observations taken at sunrise, noon, and sunset.<sup>k</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.<sup>l</sup> Same temperature on the 25th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
DELAWARE—	□	○	□	□		□		○		□		□	
Newark, [Crawford] (a).....	23.50	38.50	26.33	29.44	18	47	---	---	10	10	6	---	2.5
MARYLAND—													
Annapolis, [Zumbrock] (c)...	31.78	41.24	33.30	35.44	20	59	20	45.63	10	8	10	14.67	4.8
Annapolis, [Goodman].....				35.09	19	59	---	---	10	6	---	---	
Bladensburg.....	26.97	41.45	30.68	33.03	20	57	20	43.00	10	5	10	12.00	3.7
Frederick.....	27.05	40.15	31.55	32.92	21	59	21	45.50	10	4	10	13.00	4.9
Sykesville.....	25.00	39.55	29.13	31.23	21	55	21	43.33	10	3	10	9.00	3.8
DISTRICT OF COLUMBIA—													
Washington.....	29.95	41.66	34.60	35.40	20	57	20	46.33	10	7	13	32.00	3.6
VIRGINIA—													
Alexandria.....	30.52	42.45	34.81	35.93	20	d 54	20	45.33	10	6	10	14.67	4.6
Berryville.....	27.04	39.65	30.88	32.52	21	54	20	43.67	10	2	10	8.33	4.4
Buffalo.....	30.64	41.48	32.12	34.75	20	57	20	47.33	10	8	10	17.33	4.6
Crichton's Store (e).....	37.82	48.40	49.55	45.26	24	f 61	24	55.00	10	21	10	27.00	4.9
Garysville (g).....	31.74	46.77	43.84	40.78	24	65	24	51.67	10	10	10	18.67	---
Kanawha (h).....	30.87	42.23	37.39	36.83	20	i 53	21	47.00	10	9	10	23.00	---
Lewisburg.....	27.65	41.77	32.71	34.04	30	55	30	j 41.00	10	9	10	16.33	5.1
Peach Grove Lodge.....	26.19	40.10	29.00	31.76	21	k 52	24	42.67	10	—10	10	7.00	4.0
Rougmont (l).....	32.00	---	43.90	37.95	20	56	21	47.00	12	22	13	31.00	---
Smithfield.....	---	---	---	38.36	24	62	24	48.50	9	12.5	10	21.50	3.8
Trout Run Valley.....	23.16	38.45	23.74	28.45	21	m 50	20	40.67	10	—2	10	6.33	2.8
Winchester.....	29.32	44.23	31.87	35.14	21	60	21	46.67	10	2	10	11.33	3.8
NORTH CAROLINA—													
Chapel Hill.....	37.03	52.24	42.72	43.99	24	70	24	55.00	10	25	10	29.67	5.1
Goldsborough.....	41.06	52.67	44.35	46.03	24	70.5	24	59.33	10	24	10	28.50	5.4
SOUTH CAROLINA—													
Aiken.....	44.48	57.13	49.93	50.51	24	71	25	62.33	28	30	28	39.67	---
All Saints.....	45.10	55.68	49.00	49.93	24	71	24	60.67	29	32	28	39.67	5.6
Camden.....	43.87	57.26	46.39	49.17	24	73	24	62.67	10	31	13	37.00	5.9
Charleston, [Johnson].....	49.10	57.87	51.45	52.81	24	n 68	16	60.33	28	36	28	43.67	---
Charleston, [Dawson].....	49.96	57.87	51.45	53.09	---	68	---	---	---	36	---	---	---
Edisto Island.....	49.63	59.15	50.54	53.11	24	72	24	62.67	29	o 38	13	44.33	5.8
St. John's (p).....	44.52	57.98	47.06	49.85	24	72	24	61.33	29	29	28	38.33	---
GEORGIA—													
Savannah.....	49.2	61.3	52.6	54.37	25	76	25	65.37	28	36	28	44.30	5.7
Sparta.....	41.94	56.32	47.65	48.64	24	73	24	62.33	29	28	28	38.33	5.6
Whitemarsh Island.....	49.97	56.42	52.23	52.87	25	73	25	63.67	28	37	28	42.67	5.7
Zebulon.....	47.77	57.83	53.70	53.10	26	70	26	62.67	28	38	22	44.33	1.9
FLORIDA—													
Atsena.....	58.48	63.52	61.48	61.16	18	72	18	68.00	23	47	3	52.00	5.5
Gainesville (q).....	53.19	67.37	57.94	59.50	25	80	1	69.67	29	36	3	48.33	5.4
Jacksonville.....	56.51	67.70	60.74	61.65	31	83	25	71.00	29	42	14	o 49.67	5.9
Salt Ponds.....	69.16	76.55	---	72.85	13	r 85	19	80.00	24	57	23	61.50	2.1
Warrington (t).....	60.86	62.30	61.05	61.40	30	76	26	72.00	3	40	3	44.00	5.0
ALABAMA—													
Auburn.....	46.42	58.81	51.97	52.40	30	73	30	63.33	3	33	2	42.33	3.6
MISSISSIPPI—													
Columbus.....	43.21	57.34	50.33	50.29	24	77	24	64.43	3	31.5	2	39.93	4.7
Oxford.....	40.29	54.45	45.87	46.84	24	75	24	61.67	10	24	10	32.67	5.0
LOUISIANA—													
New Orleans.....	61.29	65.42	65.65	64.12	25	82	25	80.67	2	u 48	3	50.67	---
TEXAS—													
Austin.....	47.71	67.00	55.06	56.59	30	90	24	76.00	3	30	1	37.33	6.3
New Braunfels.....	51.94	69.23	58.87	60.01	30	95	30	76.67	3	32	1	39.67	4.7
Pin Oak (v).....	49.68	61.39	60.32	57.13	30	83	30	75.33	2	28	1	36.67	2.9

a Very incomplete.

b Same temperature on the 11th.

c Observations taken at 7½ a. m., 2 p. m., and 7½ p. m.

d Same temperature on the 21st.

e Observations taken at 8½ a. m., noon, and 5 p. m.

f Same temperature on the 6th.

g Observations taken at sunrise, 2 p. m., and sunset.

h Observations taken at sunrise, 1 p. m., and sunset.

i Same temperature on the 21st and 24th.

j Same temperature on the 21st.

k Same temperature on the 4th.

l Observations taken at sunrise and sunset.

m Same temperature on the 4th, 6th, and 20th.

n Same temperature on the 16th.

o Same temperature on the 3d.

p Observations taken at sunrise, 2 p. m., and 9 p. m.

q Observations taken at 6 a. m., 2 p. m., and 7 p. m.

r Same temperature on the 19th.

s Same temperature on the 13th.

t But few observations up to the 13th of the month.

u Same temperature on the 3d and 4th.

v Observations taken at sunrise, noon, and sunset.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TENNESSEE—	○	□	□	■		○		□		□			
Glenwood	34.54	47.00	39.05	40.20	20	67	20	56.60	10	15.5	10	25.50	5.6
Knoxville	36.1	48.9	42.4	42.46	24	67	25	58.83	10	21	10	28.83	5.9
KENTUCKY—													
Ballardsville	29.58	40.19	34.23	34.66	21	a 53	20	47.33	10	9	10	19.67	4.9
Danville	31.26	46.58	36.61	38.15	20	62	20	51.67	10	5	10	20.00	4.7
Paris	29.58	40.94	32.71	34.41	20	59	20	49.00	10	5	10	18.00	5.4
Springdale	27.56	44.33	38.45	36.78	20	64	20	53.17	10	7	10	21.33	5.4
OHIO—													
Bellefontaine	21.03	34.55	23.81	26.46	20	50	20	42.33	10	— 8	9	5.33	4.5
Cheviot	26.83	39.76	31.71	32.76	31	53	24	45.00	10	4	10	17.67	4.6
Cincinnati, [Harper]	25.61	44.26	34.03	34.63	21	61	20	49.67	10	8	10	20.33	4.9
Cincinnati, [Telegraph] (b)	29.97	41.87	34.77	35.50	21	60	20	48.67	10	10	10	21.00	4.5
Cleveland	20.79	31.33	23.74	25.29	20	47	20	38.33	9	— 3	9	— 0.67	5.3
College Hill	26.65	39.02	31.99	32.55	20	58	20	49.17	10	1	10	15.67	3.9
Dayton, (Cooper F. Sem.)				29.50	20	56			10	— 3			
Franklin (c)	25.52	34.89	29.28	29.90	20	60	20	49.33	10	— 9	10	7.67	4.6
Gallipolis	28.65	43.10	32.35	34.70	21	59	21	47.33	10	5	10	15.33	
Germantown, [Groneweg]	25.02	37.17	28.85	30.35	20	54	20	43.70	10	11	10	4.32	4.7
Granville	23.33	34.10	27.24	28.22	20	51	20	44.00	10	— 2	10	8.33	4.1
Hillsborough	25.81	36.68	29.90	30.80	20	55	20	46.33	10	1	10	11.83	4.3
Hiram	20.10	30.45	23.00	24.52	20	46	20	37.33	9	— 5	9	0.33	5.4
Jefferson	21.00	28.77	19.39	23.05	20	56	20	41.67	9	— 15	9	— 9.00	5.3
Oberlin	21.5	33.7	24.0	29.73	23	48	20	38.67	9	— 2	9	4.67	3.8
Perrysburg (e)	26.58	36.03	27.77	30.13	17	f 48	24	42.00	9	g 0	9	4.00	
Portsmouth (h)	33.42	42.65	35.74	37.27	20	62	20	53.00	10	9	10	19.33	5.7
Savannah	18.58	34.23	24.19	25.66	20	54	20	42.00	10	— 11	10	5.00	4.2
Unionville	22.42	31.55	23.60	25.86	21	i 44	24	38.00	9	— 8	9	— 3.33	5.4
Urbana	21.16	37.61	24.48	27.75	20	57	20	42.33	10	— 2	10	5.33	4.6
Zanesville, [Holston]	24.07	39.39	29.84	31.10	20	60	20	46.67	10	— 5	10	8.33	5.0
MICHIGAN—													
Ann Arbor, [Woodruff]	16.61	31.21	22.61	23.48	22	43.5	22	34.83	9	— 12	9	— 5.67	4.1
Ann Arbor, [Winchell]	18.77	32.52	21.35	24.21	20	45	20	36.00	9	g — 10	9	— 3.67	3.9
Battle Creek	16.97	32.16	21.97	23.70	18	54	23	40.00	10	— 13	9	0.33	4.0
Cooper	16.45	30.58	20.10	22.38	21	46	21	34.00	9	— 12	9	— 0.67	3.3
Copper Falls Mines (j)				16.22		33				— 17			
Detroit	18.19	30.45	23.29	23.98	22	45	22	37.33	9	— 10	9	— 3.67	5.0
Eagle River (k)	18.35	25.65	17.00	20.33	18	50	18	40.00	8	— 10	8	— 6.00	
Grand Rapids, [Currier]	17.16	30.87	22.16	23.40	22	48	23	36.00	9	— 16	9	— 3.67	4.3
Monroe													3.6
Romeo (e)	16.32	28.59	20.90	21.90	20	43.5	24	34.75	10	— 11.3	9	— 4.91	4.9
St. James	11.16	28.72	15.97	18.62	21	45	21	33.35	8	— 14	8	— 8.16	3.5
Saugatuck	19.74	32.45	22.16	24.78	20	44	23	37.33	9	— 7	9	3.00	5.3
INDIANA—													
New Harmony	30.84	43.06	34.58	36.16	23	60	20	50.00	12	11	10	23.00	5.6
Richmond	23.77	45.31	28.47	32.52	19	d 51	20	43.17	10	— 2	10	7.67	3.9
ILLINOIS—													
Athens	24.25	40.32	30.55	31.70	20	58	23	45.33	10	— 6	10	15.67	4.6
Augusta	22.45	38.29	30.06	30.26	23	61	23	48.00	12	— 4	9	15.00	4.3
Manchester (e)	26.23	41.72	30.13	32.69	23	65	23	53.00	10	5	9	19.00	5.2
Ottawa (m)	29.53	41.43	28.16	33.04	23	61	23	48.33	10	10	9	16.67	3.6
Pekin (n)				29.74		59				— 8			
Peoria (o)	23.76	42.23	37.00	33.29	23	61	23	50.00	10	0.5	9	15.69	
Upper Alton	26.82	42.52	31.87	33.74	23	66	23	50.00	10	2	10	18.00	4.2
Warsaw				25.87	9	54			11	0			
West Salem	28.84	44.10	32.74	35.23	23	54	23	51.33	10	9	10	19.00	5.2

a Same temperature on the 24th.

b Observations taken at 9 a. m., 1 p. m., and 6 p. m.

c Observations taken at 7 a. m., 3 p. m., and 7 p. m.

d Same temperature on the 20th.

e Observations taken at 7 a. m., 1 p. m., and 9 p. m.

f Same temperature on the 20th and 24th.

g Same temperature on the 10th.

h Observations taken at 7 a. m., 2½ p. m., and 8 p. m.

i Same temperature on the 14th and 23d.

j Observations taken at 6 a. m., noon, and 6 p. m.

k Observations taken at 9 a. m., 3 p. m., and 9 p. m.

l Same temperature on the 19th.

m Observations taken at 8 a. m., 3 p. m., and 9 p. m.

n Observation taken at sunrise and 1 p. m.

o Observations taken at sunrise, 3 p. m., after sunset, and at midnight.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSOURI—	°	°	°	°		°		°			°		
Rochepoort.....	31. 60	48. 06	36. 00	38. 55	23	72	23	52. 67	10	15	2	29. 00	3. 4
St Louis.....	30. 3	42. 7	35. 6	36. 20	23	65. 5	23	53. 67	10	10	10	23. 17	4. 7
WISCONSIN—													
Appleton.....	14. 55	32. 29	22. 61	23. 15	20	a 46	23	39. 67	11	—14	9	0. 33	---
Beloit.....	18. 25	33. 38	23. 22	24. 95	23	50	23	42. 00	10	— 3	9	8. 67	2. 9
Janesville.....	14. 52	35. 03	21. 45	23. 66	23	50	23	40. 33	10	— 5	10	7. 33	4. 6
Kenosha.....	20. 33	32. 79	25. 47	26. 20	23	52	23	43. 67	10	2	9	10. 00	2. 9
Madison, [Schue].....	20. 35	35. 17	22. 16	25. 89	23	52	23	42. 33	10	— 6	11	3. 33	3. 9
Manitowoc.....				26. 00				46		— 4		---	---
Milwaukee, [Pomeroy].....	21. 39	34. 22	23. 52	26. 38	23	53	23	43. 67	10	— 4	9	9. 00	---
Milwaukee, [Winkler].....	18. 90	30. 68	22. 74	24. 10	23	50	23	41. 67	10	— 2	9	8. 67	3. 4
Norway.....	21. 03	34. 97	23. 13	26. 38	23	52	23	42. 00	10	0	9	7. 33	3. 9
Platteville.....	16. 77	35. 80	23. 42	25. 33	23	52	23	42. 33	10	— 8	9	5. 00	4. 0
Racine, [Seymour].....				23. 19				23			10	3. 00	8. 9
Superior.....	13. 84	30. 97	19. 65	21. 49	23	49	23	37. 67	9	—15	8	— 0. 33	1. 6
Waukesha (b).....	20. 12	34. 21	23. 67	26. 00	23	53	23	42. 00	10	— 1	9	6. 33	4. 2
IOWA—													
Bellevue (c).....	19. 00	36. 00	27. 00	27. 33	---	52	---	---	---	— 4	---	---	---
Dubuque.....	22. 47	35. 90	27. 20	28. 52	23	d 53	23	45. 33	10	1	10	12. 67	3. 3
Fort Madison (e).....	21. 03	38. 90	29. 77	29. 90	23	57	23	48. 00	10	— 6	9	13. 67	6. 4
Muscatine.....	19. 48	34. 29	23. 79	25. 85	23	56	23	44. 33	10	—17	10	f 8. 00	3. 7
Pella.....	18. 00	34. 55	23. 19	25. 25	23	55	23	41. 00	10	—12	11	— 0. 33	5. 3
Pleasant Plain (g).....	18. 42	40. 23	23. 29	28. 15	23	59	23	45. 00	10	—15	10	4. 75	---
Poultney.....	18. 37	30. 93	21. 00	23. 43	31	47	31	h 36. 00	10	— 6	9	6. 00	3. 9
Quasqueton.....	16. 21	30. 02	19. 26	21. 83	19	48. 5	23	37. 83	10	—18	9	— 0. 67	4. 3
MINNESOTA—													
Hazlewood.....	15. 06	30. 70	18. 26	21. 14	30	46	31	37. 00	9	—15	9	— 5. 00	3. 8
CALIFORNIA—													
Sacramento.....	50. 61	63. 55	57. 00	57. 05	21	78	22	67. 67	1	39	1	47. 67	2. 8
Stockton.....	52. 29	63. 42	58. 19	57. 96	21	a 74	23	68. 67	1	42	1	48. 67	---
MEXICO—													
City of Mexico.....	52. 35	74. 58	60. 52	62. 48	1	i 79	5	j 67. 37	30	42	23	56. 33	6. 6
Mirador (k).....				73. 58				88. 09				61. 77	---
WEST INDIES—													
Up Park Camp, Jamaica (l).....				81. 15	---	92	---	---	---	68	---	---	6. 0
SOUTH AMERICA—													
Catharina Sophia, Surinam (m).....	76. 61	86. 94	81. 26	81. 60	3	n 90	22	o 83. 67	24	69	2	p 78. 67	2. 2

a Same temperature on the 23d.

b For the first 24 days of the month only.

c Observations taken at 7 a. m., 2 p. m., and 8 p. m.

d Same temperature on the 17th.

e Observations taken at 6 a. m., noon, and 7 p. m.

f Same temperature on the 9th.

g Observations taken at sunrise, noon, sunset, and evening.

h Same temperature on the 22d.

i Same temperature on the 17th and 18th.

j Same temperature on the 1st.

k Observations taken at 7 a. m., 2 p. m., and 8 p. m.

l Observations taken at 2½ a. m. and 3½ p. m.

m Observations taken at 6 a. m., 2 p. m., and 6 p. m.

n Same temperature on the 5th, 12th, 17th, 18th, 19th, 20th, 21st, 23d, and 25th.

o Same temperature on the 17th and 18th.

p Same temperature on the 1st.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) -----	43.86	-----	44.96	44.41	27	70	27	65.00	1	27	1	28.50	-----
Montreal -----	39.99	50.88	41.05	43.97	24	b 64	24	55.00	1	21	1	28.16	5.5
Red River Settlement -----	34.53	45.43	34.17	38.04	23	c 66	24	55.33	9	12	11	20.67	5.4
St. John's, Newfoundland (d) -----	32.70	37.00	31.77	33.82	27	48	5	43.67	14	20	16	21.67	-----
St. Martin -----	33.54	50.67	36.03	40.09	26	68	26	53.70	1	11	13	25.50	4.4
Toronto (e) -----	37.57	47.81	40.53	41.97	27	65	27	59.83	1	15	1	27.55	6.0
Wolfville -----	36.96	47.36	38.04	40.79	27	62	27	51.83	1	19	13	24.98	3.7
MAINE—													
Carmel -----	36.13	53.73	36.37	42.08	26	69	27	53.00	13	18	13	27.00	5.4
Cornish -----	39.57	52.70	40.47	44.25	24	69	27	57.67	13	20	13	29.67	4.5
Fryeburg -----	36.07	54.10	-----	45.08	27	72	27	61.00	1	8	1	24.00	4.8
Gardiner -----	40.73	50.93	39.80	43.82	24	65	27	53.67	2	f 26	1	31.33	4.8
Perry -----	34.20	46.20	38.20	39.53	19	57	23	46.33	1	21	13	27.67	5.0
Portland -----	39.23	50.83	40.82	43.63	23	g 62	25	50.67	13	20	13	29.67	6.0
Steuben -----	36.30	45.23	37.93	39.82	8	57	23	47.67	13	19	13	27.00	6.2
NEW HAMPSHIRE—													
Concord -----	38.90	54.67	45.33	46.30	27	72	27	60.00	2	f 22	1	30.67	4.2
Londonderry -----	39.07	54.13	42.50	45.23	29	h 68	24	55.67	2	f 22	1	30.33	4.7
Manchester (i) -----	36.76	53.90	44.33	44.99	28	j 70	27	58.00	2	20	13	32.00	5.1
North Barnstead -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.6
Stratford -----	34.03	50.43	37.17	40.54	24	68	27	54.67	1	5	1	20.00	5.2
VERMONT—													
Brandon -----	38.80	52.28	43.38	44.82	28	74	28	61.33	1	13	1	25.17	4.9
Burlington -----	40.23	54.33	44.40	46.32	26	70	26	57.33	1	12	1	25.67	3.3
Craftsbury -----	36.13	50.17	39.50	41.93	28	72	28	59.00	13	12	1	25.00	4.8
Norwich -----	36.37	54.33	40.17	43.62	27	76	27	56.00	1	7	13	25.67	-----
Shelburn -----	40.50	51.33	40.74	44.19	27	72	26	59.33	1	15	1	25.67	5.1
MASSACHUSETTS—													
Amherst -----	39.46	56.30	44.09	46.62	29	73	28	60.20	1	14	1	27.10	4.7
Boston (k) -----	39.70	55.73	44.57	46.63	1	72	27	57.33	1	21	1	31.00	3.3
Bridgewater (l) -----	42.67	52.80	45.77	47.08	9	66	18	57.33	1	26.5	1	33.33	4.3
Cambridge (m) -----	38.40	52.93	43.78	45.04	23	68	23	53.67	1	20	1	29.33	5.4
Lawrence (n) -----	37.33	-----	-----	37.33	-----	50	-----	-----	-----	25	-----	-----	-----
Mendon -----	41.33	51.80	43.43	45.52	27	67	19	57.33	1	19	1	29.33	5.1
Nantucket -----	44.45	50.16	42.95	45.85	19	60	28	52.93	1	34	13	37.23	4.6
New Bedford -----	-----	-----	-----	45.34	-----	-----	28	53.50	-----	-----	1	32.00	5.8
Newburyport -----	39.99	52.63	42.01	44.88	9	72	27	57.67	3	21	16	30.17	7.9
North Attleborough -----	42.55	54.77	43.00	46.77	9	70	9	54.90	1	25	1	31.63	4.5
Princeton -----	39.27	49.28	40.67	43.07	28	68	27	55.00	13	15	13	23.00	5.3
Richmond -----	35.93	54.07	43.80	44.60	28	73	28	64.33	1	10	1	26.00	5.7
Springfield -----	40.67	57.63	46.53	48.28	28	78	28	63.00	1	20	1	32.67	4.7
Westfield -----	40.57	55.38	44.53	46.83	28	77	28	60.67	2	20	1	31.00	5.7
Williamstown -----	39.42	53.20	44.30	45.64	28	76	28	65.10	1	14	1	24.00	5.8
Worcester -----	41.20	53.63	42.70	46.84	28	p 70	28	58.33	1	22	1	30.33	4.9
RHODE ISLAND—													
Acquidnetset (q) -----	52.35	56.46	44.21	51.01	18	71	18	63.00	1	35	5	45.67	-----
Providence (r) -----	41.4	56.5	41.7	46.53	28	78	28	58.67	1	22	1	31.00	4.9
CONNECTICUT—													
Georgetown -----	39.70	54.90	43.50	46.03	25	s 72	29	59.00	1	20	1	29.33	5.1
New London -----	45.30	56.50	44.53	48.78	28	72	28	60.33	1	28	1	34.00	4.5
Norwich -----	43.67	55.70	45.23	48.20	28	76	28	63.00	1	25	1	33.33	4.3
Pomfret -----	41.23	54.07	42.86	46.05	28	78	28	61.00	1	22	1	29.00	4.8
Saybrook -----	42.03	50.10	43.93	45.35	28	64	28	54.67	1	26	1	30.33	4.8
Wallingford (t) -----	42.72	59.00	45.04	48.92	28	u 74	28	59.67	14	30	13	36.50	4.9

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 9th.

c Same temperature on the 20th.

d Observations taken at 8 a. m., 3 p. m., and 9 p. m.

e Observations taken at 6 a. m., 2 p. m., and 10 p. m.

f Same temperature on the 1st.

g Same temperature on the 8th.

h Same temperature on the 17th and 25th.

i Month incomplete.

j Same temperature on the 27th.

k Observations taken at 10 a. m., 2 p. m., and 6 p. m.

l Observations taken at 7 a. m., 2 p. m., and 7 p. m.

m Observations taken at sunrise, 3 p. m., and 9 p. m.

n Observations taken at 6 a. m.

o Same temperature on the 18th.

p Same temperature on the 29th.

q Observations somewhat broken.

r Observations taken at 6 a. m., 1 p. m., and 10 p. m.

s Same temperature on the 28th.

t Observations taken at 7 a. m., 1 p. m., and 10 p. m., for the last 25

days of the month only.

u Same temperature on the 30th.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—	°	°	°	°		°		°		°			
Angelica.....	38.23	56.50	43.07	45.93	28	a 80	27	72.00	1	— 4	1	25.33	5.0
Baldwinsville.....	36.27	49.33	43.23	42.94	29	78	29	67.33	1	10	1	24.33	5.3
Beverly.....	42.79	56.10	47.30	48.73	28	76	28	63.33	2	25	1	33.50	5.3
Blackwell's Island.....	46.00	55.10	48.60	49.90	12	68	28	60.33	1	27	1	34.67	6.3
Buffalo (b).....	37.58	49.31	39.09	41.99	27	81	27	62.67	1	14			5.5
Canton.....	39.13	55.13	44.13	46.13	27	80	27	66.67	1	12	1	23.33	5.5
Eden.....	42.93	52.20	43.77	46.30	27	83	27	71.33	1	14	1	28.67	4.9
Fishkill Landing.....	39.80	55.93	47.27	47.66	28	79	28	65.33	1	15	1	26.67	4.1
Flatbush.....	43.43	54.78	45.93	48.05	12	75	12	59.03	1	25	1	32.46	5.8
Geneva.....	39.59	52.32	44.98	54.63		78	27	66.00		15	1	28.83	6.0
Liberty.....	37.43	51.20	41.30	43.31	28	75	28	64.33	1	12	1	27.67	5.5
Lodi.....	42.43	53.63	42.77	46.28	28	a 78	28	69.00	1	20	5	31.33	6.2
Mexico.....	41.52	52.74	41.50	54.25		79	27	69.37		20	1	27.47	4.5
Morrisania.....	45.23	58.57	46.33	50.04	12	c 76	24	63.00	1	22	1	31.00	4.2
New York city.....	45.64	55.46	47.76	49.62	12	70.5	28	60.60	1	26	1	32.96	5.4
North Salem.....	42.63	56.50	44.73	47.95		79	28	64.33		20	1	26.67	4.7
Oswego.....	37.70	50.17	40.93	42.93	27	82	27	68.00	1	11	1	23.33	5.8
Ovid.....	42.00	52.20	44.13	46.11	27	79	28	a 67.33	1	20	13	28.00	5.9
Penn Yan (d).....	35.37	55.20	47.33	45.96	28	82	28	67.00	1	8	1	27.00	6.8
Rochester, [Harkness].....	46.0	52.5	45.9	48.13		78				24			
Rochester, [Pratt].....	42.2	54.8	46.4	47.80	27	82	27	72.20	1	16	1	30.50	7.6
Sag Harbor.....	43.97	57.67	44.00	48.55	28	75	28	61.33	1	27	1	33.00	4.8
Smithville.....	38.93	52.00	42.80	44.58	27	78	27	67.67	13	15	13	24.00	4.4
Spencertown.....	41.07	53.80	42.67	45.85	28	80	28	67.67	1	17	13	e 27.00	4.9
Wampsville.....	41.57	58.13	43.97	47.89	28	83	27	69.33	1	12	1	26.33	5.5
Watertown.....	38.80	58.60	40.74	46.05	27	86	27	68.67	10	g 20	13	25.33	5.8
Waterford (f).....	39.46	52.53	43.00	45.90		72				14			
NEW JERSEY—													
Bloomfield.....	42.98	59.33	47.28	49.86	29	75.5	29	64.00	1	22.5	1	35.50	4.7
Burlington.....	42.57	60.90	50.83	51.43	29	79	28	67.33	1	23	1	32.33	6.9
Lambertville.....	43.62	61.12	47.82	50.85	28	85	28	68.33	1	17	1	32.83	4.8
Newark (h).....				49.26	28	i 74.75	29	63.25	1	19.5	1	32.00	
PENNSYLVANIA—													
Bedford (j).....	39.41	60.38	54.45	51.41	12	83	12	68.33	1	16	1	31.67	5.9
Carlisle.....	45.37	59.05	49.90	48.11	12	82.5	28	69.83	1	24	1	28.7	5.2
Chromedale.....	44.32	59.69	48.69	50.90	12	78.5	29	65.37	1	25	1	32.40	5.4
Easton.....	42.77	63.15	48.88	51.60		80	28	69.67		23	1	33.67	5.5
Fleming (k).....	37.00	57.63	50.16	48.26	12	l 76			1	10			
Gettysburg.....	43.90	61.17	48.90	51.32	12	85	29	70.33	1	20	1	29.33	4.7
Harrisburg.....	46.07	60.38	55.08	53.84	28	82	28	72.00	1	26	21	m 42.33	4.9
Lewisburg.....	42.96	57.11	48.00	49.36	28	82	28	69.57	1	18	1	27.83	6.2
Meadville.....	42.60	57.46	43.41	47.82	27	83	27	73.00	1	9	1	29.67	5.3
Morrisville.....	44.67	59.97	48.17	50.94	29	78	29	67.67	1	22	1	32.67	4.0
Moss Grove.....	40.53	56.55	44.38	47.15	27	84	27	72.00	1	5	1	27.33	5.0
Nazareth.....	44.20	60.40	43.63	49.41	28	82	29	69.67	1	21	1	28.67	5.3
Norristown.....	47.21	59.12	50.15	52.16	12	79	12	68.67	1	28.5	1	33.50	5.4
North Whitehall (k).....	39.60	59.10	49.93	49.54	28	80	29	66.00	1	16	1	30.00	
Paradise.....				42.00									
Philadelphia.....	48.32	61.63	53.43	54.46	29	80	29	74.33	1	26	1	35.83	5.9
Pittsburg.....	46.33	58.57	50.00	51.63	27	82	27	73.33	5	n 34	5	35.00	
Pocopson.....	44.23	60.68	48.60	51.17	28	81	28	66.67	1	24	1	33.67	6.0
Shamokin.....					28	82			1	6			
West Haverford.....	45.80	60.83		53.31	29	i 80	29	70.00	1	22	1	33.00	5.0
DELAWARE—													
Newark, [Martin].....	45.87	60.03	50.28	52.06	28	79	29	68.33	1	24	1	33.67	3.9

<sup>a</sup> Same temperature on the 27th.<sup>b</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.<sup>c</sup> Same temperature on the 24th.<sup>d</sup> Observations taken at sunrise, 2 p. m., and sunset.<sup>e</sup> Same temperature on the 18th.<sup>f</sup> Observations taken at 7 a. m., 1 p. m., 6 p. m., and 10 p. m.<sup>g</sup> Same temperature on the 1st and 13th.<sup>h</sup> Observations taken at 7 a. m. and 6 p. m.<sup>i</sup> Same temperature on the 12th.<sup>j</sup> For the first 19 days of the month only.<sup>k</sup> Observations taken at sunrise, noon, and sunset.<sup>l</sup> Same temperature on the 28th.<sup>m</sup> Same temperature on the 2d.<sup>n</sup> Same temperature on the 7th and 14th.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—	○	○	○	○		■		□		○		□	
Annapolis, [Goodman].....				52.34	12	85			1	24			
Bladensburg.....	45.79	62.20	50.77	52.92	12	83	12	72.67	1	22	1	34.00	5.8
Frederick.....	47.41	60.61	53.33	53.78	12	81	28	69.50	1	26.5	1	35.00	5.0
Sykesville.....	43.17	63.13	50.63	52.31	12	84	29	71.67	1	19	1	33.00	4.3
DISTRICT OF COLUMBIA—													
Washington.....	47.22	63.08	53.67	54.66	12	84	12	73.17	1	26	1	36.67	4.8
VIRGINIA—													
Alexandria.....	48.85	62.66	54.03	55.18	12	82	12	72.33	1	28	21	35.67	4.8
Buffalo.....	47.50	66.93	54.63	56.35	12	85	28	74.00	2	27	21	38.00	3.9
Crichton's Store (a).....	53.57	69.11	67.56	63.41	15	86	30	78.00	1	35	21	40.67	4.5
Garysville (c).....				58.33	24	89	29	76.00	1	28	1	42.00	
Kanawha (d).....	45.37	65.17	59.43	56.06	16	84	30	76.33	1	28	21	36.33	
Lewisburg.....	44.23	63.73	51.83	53.26	27	84	30	71.00	1	26	21	34.00	5.3
Mount Solon.....	47.38	65.65	50.75	54.59	15	89	27	71.00	1	33.5	21	34.50	2.5
Peach Grove Lodge.....	46.17	66.13	49.27	53.86	12	88	27	71.67	1	24	21	35.67	2.9
Portsmouth.....	51.04	68.63	53.60	57.76	30	90	15	72.67	1	30	1	37.33	3.6
Rougemont.....	48.93		62.83	55.88	12	80	30	72.00	1	29	21	32.00	
Smithfield.....				57.22	30	84	29	74.00	1	24.5	1	34.25	
Trout Run Valley.....	42.17	61.47	45.77	49.80	12	84	12	72.00	1	16	1	30.00	3.4
Winchester.....	49.33	65.47	52.40	55.73	28	86	28	74.67	1	30	21	34.00	4.4
NORTH CAROLINA—													
Chapel Hill.....	53.03	71.77	59.83	61.54	30	89	15	75.67	1	30	21	44.67	5.5
Goldsborough.....	55.49	70.77	61.07	62.44	17	85	15	75.20	1	33	1	40.67	4.6
SOUTH CAROLINA—													
Aiken.....	57.73	74.21	64.62	65.52	17	87	16	78.00	1	33	1	46.33	
All Saints.....	57.77	70.67	61.13	63.19	17	85	17	75.33	1	32	1	44.67	3.7
Camden.....	57.90	74.53	62.06	64.83	16	88	17	79.67	1	36	1	43.00	5.2
Charleston, [Johnson].....	59.87	72.07	63.33	65.09	13	84	30	74.67	1	36	1	46.33	
Charleston, [Dawson].....	59.86	72.66	63.33	65.28		84				36			
Edisto Island.....	60.62	70.93	64.19	65.25	16	81	30	71.67	21	48	6	55.00	4.1
St John's (i).....	54.86	72.08	61.45	62.80	13	84	17	75.00	1	32	1	43.67	
GEORGIA—													
Savannah.....	59.8	76.4	66.3	67.50	16	89	13	76.43	1	37	1	47.33	3.4
Sparta.....	52.70	74.97	61.73	63.13	15	87	16	75.00	1	30	1	43.00	4.4
Thomaston.....													3.2
Whitemarsh Island.....	60.27	72.70	63.60	65.52	16	86	13	74.33	1	40	1	46.67	3.4
Zebulon.....	59.67	74.00	67.37	67.01	11	84	15	75.00	1	34	1	47.33	3.6
FLORIDA—													
Atsena.....	66.10	72.32	68.29	68.90	26	84	26	76.33	1	52	1	58.00	2.2
Gainesville (k).....	57.87	78.00	64.60	66.82	14	86	30	74.67	21	46	1	53.33	2.5
Jacksonville.....	67.70	77.43	66.96	70.70	13	87	30	78.67	1	51	1	53.00	3.0
Salt Ponds.....	70.57	78.90		74.73	30	86	30	80.50		62	6	65.00	1.3
Warrington.....	79.77	75.43	70.70	75.30	19	98	19	86.33	1	53	1	55.67	3.5
ALABAMA—													
Auburn.....	60.70	75.20	65.80	67.23	10	84	26	77.33	1	41	1	51.00	3.6
Greene Springs (i).....	58.59	77.25	67.54	67.79	11	90	15	78.33	6	42	5	55.33	5.6
MISSISSIPPI—													
Columbus.....	56.46	73.70	63.38	64.51	26	86	16	75.20	6	44	5	50.50	3.9
Oxford.....	60.50	73.83	63.03	65.79	10	86	26	77.00	1	45	1	52.67	3.9
TEXAS—													
Austin.....	62.23	82.00	68.83	71.02	3	92	29	75.67	5	46	5	64.00	5.4
New Braunfels.....	66.83	85.29	71.63	74.58	23	96	23	80.00	5	51	5	67.33	5.5
Pin Oak (r).....	62.53	76.90	70.60	70.01	16	86	30	77.00	20	50	20	62.67	2.5
TENNESSEE—													
Glenwood.....	51.39	67.79	58.87	59.35	26	85	15	76.90	1	32	4	44.73	4.4

a Observations taken at 7½ a. m., noon, and 6 p. m.

b Same temperature on the 28th.

c Observations taken at sunrise, 2 p. m., and sunset.

d Observations taken at sunrise, 1 p. m., and sunset.

e Same temperature on the 2d.

f Same temperature on the 15th.

g Same temperature on the 12th.

h Same temperature on the 30th.

i Observations taken at sunrise, 2 p. m., and 9 p. m.

j Same temperature on the 16th.

k Observations taken at 6 a. m., 2 p. m., and 9 p. m.

l Same temperature on the 15th, 25th, and 30th.

m Same temperature on the 25th.

n Same temperature on the 14th, 25th, and 26th.

o Same temperature on the 26th.

p Same temperature on the 21st.

q Same temperature on the 23d.

r Observations taken at sunrise, noon, and sunset.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
KENTUCKY—	°	°	°	°	°	°	°	°	°	°	°	°	
Ballardsville.....	51.87	66.66	57.80	58.78	26	85	27	73.33	1	30	5	41.33	4.3
Danville.....	53.60	69.72	57.97	60.43	16	86	15	76.33	1	30	5	43.67	3.9
Paris.....	49.33	64.47	56.27	56.69	16	a 83	15	74.00	1	22	5	40.33	5.4
Springdale.....	46.05	70.23	61.50	59.26	26	91	15	76.50	1	25	5	b 43.33	5.2
OHIO—													
Bellefontaine.....	46.83	55.05	49.22	50.36	26	80	26	69.25	1	25	4	34.33	4.8
Cheviot.....	48.57	67.67	56.10	57.45	26	88	26	c 73.00	1	27	4	40.00	4.5
Cincinnati, [Harper].....	53.00	69.03	58.10	60.04	26	89	27	77.33	1	27	21	43.67	4.8
Cincinnati, [Telegraph] (d).....	48.63	64.33	55.60	56.19	26	80	30	70.67	1	28	2	38.00	3.6
Cleveland.....	44.33	58.88	44.18	49.13	26	83	27	72.00	1	19	13	31.33	5.5
Dayton, [Fisher].....	43.70	64.43	53.76	53.96	26	85	30	d 71.00	1	22	5	40.67	3.2
Gallipolis.....	48.50	67.77	53.83	56.70	12	e 84	28	73.00	1	25	21	38.67	---
Germantown, [Groneweg].....	45.95	62.82	50.22	52.99	15	81	27	69.57	1	23	1	38.97	5.4
Granville.....	47.17	62.50	50.80	53.49	16	a 79	27	69.33	1	26	21	37.33	4.8
Hillsborough.....	47.73	61.63	53.67	54.34	26	81	14	70.33	1	25	5	39.00	4.0
Hiram.....	42.63	56.13	44.77	47.84	27	80	27	68.33	1	17	1	31.67	5.8
Jefferson.....	43.50	55.10	42.27	46.96	27	78	27	67.33	1	22	13	33.00	4.9
Oberlin.....	49.5	60.5	45.5	51.83	26	83	27	74.00	1	24	13	33.33	4.1
Perrysburg (f).....	52.27	62.43	49.87	54.86	26	82	26	75.33	1	30	4	38.67	---
Portsmouth (g).....	53.97	67.03	58.33	59.78	16	h 85	27	79.67	1	28	21	b 43.00	5.2
Savannah.....	43.33	60.80	45.80	49.98	27	81	28	67.00	1	18	20	35.00	4.9
Unionville.....	44.60	54.40	41.43	46.81	27	80	27	71.33	1	26	13	30.67	5.4
Urbana.....	46.73	63.07	50.17	53.32	26	84	26	71.00	1	25	4	36.00	5.9
Zanesville, [Holston].....	45.47	65.93	52.53	54.64	27	93	27	74.33	1	20	5	38.00	6.3
MICHIGAN—													
Ann Arbor, [Woodruff].....	41.87	57.90	45.67	48.48	26	79	27	67.33	1	19	1	33.00	4.3
Ann Arbor, [Winchell].....	41.53	57.80	44.43	47.92	26	78	27	65.67	1	24	13	34.33	4.3
Battle Creek.....	42.07	55.22	45.96	47.75	26	77	27	a 65.00	1	25	1	31.33	4.6
Cooper.....	42.80	55.47	43.17	47.11	15	i 74	27	61.33	1	20	4	31.33	3.4
Copper Falls Mines (j).....				39.14		58				20			
Detroit.....	42.90	55.90	42.93	47.24	26	79	26	65.67	1	28	5	b 34.00	5.5
Eagle River (k).....	37.63	44.47	38.60	40.23	21	70	21	55.33	12	21	12	23.67	---
Grand Rapids, [Currier].....	39.83	54.73	45.93	46.83	27	75	27	66.33	1	21	4	31.33	4.8
Newark.....	43.69	52.76	43.41	46.62	24	77	25	61.00	13	29	4	31.67	5.2
Romeo (f).....	40.70	54.12	42.55	45.79	27	72.5	27	65.83	1	17.5	1	28.91	6.2
St. James.....	35.56	43.20	36.23	38.33	8	67	8	52.00	13	20	12	28.00	4.9
INDIANA—													
New Albany.....	49.07	68.72	53.95	57.25	9	88	15	74.33	1	27.5	4	43.33	4.6
New Harmony.....	50.80	68.17	57.67	58.88	26	88	26	78.00	5	35	5	43.00	4.2
Richmond.....	47.04	61.45	51.96	53.48	26	82.5	26	71.16	1	26.5	5	37.60	4.6
ILLINOIS—													
Athens.....	51.23	69.16	53.30	57.90	11	84	30	73.67	5	31	4	40.33	4.0
Augusta.....	46.67	63.60	53.07	54.45	11	80	30	68.67	5	31	4	40.33	3.8
Manchester (f).....	49.33	67.97	52.23	56.51	26	88	30	a 69.33	5	32	4	42.00	4.1
Marengo (l).....	49.39	60.83	46.52	52.25	8	78	15	64.00	12	30	13	36.33	4.4
Ottawa (m).....	52.50	63.24	50.82	55.52	26	82	26	71.33	4	33	4	40.67	4.9
Pekin (n).....				53.57		87				22			
Peoria.....	59.73	67.17	55.35	57.75	26	88	30	70.13	5	35	4	44.75	---
Riley.....	37.83	50.00		43.91	15	70	15	60.00	13	20	13	27.00	---
Upper Alton.....	50.47	67.07	54.70	57.41	26	87	26	72.33	1	32	5	44.67	3.0
Warsaw.....	45.60				26	64			5	26			
West Salem.....	48.57	70.77	57.40	58.91	26	91	26	77.67	5	29	4	42.00	4.2
MISSOURI—													
Rocheport (o).....	55.83	70.46	56.67	60.99	11	84	11	72.33	5	33	4	38.50	2.5
St. Louis.....	52.4	67.9	57.5	59.26	26	86	26	72.67	1	38	4	46.33	3.6

*a* Same temperature on the 26th.*b* Same temperature on the 4th.*c* Same temperature on the 16th.*d* Observations taken at sunrise, 1 p. m., and 9 p. m.*e* Same temperature on the 29th and 30th.*f* Observations taken at 7 a. m., and 1 and 9 p. m.*g* Observations taken at 7 a. m., 2 p. m., and 9 p. m.*h* Same temperature on the 26th, 27th, and 28th.*i* Same temperature on the 27th.*j* Observations taken at 6 a. m., noon, and 6 p. m.*k* Observations taken at 9 a. m., 3 p. m., and 9 p. m.*l* For the last 23 days of the month only.*m* Observations taken at 8 a. m., 2 p. m., and 9 p. m.*n* Observations taken at sunrise and 1 p. m.*o* Month incomplete.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—	°	°	°	°		°		°		°			
Appleton .....	39.03	53.90	43.82	45.58	27	70	26	59.00	13	22	12	28.67	4.4
Beloit .....	46.40	56.53	46.46	49.80	8	a 70	25	62.33	12	28	11	36.67	3.5
Janesville .....	41.40	56.87	44.93	47.40	25	70	27	61.33	13	25	4	36.67	5.7
Kenosha .....	43.03	50.71	43.43	45.72	15	b 71	27	64.67	4	c 30	12	d 33.67	4.3
Madison, [Schue] .....	42.80	55.33	45.90	48.01	25	68	25	61.67	15	25	12	32.67	4.9
Manitowoc .....				44.0		63				24			
Milwaukee, [Winkler] .....	41.13	49.40	40.50	43.68	27	e 70	27	57.00	4	25	5	32.00	4.8
Milwaukee, [Pomeroy] .....	42.87	50.74	40.10	44.57	27	74	27	60.00	4	26	12	30.33	---
Monroe .....													5.7
Norway .....	43.40	55.53	42.40	47.11	27	71	8	62.33	12	25	12	31.67	5.0
Platteville .....	45.00	58.73	48.97	50.90	26	74	26	66.00	13	28	3	39.67	6.4
Racine, [Seymour] .....				41.80			27	61.00			5	29.00	6.9
Superior .....	36.60	43.43	37.90	39.31	8	62	11	54.00	9	f 25	12	31.33	2.4
Waukesha .....	41.87	54.27	43.13	46.42	8	73	26	60.33	13	20	12	32.33	5.2
IOWA—													
Bellevue (g) .....	40.00	57.00	48.00	48.33		74				26			---
Clinton (h) .....	49.50	57.59	49.87	52.32	26	80	26	67.33	13	32	12	38.67	2.7
Dubuque .....	48.15	55.50	49.59	51.08	20	68	24	61.00	7	34.5	2	40.50	4.4
Fairfield (i) .....	44.10	71.07	49.40	55.29	25	84	11	67.50	5	30	1	37.00	---
Fort Madison (j) .....	47.10	62.73	53.90	54.58	25	82	25	68.67	5	23	4	40.33	5.9
Muscatine .....	43.90	59.87	48.63	50.80	25	77	25	65.00	19	27	19	35.00	4.1
Pleasant Plain (k) .....	42.03	62.47	54.03	52.06	11	84	11	67.75	5	22	1	39.75	---
Quasqueton (h) .....	43.52	56.85	47.07	49.15	26	75	26	65.00	5	29	13	31.33	6.8
MINNESOTA—													
Hazlewood .....	40.03	52.24	42.07	44.78	11	67	25	58.33	12	24	12	29.67	5.0
Red Wing .....	34.74	44.18	35.15	38.02	26	72	26	65.95	12	16	9	29.50	5.6
CALIFORNIA—													
Sacramento .....	53.83	64.40	58.27	58.83	21	m 69	27	n 62.67	29	46	16	55.00	3.8
Stockton .....	53.93	64.80	55.53	58.09	5	74	22	68.00	7	o 50	15	52.67	---
MEXICO—													
City of Mexico .....	55.47	78.10	62.90	65.49	27	p 84	23	70.00	11	49	5	60.00	7.1
Mirador (q) .....				81.07				92.44				73.40	---
SOUTH AMERICA—													
Catharina Sophia (r) .....	76.83	83.87	80.20	80.30	2	s 87	13	83.33	2	70	4	75.67	4.4

a Same temperature on the 25th and 27th.

b Same temperature on the 22d.

c Same temperature on the 12th and 13th.

d Same temperature on the 13th.

e Same temperature on the 15th.

f Same temperature on the 12th.

g Observations taken at 7 a. m., and 2 and 8 p. m.

h Month incomplete.

i Observations taken at 7 a. m., noon, and 7 and 10 p. m.

j Observations taken at 6 a. m., noon, and 7 p. m.

k Observations taken at morning, noon, evening, and night.

l Same temperature on the 25th.

m Same temperature on the 22d and 27th.

n Same temperature on the 5th.

o Same temperature on the 8th, 9th, 14th, 15th, 16th, 24th, 25th, 26th, 27th, 28th, and 29th.

p Same temperature on the 28th.

q Observations taken at 7 a. m., and 2 and 8 p. m.

r Observations taken at 6 a. m., and 2 and 6 p. m.

s Same temperature on the 9th, 13th, and 30th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) .....	55. 1	-----	53. 22	54. 16	24	75	23	70. 00	2	43	8	43. 50	-----
Montreal .....	53. 46	61. 08	52. 35	55. 63	23	79	23	72. 70	3	39	3	40. 16	5. 8
Red River Settlement (b) .....	53. 92	66. 54	52. 17	57. 54	9	84	18	71. 33	15	31	11	38. 67	5. 4
St. Martin .....	46. 02	61. 45	50. 13	52. 53	23	79	23	66. 50	6	33	4	38. 67	4. 7
Toronto (c) .....	46. 82	54. 95	48. 95	49. 91	24	80	23	63. 72	30	37	30	41. 02	5. 5
Wolfville .....	45. 31	55. 46	45. 06	48. 61	16	73	16	63. 77	2	34	5	38. 57	4. 4
MAINE—													
Carmel .....	45. 60	59. 82	45. 27	50. 23	23	81	23	65. 33	4	d 36	26	40. 00	6. 0
Cornish .....	45. 45	57. 55	47. 61	50. 20	23	77	23	69. 67	4	e 34	3	37. 00	5. 5
Fryeburg .....	47. 15	60. 07	-----	53. 61	23	80	23	67. 50	5	33	4	41. 50	5. 6
Gardiner .....	40. 03	58. 66	48. 60	49. 10	23	73	23	65. 67	3	38. 5	3	42. 17	6. 2
Perry (f) .....	42. 74	53. 81	44. 10	45. 08	23	66	23	54. 25	1	g 31	3	37. 00	6. 0
Portland .....	48. 74	57. 44	48. 16	51. 45	23	74	23	66. 67	2	h 38	4	42. 67	6. 8
Steuben .....	43. 94	52. 13	45. 10	47. 06	23	71	23	59. 33	27	36	2	39. 00	6. 4
NEW HAMPSHIRE—													
Concord (i) .....	47. 16	60. 48	52. 61	53. 42	24	84	24	j 68. 33	4	37	4	41. 00	4. 9
Londonderry .....	45. 81	60. 74	50. 06	52. 20	24	88	23	71. 33	3	e 36	9	38. 67	5. 7
Manchester .....	49. 93	61. 37	52. 82	54. 71	24	92	24	76. 33	4	38	11	42. 33	6. 5
North Barnstead .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6. 5
Stratford .....	44. 32	57. 77	45. 65	49. 25	23	81	23	63. 67	4	33	4	34. 33	7. 0
VERMONT—													
Brandon .....	47. 32	58. 51	49. 27	51. 70	23	77. 5	24	71. 67	4	34	4	35. 84	6. 3
Burlington .....	49. 19	63. 45	52. 13	54. 92	23	82	23	72. 33	1	36	4	43. 67	4. 0
Craftsbury .....	43. 94	56. 26	47. 10	49. 10	23	79	23	68. 00	5	e 34	5	35. 00	5. 5
Shelburn .....	49. 94	59. 00	49. 16	52. 70	23	81	23	72. 00	3	36	4	40. 00	6. 0
Norwich .....	45. 06	58. 16	47. 12	50. 11	23	81	23	66. 33	4	k 35	4	38. 33	-----
MASSACHUSETTS—													
Amherst .....	48. 99	61. 13	51. 45	55. 86	24	89	24	73. 6	4	38	3	41. 83	5. 6
Boston (l) .....	46. 19	61. 45	50. 77	52. 80	24	92	24	74. 00	5	34	3	42. 00	4. 3
Bridgewater (m) .....	50. 92	60. 00	52. 16	54. 36	24	86. 5	24	70. 00	9	h 38. 5	9	39. 33	4. 9
Cambridge (n) .....	45. 20	59. 67	51. 19	52. 02	24	89	23	67. 67	5	35	3	39. 67	6. 8
Lawrence (o) .....	46. 80	-----	-----	46. 80	-----	67	-----	-----	-----	37	-----	-----	-----
Mendon .....	48. 23	59. 61	50. 81	52. 88	24	87	24	73. 00	27	31	3	39. 67	5. 7
Nantucket .....	51. 13	56. 14	49. 38	52. 22	24	68	24	65. 33	3	39	3	41. 60	4. 9
New Bedford .....	-----	-----	-----	52. 85	-----	-----	24	65. 67	-----	-----	3	41. 20	6. 0
Newburyport .....	47. 11	56. 93	49. 32	51. 12	23	83	23	71. 23	5	37	3	38. 80	7. 1
North Attleborough .....	49. 76	60. 99	48. 84	53. 20	24	90	24	75. 10	10	35	10	39. 73	5. 3
Princeton .....	46. 21	56. 39	47. 65	50. 08	24	84	24	70. 67	3	33. 5	9	35. 00	6. 1
Richmond .....	45. 45	62. 16	53. 19	53. 60	24	84	14	73. 67	5	p 34	4	36. 67	6. 8
Springfield .....	49. 48	62. 65	52. 13	54. 75	24	92	24	75. 67	4	q 38	9	41. 33	6. 0
Westfield .....	47. 82	61. 03	50. 90	53. 25	24	89	24	75. 33	3	r 38	9	41. 00	5. 9
Williamstown (s) .....	47. 86	58. 27	50. 59	52. 24	24	81	24	67. 30	4	36	5	40. 17	6. 7
Worcester .....	48. 48	59. 19	50. 81	52. 83	24	87	24	73. 00	9	t 35	9	37. 00	5. 6
Weymouth .....	50. 42	-----	51. 19	50. 80	23	68	23	64. 50	2	u 40	4	40. 50	-----
RHODE ISLAND—													
Providence (v) .....	48. 3	62. 2	50. 00	53. 50	24	91	24	72. 33	4	36	9	40. 00	5. 5
CONNECTICUT—													
Georgetown .....	46. 10	57. 32	48. 48	50. 63	24	82	24	71. 67	31	36	8	h 41. 33	5. 4
New London .....	53. 16	61. 58	50. 16	54. 97	24	84	24	72. 00	9	38	2	43. 00	5. 0
Norwich .....	51. 42	62. 35	51. 94	55. 24	24	89	24	75. 67	5	38	3	42. 33	4. 5
Pomfret .....	48. 87	59. 03	48. 77	52. 22	24	85	24	70. 67	9	35	9	38. 67	5. 6
Saybrook .....	50. 23	56. 77	50. 77	52. 59	20	w 68	24	65. 33	5	x 40	5	42. 67	5. 1
Wallingford .....	48. 45	60. 60	49. 10	52. 72	24	88	24	71. 50	5	r 40	9	41. 83	4. 7

a Observations taken at 9 a. m. and 9 p. m.

b Observations interrupted from the 2d to the 9th.

c Observations taken at 6 a. m., 3 p. m., and 10 p. m.

d Same temperature on the 8th, 9th, and 22d.

e Same temperature on the 4th.

f Observations taken at sunrise, 7 a. m., 2 p. m., and 9 p. m.

g Same temperature on the 3d and 6th.

h Same temperature on the 3d.

i For the last 16 days of the month only.

j Same temperature on the 23d.

k Same temperature on the 2d.

l Observations taken at 6 a. m., 2 p. m., and 6 p. m.

m Observations taken at 7 a. m., 2 p. m., and 7 p. m.

n Observations taken at sunrise, 3 p. m., and 9 p. m.

o Observations taken at 6 a. m.

p Same temperature on the 5th and 9th.

q Same temperature on the 5th.

r Same temperature on the 6th.

s Observations taken at 6½ a. m., 2 p. m., and 9 p. m.

t Same temperature on the 13th.

u Same temperature on the 1st, 3d, and 4th.

v Observations taken at 6 a. m., 1 p. m., and 10 p. m.

w Same temperature on the 24th and 29th.

x Same temperature on the 9th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK —	°	°	°	°	°	°	°	°	°	°	°	°	
Angelica.....	48.57	63.60	51.47	54.55	24	90	24	73.33	5	31	30	35.67	5.5
Baldwinsville.....	48.58	58.61	54.71	53.96	24	81	23	72.00	11	37	4	43.00	5.7
Beverly.....	52.33	60.68	53.90	55.64	24	80	24	74.33	9	a 42	8	43.00	5.5
Blackwell's Island.....	51.07	60.42	54.77	55.42	24	83	24	76.33	2	b 43	2	44.67	5.7
Canton.....	50.10	63.18	52.76	55.35	14	84	15	68.00	3	38	30	42.00	5.9
Concord.....													5.6
Eden.....	51.80	60.45	52.42	54.89	23	80	23	72.67	29	c 37	30	38.33	5.2
Fishkill Landing.....	48.63	62.59	54.29	55.17	24	88	24	74.67	6	36	5	43.67	5.0
Flatbush.....	51.69	61.69	52.83	55.40	24	87	24	75.70	1	41	1	44.03	5.3
Geneva.....	48.35	60.54	52.61	53.83		85	23	71.00		38	30	40.00	6.2
Lodi.....	50.06	59.06	51.06	53.39	23	84	23	73.00	4	c 34	30	36.67	6.0
Lowville.....	45.29	61.19	49.23	51.90		82	23	68.33		28	4	39.33	5.7
Mexico.....	50.35	58.95	49.59	52.96		80	23	70.73		37	4	41.63	6.0
Morrisania.....	51.57	63.60	55.03	56.73	24	87	24	80.33	2	d 42	2	44.67	5.0
New York city.....	53.59	62.24	55.06	56.96	20	78	24	75.00	2	42	2	44.03	4.8
North Salem.....	51.19	62.32	52.10	55.17		89	24	76.00		41	1	43.00	5.5
Oswego.....	47.68	56.29	48.61	50.86	14	80	14	63.33	23	33	4	38.33	6.4
Ovid.....	50.10	58.29	51.90	53.43	23	82	23	74.00	4	37	9	e 40.33	6.0
Penn Yan (f).....	44.81	62.16	54.45	53.81	24	70	24	79.33	11	29	29	38.00	6.7
Pompey Hill.....	47.29	54.25	48.68	50.07		79	23	70.33		32	30	34.67	
Rochester, [Harkness].....	55.6	60.4	53.0	56.33		83				40			
Rochester, [Pratt].....	51.1	62.3	53.9	55.76	23	85	23	73.80	4	39.5	30	41.90	7.9
Sag Harbor (g).....	52.12	63.68	49.72	55.17	24	83	24	71.67	5	38	5	41.33	4.9
Smithville (h).....	44.73	60.10	47.62	50.82	14	i 75	15	68.33	4	31	4	40.00	5.2
Spencertown.....	49.90	59.19	48.29	52.46	24	87	24	74.67	5	33	5	40.33	5.0
Wampsville.....	50.74	62.71	50.10	54.52	24	88	24	74.00	4	34	4	40.67	5.9
Watertown.....	48.29	65.23	49.42	54.31	24	82	15	66.00	5	32	4	39.33	7.6
Waterford (j).....	48.48	57.10	48.74	51.93		81				27			
NEW JERSEY—													
Bloomfield.....	50.87	66.23	53.94	57.01	24	94	24	81.17	11	40.5	8	44.67	4.2
Burlington.....	50.97	68.45	56.32	58.58	24	70	24	77.00	6	38	1	43.67	7.1
Lambertville.....	51.92	67.59	53.07	57.53	24	91.5	24	77.67	6	29.25	1	42.33	5.0
Newark.....				56.24	24	85.5	24	74.00	5	37.2	3	43.75	
PENNSYLVANIA—													
Bedford.....	53.96	67.35	58.87	60.06	24	87	24	75.67	5	39	9	k 45.00	5.2
Cannonsburg.....	51.48	64.71	52.48	56.22	24	83	24	72.00	31	30	9	44.00	
Carlisle.....	55.63	66.07	56.87	59.52	20	81.5	20	71.83	1	c 42	7	45.33	4.5
Chromedale.....	54.55	65.67	55.47	58.60	24	85	20	72.10	30	40	1	43.57	4.9
Easton.....	52.48	66.93	54.08	57.83	24	94	24	79.33	1	38	1	43.33	4.9
Fleming (l).....	45.80	66.06	58.90	56.92	24	91			31	27			
Gettysburg.....	54.32	67.94	57.19	59.82	24	89	24	73.67	31	42	1	44.33	4.6
Harrisburg.....	56.90	72.87	61.60	63.79	24	92	24	80.67	2	45	1	46.33	4.3
Lewisburg.....	53.86	65.10	55.36	58.11	24	89.5	24	78.33	30	40	30	43.10	5.8
Meadville.....	53.81	64.28	51.65	56.58	24	72	24	78.00	30	33	30	38.33	5.4
Morrisville.....	53.03	65.61	53.71	57.45	24	84	24	74.33	1	40	1	42.67	4.0
Nazareth.....	52.42	66.26	50.61	56.43	12	84	24	69.00	25	37	30	44.00	4.9
Norristown.....	52.37	64.44	56.72	57.84	24	84	24	74.67	6	40	1	42.67	5.1
North Whitehall (n).....	47.81	63.90	57.74	56.48	24	87	24	74.67	6	34	1	44.00	
Paradise.....				60.00									
Philadelphia.....	58.6	67.2	62.2	62.67	24	83.5	24	78.17	10	m 42	1	44.00	5.7
Pittsburg.....	54.55	66.65	56.42	59.21	24	86	24	73.33	31	35	9	45.00	
Pocopson.....	53.10	67.68	55.35	58.71	24	87	24	76.00	6	37	1	42.67	5.5
Shamokin.....					24	95			1	25			
Somerseset.....	49.5	62.9	51.2	54.53	24	83	24	71.17	5	33	30	37.90	5.0
West Haverford.....	52.80	67.35		60.08	24	86	24	73.00	31	42	9	46.50	5.3
DELAWARE—													
Newark, [Martin] (n).....	54.69	66.63	52.00	57.77	20	83	29	67.00	2	m 42	1	42.67	3.7

a Same temperature on the 8th.

b Same temperature on the 1st.

c Same temperature on the 30th.

d Same temperature on the 1st and 3d.

e Same temperature on the 4th.

f Observations taken at sunrise, 2 p. m., and sunset.

g For the first 26 days of the month only.

A For the first 22 days of the month only.

i Same temperature on the 15th.

j Observations taken at 6 a. m., 1 p. m., 6 p. m., and 10 p. m.

k Same temperature on the 7th.

l Observations taken at sunrise, noon, and sunset.

m Same temperature on the 1st.

n Month incomplete.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—	o	o	o	o		o		o		o		o	
Annapolis, [Goodman]-----				61.19	24	89			31	36			
Bladensburg-----	55.83	65.85	56.26	59.31	27	81	27	68.67	6	42	7	46.33	4.5
Frederick-----	59.34	68.03	58.54	61.97	24	85.5	24	75.83	7	42	7	46.27	4.5
Ridge-----	65.81	74.29	62.45	67.85	24	94	24	82.00	7	47	7	50.00	2.5
Sykesville-----	54.84	69.13	56.23	60.07	24	89	23	77.67	1	40	1	41.00	3.8
DISTRICT OF COLUMBIA—													
Washington-----	56.55	69.30	60.20	55.35	24	86	24	75.67	6	43	1	46.67	4.0
VIRGINIA—													
Alexandria-----	58.84	69.84	60.19	62.96	20	85	24	75.67	7	45	7	48.33	4.2
Berryville-----	52.85	61.61	56.00	56.82	25	71	25	66.67	6	40	7	44.33	4.7
Orichton's Store (c)-----	61.85	75.09	73.56	70.16	20	91	25	85.00	6	46	7	52.67	4.1
Garysville (d)-----				65.33	24	91	24	80.00	31	42	6	49.00	---
Kanawha (e)-----	54.55	74.00	64.20	64.25	24	86	24	74.00	5	40	30	52.67	---
Lewisburg-----	54.06	70.94	56.16	60.39	24	90	24	75.00	30	41	6	45.33	5.7
Peach Grove Lodge-----	54.39	71.19	58.13	61.24	24	86	24	74.00	31	33	30	44.67	3.7
Portsmouth-----	60.74	76.29	58.16	65.06	24	92	24	76.67	6	47	8	52.00	3.8
Rougemon (f)-----	56.71		66.52	61.61	24	83	25	72.00	7	43	7	46.50	---
Smithfield-----				62.25	25	88	24	78.25	22	41	4	49.75	---
Trout Run Valley-----	51.16	68.65	53.19	57.66	24	90	24	70.67	5	43	7	41.67	3.3
Winchester-----	59.10	72.32	59.45	63.62	24	90	20	80.67	6	44	7	47.33	4.1
Wirt Court-house-----	54.55	71.55	60.34	62.15	24	89	15	75.33	31	37	30	45.67	5.3
NORTH CAROLINA—													
Chapel Hill-----	60.84	76.42	64.55	67.27	24	90	24	76.67	7	47	6	47.33	5.7
Goldsborough-----	64.38	75.65	64.76	68.26	29	87	2	76.10	7	49.5	6	51.00	4.8
SOUTH CAROLINA—													
Aiken-----	65.06	74.53	67.42	69.00	4	85	29	76.67	7	51	6	57.67	---
All Saints-----	67.03	75.81	69.45	70.76	28	88	28	79.33	7	55	10	61.33	4.1
Camden-----	64.84	77.35	67.93	70.04	28	86	25	79.67	7	52	6	53.67	5.5
Charleston, [Johnson]-----	68.97	78.29	71.32	72.86	3	88	29	79.67	7	61	5	67.33	---
Charleston, [Dawson]-----	68.96	78.29	71.32	72.86		88				61			---
Edisto Island (k)-----	67.80	76.44	70.63	71.62	3	82	3	75.67	11	60	10	66.33	4.0
St. John's (l)-----	62.81	76.50	66.34	68.55	28	86	28	75.67	11	48	10	58.67	---
GEORGIA—													
Savannah-----	69.3	81.1	72.00	74.13	4	94	28	81.80	11	63	5	67.80	5.3
Sparta-----	63.97	82.30	70.87	72.38	4	92	25	77.00	7	52	6	60.00	5.4
Thomaston (n)-----	66.29	76.61	73.94	72.28	21	83	26	79.00	9	57	9	60.33	4.2
Whitemarsh Island-----	69.90	77.93	73.53	73.79	4	89	4	79.00	10	61	10	66.33	4.5
Zebulon-----	67.74	78.58	72.70	73.01	3	88	27	81.00	10	56	11	62.67	4.2
FLORIDA—													
Atsena (g)-----	74.92	79.92	75.58	76.81	30	86	31	82.00	20	69	20	71.00	3.6
Gainesville (r)-----	67.03	80.60	70.52	72.72	31	89	30	79.00	12	57	11	62.33	4.3
Jacksonville-----	73.16	84.12	73.09	76.79	3	88	4	81.33	10	65	11	69.77	4.0
St. Augustine (s)-----	75.68	79.35	74.39	76.47	28	88	29	82.33	11	64	19	71.33	4.9
Salt Ponds-----	76.74	84.84		80.79	6	89	14	83.50	21	72	20	74.53	3.4
Warrington-----	75.65	79.55	72.13	75.78	21	91	21	88.00	9	64	1	68.33	4.2
ALABAMA—													
Auburn-----	68.09	77.09	65.87	70.35	27	91	27	80.67	9	55	9	61.00	---
Greene Springs-----	64.68	83.63	71.80	73.37	22	93	21	87.33	11	52	9	61.00	4.8
Greensborough (q)-----	71.22	82.39	75.50	76.37	26	87	26	80.67	29	68.5	29	73.83	0.9
MISSISSIPPI—													
Columbus-----	65.20	80.33	68.22	71.25	25	90	25	79.60	9	54	18	58.53	3.6
Oxford-----	71.45	77.29	67.19	71.98	26	87	25	81.00	8	48	18	55.00	3.5

a Same temperature on the 1st.

b Same temperature on the 3d, 6th, 7th, 8th, and 10th.

c Observations taken at 7 a. m., noon, and 6 p. m.

d Observations taken at sunrise, 2 p. m., and sunset.

e Observations taken at sunrise, 1 p. m., and sunset.

f Observations taken at sunrise and sunset.

g Same temperature on the 7th.

h Same temperature on the 6th.

i Same temperature on the 10th.

j Same temperature on the 25th.

k Month incomplete.

l Observations taken at sunrise, 2 p. m., and 9 p. m.

m Same temperature on the 9th and 11th.

n Observations taken at 7 a. m., 2 p. m., and 7 p. m.

o Same temperature on the 25th, 26th, and 28th.

p Same temperature on the 8th.

q For the last 12 days of the month only.

r Observations taken at 5 a. m., 2 p. m., and 9 p. m.

s Observations taken at 8 a. m., 2 p. m., and 10 p. m.

t Same temperature on the 29th.

u Same temperature on the 11th.

v Same temperature on the 26th.

w Same temperature on the 24th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS--	°	°	°	°		■		°		°		■	
Austin .....	64.23	81.13	73.23	72.86	27	94	27	a80.33	9	b54	9	56.33	4.6
New Braunfels.....	71.21	86.26	73.90	77.12	27	99	30	86.00	8	53	8	54.67	4.0
Pin Oak (c) .....	62.16	78.16	75.16	71.83	27	89	27	81.00	8	d54	9	55.67	1.5
TENNESSEE--													
Glenwood .....	57.15	72.11	61.91	63.72	25	85.5	25	74.10	9	46	8	51.47	4.4
KENTUCKY--													
Ballardsville .....	60.06	71.45	63.58	65.03	24	85	24	76.67	30	41	5	47.67	4.1
Paris .....	57.29	71.73	59.74	62.92	24	85	24	72.33	10	43	5	48.00	3.6
Springdale .....	50.68	76.39	65.65	64.24	24	93	24	75.00	31	34	5	46.67	4.1
OHIO--													
Bellefontaine.....	55.65	66.32	54.74	58.90	24	88	24	79.00	30	40	30	45.00	5.4
Cheviot .....	55.71	73.35	61.00	63.35	24	93	24	79.33	5	42	5	49.00	4.7
Cincinnati, [Harper].....	62.58	75.06	64.23	67.29	24	90	24	81.00	5	45	5	54.67	4.3
Cincinnati, [Telegraph] (e).....	57.32	70.77	62.71	63.60	24	90	24	77.00	31	43	5	52.67	4.0
Cleveland.....	53.07	63.69	52.96	56.57	24	88	24	73.33	30	37	5	45.33	5.5
Dayton, [Fisher].....	51.71	69.90	58.42	60.01	24	86	24	74.00	31	35	30	47.00	3.5
Gallipolis .....	59.00	74.03	60.45	64.49	24	89	24	77.00	30	47	8	53.00	---
Germantown, [Binkerd] .....	50.52	71.06	56.64	59.41	24	92	24	76.00	31	33	9	47.00	3.7
Germantown, [Groneweg] .....	52.92	70.92	56.97	60.27	24	90	24	74.75	30	43	30	49.10	5.1
Granville .....	55.97	67.40	57.62	60.33	24	86	24	75.33	5	41	30	47.00	5.0
Hillsborough .....	54.39	66.77	59.26	60.14	24	85	24	75.50	5	40.5	30	48.33	4.1
Hiram .....	50.84	61.58	52.23	54.88	24	85	24	72.33	30	34	30	41.33	5.6
Jefferson .....	53.61	60.77	51.87	55.42	23	f84	24	76.67	30	32	30	40.00	6.2
Oberlin .....	53.42	65.10	51.16	56.56	24	91	23	70.00	30	37	4	43.67	4.0
Perrysburg (g) .....	57.26	66.55	57.00	60.27	24	93	24	77.00	4	45	4	47.67	---
Savannah .....	52.00	64.52	52.03	56.18	23	85	23	73.33	5	28	30	h43.00	4.5
Scioto (i) .....	61.90	74.33	68.81	68.35	23	f86	23	80.67	31	42	5	54.00	4.9
Unionville .....	50.61	62.71	48.71	54.01	23	f86	24	72.00	30	33	8	42.00	5.5
Urbana .....	53.97	70.94	56.77	60.56	24	92	24	78.00	9	40	30	46.67	5.1
Zanesville, [Dayton] (j) .....	57.92	70.65	56.75	61.77	24	92	26	63.50	30	45	8	52.67	5.4
Zanesville, [Holston] .....	56.61	72.55	61.03	63.40	24	90	24	78.67	31	39	5	52.33	6.9
MICHIGAN--													
Ann Arbor, [Winchell].....	50.74	65.35	51.16	55.75	24	91	23	77.33	4	36	30	40.33	---
Ann Arbor, [Woodruff] .....	50.42	65.35	53.73	56.50	24	88	23	73.67	4	40	30	45.33	4.6
Cooper .....	50.87	61.74	50.61	54.07	24	a86	24	85.00	4	30	4	40.00	3.4
Copper Falls Mines (k) .....				52.02		72				30			---
Detroit .....	53.42	61.48	52.00	55.63	23	83	23	84.67	4	40	4	44.00	6.9
Eagle River .....	43.97	56.84	47.68	49.50	18	m78	22	73.33	11	29	12	31.67	---
Grand Rapids, [Currier].....	50.45	64.13	53.55	56.04	23	f84	23	75.33	30	39	12	43.33	4.1
Monroe .....													4.0
Romeo (g) .....	50.02	63.04	49.64	54.23	23	f86	23	81.00	30	35	30	41.00	5.6
St. James .....	44.19	54.71	43.72	47.54	14	n69	23	59.67	11	31	11	37.33	4.3
Saugatuck (o) .....	44.87	53.50	44.50	47.62	1	66	1	57.33	4	36	4	41.33	6.9
INDIANA--													
New Albany .....	57.61	72.00	56.66	60.09	24	86.5	24	74.83	30	40	5	47.17	4.6
New Harmony .....	60.35	74.52	63.42	66.10	24	a90	25	80.00	9	45	5	48.67	4.2
Richmond .....	53.58	67.52	57.27	59.46	23	82	24	72.33	5	42	30	48.50	4.8
ILLINOIS--													
Athens .....	57.93	74.12	60.16	64.07	24	92	24	80.67	30	p46	7	52.33	4.1
Augusta .....	55.64	70.23	60.70	62.19	24	89	24	80.00	5	44	17	48.33	3.8
Manchester (g) .....	58.29	71.58	49.45	59.77	24	92	24	78.00	8	46	5	48.00	6.1
Marengo .....	54.94	63.52	52.48	56.98	23	f90	23	82.67	12	34	12	36.00	4.5
Ottawa .....	56.23	65.70	53.34	58.42	23	f86	23	76.67	4	42	4	48.33	5.2
Pekin .....				59.12		94				37			---
Peoria .....	56.78	71.52	60.60	62.97	24	95	24	78.50	5	q48	7	h53.00	---

a Same temperature on the 25th.

b Same temperature on the 10th.

c Observations taken at sunrise, noon, and sunset.

d Same temperature on the 9th.

e Observations taken at 6 a. m., noon, and 9 p. m.

f Same temperature on the 24th.

g Observations taken at 7 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 4th.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Observations taken at 9 p. m. only, on the 7th, 8th, 26th, and 27th.

k Observations taken at 6 a. m., noon, and 6 p. m.

l Same temperature on the 29th and 30th.

m Same temperature on the 22d.

n Same temperature on the 21st.

o For the first 8 days of the month only.

p Same temperature on the 9th.

q Same temperature on the 6th, 8th, 12th, 18th, and 30th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—Continued.	°	°	°	°		°		°		°			
Riley (a) -----	44.68	62.35	-----	53.51	24	90	24	81.50	12	b 34	5	38.00	-----
Upper Alton -----	59.58	71.83	60.11	63.84	24	85	24	74.33	5	46	5	48.67	3.2
Warsaw -----	57.84	70.52	60.50	62.95	23	c 89	24	81.67	5	d 45	7	e 49.00	3.8
West Salem -----	58.94	78.16	61.94	66.35	24	94	24	80.00	5	44	5	49.00	4.6
MISSOURI—													
Rochepot -----	64.25	72.69	62.37	66.44	24	96	24	83.00	4	52	4	56.33	3.1
St Louis -----	61.1	73.5	64.1	66.23	24	91	24	81.67	17	47	5	49.67	3.9
WISCONSIN—													
Appleton -----	49.58	65.39	52.58	55.85	23	90	23	80.00	12	f 34	12	39.33	4.2
Beloit -----	55.72	64.48	52.96	57.72	23	c 91	23	77.67	12	38	12	40.00	3.5
Cascade Valley (g) -----	52.57	78.57	62.21	64.45	22	100	22	85.53	29	35	20	50.33	3.6
Janesville -----	50.65	66.39	53.10	56.71	23	94	23	79.67	5	h 38	12	40.00	5.5
Kenosha -----	50.71	56.19	49.90	52.27	23	89	23	77.83	12	38	12	38.33	3.4
Manitowoc -----	-----	-----	-----	50.00	-----	80	-----	-----	-----	33	-----	-----	-----
Milwaukee, [Pomeroy] -----	51.74	56.68	47.23	51.88	19	90	23	77.67	12	33	12	34.67	6.8
Milwaukee, [Winkler] -----	49.33	56.72	47.10	51.05	23	90	23	78.67	12	33.5	12	33.83	3.9
Norway -----	52.03	61.54	51.32	56.96	23	90	22	80.00	12	34	12	35.00	4.6
Platteville -----	54.42	70.26	58.61	61.10	24	94	23	82.33	12	42	12	44.67	5.1
Racine, [Seymour] -----	-----	-----	-----	51.87	-----	-----	23	76.00	-----	-----	12	37.00	7.5
Superior -----	45.77	55.77	46.32	49.29	19	85	22	71.67	11	36	4	38.67	1.3
Waukesha -----	52.23	62.48	51.52	55.41	23	94	23	81.33	12	36	12	36.67	4.8
IOWA—													
Bellevue (i) -----	47.00	68.00	58.00	57.66	-----	94	-----	-----	-----	36	-----	-----	-----
Dubuque -----	57.23	67.20	59.66	61.36	24	92	23	85.50	4	40	12	43.33	4.6
Fort Madison (j) -----	59.23	70.87	63.13	64.41	24	96	24	87.33	5	44	5	48.00	6.1
Franklin (k) -----	48.87	70.87	62.12	60.29	24	90	24	74.67	30	38	29	52.33	4.1
Iowa city -----	59.29	67.61	59.77	62.22	24	90	24	c 83.33	17	42	7	46.33	6.0
Muscatine -----	54.5	70.2	59.1	57.93	24	90	22	78.67	8	l 40	4	47.67	4.3
Pleasant Plain (m) -----	48.97	73.00	57.13	60.50	23	96	23	79.25	-----	34	5	44.00	-----
Quasqueton (n) -----	56.27	71.65	58.65	62.19	23	91.5	23	80.83	13	40	13	45.50	4.4
MINNESOTA—													
Hazlewood -----	53.83	66.97	55.73	58.84	23	88	23	79.00	15	39	1	42.00	5.0
CALIFORNIA—													
Sacramento -----	59.68	70.84	61.23	63.92	16	o 80	16	72.67	2	49	2	54.33	3.2
Stockton -----	55.74	68.19	55.61	59.85	16	o 80	17	67.33	3	50	3	55.33	-----
MEXICO—													
City of Mexico -----	57.58	80.23	63.87	67.23	5	p 85	5	71.67	19	52	17	59.00	5.9
Mirador (i) -----	-----	-----	-----	84.58	-----	-----	-----	91.99	-----	-----	-----	78.04	-----
SOUTH AMERICA—													
Catharina Sophia, Surinam (q) -----	76.58	84.42	81.00	80.66	26	93	25	85.33	29	r 73	29	r 78.00	4.8

a Observations taken at sunrise and 2 p. m.

b Same temperature on the 18th and 30th.

c Same temperature on the 24th.

d Same temperature on the 7th and 17th.

e Same temperature on the 5th.

f Same temperature on the 13th.

g For the last 14 days of the month only.

h Same temperature on the 4th.

i Observations taken at 7 a. m., 2 p. m., and 8 p. m.

j Observations taken at 6 a. m., noon, and 7 p. m.

k For the last 8 days of the month only.

l Same temperature on the 10th.

m Observations taken at sunrise, noon, sunset, and 9 p. m.

n For the last 20 days of the month only.

o Same temperature on the 17th.

p Same temperature on the 6th, 7th, 14th, 15th, and 22d.

q Observations taken at 6 a. m., 2 p. m., and 6 p. m.; interrupted from the 10th to the 23d of the month.

r Same temperature on the 30th.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
	°	°	°	°		°		°		°		°	
BRITISH AMERICA—													
Hamilton (a) .....	67.5	.....	64.4	65.95	29	88	22	82.50	6	50	6	51.50	.....
Montreal .....	64.39	79.54	66.10	70.01	21	87	21	79.50	4	51.5	4	52.53	5.8
St. John's (c) .....	60.71?	66.14?	62.00?	62.95?	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Martin .....	61.11	76.07	63.73	66.98	21	95	21	80.90	5	47	4	51.10	5.0
Toronto (d) .....	58.07	67.76	59.36	61.73	28	82	21	74.57	1	48	7	53.97	3.5
MAINE—													
Carmel (e) .....	58.86	76.12	55.94	63.54	14	85	10	72.67	5	43	7	54.33	5.5
Cornish .....	60.13	72.97	61.73	64.94	29	92	21	80.33	7	44	6	51.00	4.5
Gardiner .....	64.59	75.17	62.20	67.32	21	90	22	79.67	7	f 52	7	57.33	4.2
Perry (g) .....	53.33	64.03	54.67	57.34	21	84	22	70.00	5	45	9	50.25	4.8
Portland .....	66.37	74.27	61.95	67.53	29	97	21	84.83	7	f 49	7	56.67	5.5
Steuben .....	57.43	65.40	57.73	59.85	21	91	21	77.33	15	44	7	52.67	6.6
NEW HAMPSHIRE—													
Concord .....	60.33	73.57	66.47	66.79	29	93	29	82.00	1	42	■	54.00	4.3
Londonderry .....	60.93	75.93	66.10	67.65	21	91	29	83.67	1	45	6	52.00	4.0
Manchester .....	64.53	77.83	67.36	69.91	29	96	29	88.33	7	f 50	■	54.33	5.1
North Barnstead .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.6
Stratford .....	60.63	73.83	58.90	64.45	29	97	29	78.00	1	44	1	50.00	6.6
VERMONT—													
Brandon .....	62.01	74.05	62.60	66.22	29	90	29	80.50	■	48	1	52.67	5.0
Burlington .....	62.37	77.33	64.30	68.00	29	94	29	86.67	1	50	1	53.67	3.2
Craftsbury .....	59.97	70.23	61.70	63.63	29	87	21	78.00	1	46	4	52.00	4.8
Norwich .....	61.97	75.80	61.90	66.56	29	94	29	84.67	1	48	■	50.33	.....
Shelburn .....	64.67	74.17	63.27	67.37	29	94	21	84.00	5	48	1	56.00	4.7
MASSACHUSETTS—													
Amherst .....	63.24	76.58	65.85	68.56	29	94	29	84.80	1	48	■	53.67	4.3
Boston (d) .....	60.40	77.33	69.93	69.22	21	95	30	84.67	1	i 44	7	49.33	2.9
Bridgewater (j) .....	64.37	73.63	66.40	68.13	29	92	29	85.67	7	47.5	7	51.50	4.2
Cambridge (k) .....	59.97	75.94	65.44	67.12	29	95	22	82.17	6	47	■	48.33	6.1
Lawrence (l) .....	60.54	.....	.....	60.54	.....	81	.....	.....	.....	50	.....	.....	.....
Mendon .....	63.90	75.33	65.23	68.15	29	93	29	85.00	7	f 47	■	48.33	4.8
Nantucket .....	62.69	68.77	59.74	63.73	21	86.5	30	76.50	5	50	■	51.83	4.8
New Bedford .....	.....	.....	.....	65.59	.....	.....	22	82.50	.....	.....	■	52.20	6.3
Newburyport .....	61.00	73.04	63.41	65.82	29	95	29	84.67	7	47	7	51.60	7.6
North Attleborough .....	64.19	75.19	62.48	67.29	29	94	29	85.90	6	47	6	49.27	4.5
Princeton .....	59.89	70.77	62.25	64.30	29	87.5	29	80.50	■	m 44	■	47.17	5.4
Richmond .....	61.27	80.73	70.10	70.70	29	93	21	78.67	1	56	1	48.00	4.4
Westfield .....	60.83	75.70	65.43	67.35	29	94	29	83.33	1	44	■	51.67	5.8
Weymouth .....	65.97	.....	65.10	65.53	29	87	29	83.50	■	49	7	n 52.50	.....
Williamstown (o) .....	64.83	72.45	60.46	65.91	29	88.5	29	81.30	1	44	■	54.10	5.6
Worcester .....	63.13	73.83	66.17	67.71	21	90	29	83.33p	1	45	■	49.67	5.0
RHODE ISLAND—													
Providence (g) .....	62.6	76.5	64.1	67.73	29	95	30	84.00	■	i 48	6	50.33	4.7
CONNECTICUT—													
Georgetown .....	60.13	72.80	61.43	64.79	21	92	29	83.33	6	48	6	49.33	5.3
New London .....	65.73	77.20	63.63	68.85	21	94	22	83.33p	6	51	■	53.67	4.2
Norwich .....	65.67	77.97	66.47	70.04	29	95	29	87.67	■	50	■	52.00	4.5
Pomfret .....	62.87	73.28	63.53	66.56	29	89	29	82.00	■	45	■	49.00	5.1
Saybrook .....	63.50	71.53	64.57	66.53	30	r 86	30	79.00	7	f 54	6	55.33	4.5
Wallingford .....	61.52	76.70	64.12	67.45	29	93.5	30	83.33	■	50	6	51.67	4.7
NEW YORK—													
Angelica .....	65.67	81.47	66.03	71.06	22	96	30	85.67	15	52	14	54.67	3.6
Baldwinsville .....	61.10	72.37	65.57	66.35	29	89	29	80.00	2	51	15	n 56.67	4.7
Beverly .....	67.30	74.07	67.53	69.63	30	91	29	87.00	1	f 53	■	54.00	4.8

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 19th.

c Observations taken at 8 a. m., 3 p. m., and 9 p. m., for 7 days only.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e For the first 18 days of the month only.

f Same temperature on the 6th.

g Observations taken at sunrise, 7 a. m., 2 p. m., and 9 p. m.

h Same temperature on the 29th.

i Same temperature on the 7th.

j Observations taken at 7 a. m., 2 p. m., and 7 p. m.

k Observations taken at sunrise, 3 p. m., and 9 p. m.

l Observations taken at 6 a. m.

m Same temperature on the 1st.

n Same temperature on the 5th.

o Observations taken at 6½ a. m., 2 p. m., and 9 p. m.

p Same temperature on the 21st.

q Observations taken at 6 a. m., 1 p. m., and 10 p. m.

r Same temperature on the 27th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
New York—Continued.	□	□	□	□	□	□	□	□	□	□	□	□	
Blackwell's Island	67. 13	74. 60	69. 37	70. 36	22	91	29	85. 33	6	53	8	54. 00	6. 9
Canton	63. 75	78. 90	65. 00	69. 22	29	a 92	29	88. 67	4	51	1	54. 67	4. 5
Flatbush	66. 06	76. 60	65. 41	69. 36	29	93	30	85. 67	0	53	6	53. 60	5. 3
Geneva	61. 32	75. 82	64. 03	66. 96	---	92	29	83. 50	---	50	5	55. 33	5. 0
Houseville	63. 00	74. 60	61. 50	66. 37	29	92	29	81. 67	15	50	1	53. 00	5. 9
Lodi	64. 77	75. 97	65. 10	68. 61	29	88	29	80. 67	1	51	15	b 58. 33	5. 0
Lowville	59. 90	75. 93	61. 90	65. 91	---	90	29	78. 00	---	40	1	52. 33	4. 5
Mexico	62. 59	72. 60	63. 30	66. 16	---	91	29	81. 90	---	50	15	55. 43	5. 0
Morrisania	67. 87	82. 90	67. 67	72. 81	29	99	30	89. 33	6	52	6	54. 00	4. 8
New York city	68. 62	77. 23	69. 18	71. 68	29	92	29	85. 90	6	54	0	54. 53	4. 5
North Salem	66. 00	77. 27	65. 42	69. 56	---	92	29	87. 17	---	43	6	51. 67	5. 1
Oswego	62. 67	71. 03	61. 63	65. 11	29	92	29	81. 33	6	48	15	56. 00	4. 6
Ovid	64. 80	73. 90	65. 00	67. 90	29	a 88	29	81. 33	5	50	5	53. 67	5. 1
Penn Yan (c)	57. 33	76. 73	66. 40	66. 82	29	90	29	84. 00	2	44	5	54. 33	5. 4
Pompey Hill	63. 07	68. 71	64. 88	65. 55	---	87	29	79. 20	---	49	6	53. 43	3. 2
Rochester, [Harkness]	70. 2	75. 6	67. 3	71. 03	---	91	---	---	---	51	---	---	---
Rochester, [Pratt]	63. 60	75. 82	66. 60	68. 67	29	92	29	83. 00	5	52. 7	5	50. 83	6. 4
Spencertown	63. 90	73. 50	62. 87	66. 76	29	92	29	84. 00	15	50	6	54. 00	4. 1
Utica	65. 00	74. 40	66. 57	68. 66	---	91	29	84. 00	---	51	1	55. 33	4. 8
Wampsville	64. 17	78. 90	64. 73	69. 26	29	94	29	85. 67	15	52	15	58. 67	5. 1
Waterford (d)	62. 40	73. 89	65. 77	68. 42	---	92	---	---	---	40	---	---	---
Watertown	60. 33	74. 17	60. 03	64. 84	29	92	29	78. 33	10	46	10	52. 67	7. 2
NEW JERSEY—													
Bloomfield	64. 48	79. 70	66. 82	70. 33	29	99	30	86. 16	16	54. 5	6	55. 00	4. 5
Burlington	69. 27	83. 13	70. 70	74. 36	29	99	28	89. 33	1	e 56	6	56. 33	4. 9
Lambertville	68. 11	83. 93	68. 07	73. 37	29	99	29	89. 67	1	40	6	54. 67	4. 6
Newark (f)	---	---	---	70. 58	---	---	30	84. 88	---	---	6	54. 00	---
PENNSYLVANIA—													
Bedford	70. 00	82. 54	73. 32	75. 29	21	91	30	83. 33	0	g 59	6	61. 67	4. 5
Cannonsburg	61. 74	75. 77	65. 74	67. 75	28	95	28	84. 33	1	52	15	h 57. 33	---
Carlisle	70. 05	79. 13	72. 43	73. 87	29	93	29	86. 33	1	53	6	57. 67	3. 8
Chromedale	69. 11	79. 91	69. 00	72. 67	29	95	29	87. 70	6	55	6	56. 20	5. 2
Easton	66. 90	85. 30	69. 80	74. 00	29	99	29	88. 00	1	54	6	55. 67	5. 5
Fleming (i)	58. 30	82. 73	69. 90	70. 31	20	99	---	---	16	41	---	---	---
Gettysburg	67. 00	84. 10	71. 07	74. 06	29	j 96	30	87. 33	1	52	6	56. 00	4. 1
Harrisburg	70. 87	83. 83	76. 63	77. 11	30	96	30	90. 00	1	53	6	59. 67	3. 7
Lewisburg	68. 03	80. 12	68. 81	72. 32	29	94	29	87. 77	1	52	6	56. 93	5. 5
Meadville	67. 83	82. 72	64. 90	71. 82	28	95	28	83. 00	16	50	15	58. 33	5. 0
Morrisville	66. 13	79. 50	67. 30	70. 98	29	j 94	29	84. 33	6	52	6	53. 67	3. 5
Moss Grove	64. 70	78. 17	65. 33	69. 40	22	90	22	82. 00	15	38	15	50. 67	4. 6
Nazareth	68. 33	82. 87	66. 33	72. 51	22	98	30	87. 00	6	54	6	56. 33	5. 4
Norristown	65. 81	78. 52	69. 07	71. 13	30	92	30	85. 33	6	k 54	6	54. 30	5. 1
North Whitehall (i)	59. 49	75. 97	66. 90	67. 44	29	l 92	30	84. 33	1	42	6	54. 67	---
Paradise	---	---	---	81. 00	---	---	---	---	---	---	---	---	---
Pittsburg	66. 50	78. 07	68. 20	70. 92	22	92	29	83. 00	1	m 55	15	61. 33	---
Pocopson	67. 95	82. 86	69. 43	73. 41	29	100	29	91. 00	0	n 55	6	56. 67	5. 8
Shamokin	---	---	---	---	29	102	---	---	3	36	---	---	---
Somerset	63. 74	78. 80	65. 35	69. 30	29	o 89	29	79. 67	1	48	15	58. 33	4. 9
West Haverford	67. 43	82. 70	---	75. 06	29	99	29	89. 50	6	52	6	53. 00	4. 9
MARYLAND—													
Annapolis, [Goodman]	---	---	---	72. 90	29	97	---	---	1	48	---	---	---
Bladensburg	68. 74	86. 09	68. 82	74. 55	30	99	30	88. 33	6	56	6	57. 00	5. 2
Frederick	73. 25	81. 19	72. 04	75. 49	29	95	29	89. 83	6	57	6	58. 00	4. 8
Ridge	75. 40	85. 63	76. 27	79. 10	29	103	30	92. 33	6	60	6	62. 67	3. 4
Sykesville	67. 77	80. 53	70. 57	72. 96	22	93	29	85. 67	1	p 50	7	e 55. 33	3. 6

*a* Same temperature on the 21st.*b* Same temperature on the 5th.*c* Observations taken at sunrise, 2 p. m., and sunset.*d* Observations taken at 6 a. m., 1 p. m., 6 p. m., and 10 p. m.*e* Same temperature on the 6th.*f* Observations taken by register thermometer.*g* Same temperature on the 16th.*h* Same temperature on the 14th.*i* Observations taken at sunrise, noon, and sunset.*j* Same temperature on the 22d.*k* Same temperature on the 7th.*l* Same temperature on the 30th.*m* Same temperature on the 13th.*n* Same temperature on the 15th.*o* Same temperature on the 24th.*p* Same temperature on the 7th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
DISTRICT OF COLUMBIA—	°	■	°	°		°		°		■		°	
Washington.....	69.16	81.98	73.06	74.73	29	95	29	87.67	6	56	■	57.00	4.5
VIRGINIA—													
Alexandria.....	72.13	82.07	72.97	75.72	29	a 95	29	88.67	■	58	■	58.67	4.2
Berryville.....	69.46	81.07	76.52	75.68	22	95	28	87.33	1	53	1	60.33	4.2
Crichton's Store (b).....	70.15	85.75	81.27	79.06	30	■	30	91.67	1	60	7	65.00	5.4
Garysville (c).....				76.50	30	d 94	■	87.33	1	48	■	60.33	---
Kanawha (e).....	64.73	84.43	75.00	76.44	22	93	29	82.25	15	53	1	68.00	---
Lewisburg.....	65.43	85.83	68.10	73.12	30	96	30	82.00	1	50	1	60.00	4.4
Peach Grove Lodge.....	64.73	82.63	67.43	71.60	4	f 92	30	81.33	1	g 54	17	62.00	1.8
Poplar Grove.....	61.27	85.40	69.83	72.16	22	97	29	80.67	15	48	15	61.67	3.9
Portsmouth.....	73.27	88.87	72.17	78.10	29	i 101	30	90.00	■	53	7	62.00	3.7
Rougemont (j).....	68.50		79.23	73.86	29	i 92	22	87.00	1	50	1	64.00	---
Smithfield (k).....				75.17	22	l 94	30	87.60	16	57	7	63.00	---
Trout Run Valley.....	66.37	83.30	64.27	71.31	29	98	25	82.67	1	50	6	57.33	3.3
Winchester.....	70.37	84.67	71.03	75.32	22	i 96	22	87.33	1	50	6	60.67	3.9
Wirt Court-house.....	64.33	85.30	71.03	73.55	22	100	22	86.00	1	42	1	58.67	4.6
NORTH CAROLINA—													
Chapel Hill.....	71.11	86.18	74.54	77.28	12	m 97	23	86.33	1	n 62	7	66.67	4.9
SOUTH CAROLINA—													
Aiken.....	74.37	84.73	77.33	78.93	23	96	23	85.67	15	59	1	73.00	---
All Saints.....	77.97	82.40	78.13	79.46	30	58	30	85.33	5	n 12	2	o 75.33	4.4
Camden.....	75.73	86.53	77.33	79.86	30	96	29	88.00	4	67	17	o 72.33	5.3
Charleston, [Johnson].....	76.93	88.17	79.47	81.52	30	96	■	87.00	3	p 71	2	76.33	---
Charleston, [Dawson].....	76.93	88.16	79.46	81.52		■				71			---
Edisto Island (g).....	77.24	82.93	79.28	79.82	15	r 88	27	84.67	■	70	3	g 74.67	4.6
St. John's (s).....	71.00	84.61	75.60	77.07	24	91	24	81.67	2	63	2	70.00	---
GEORGIA—													
Savannah.....	77.1	88.8	78.2	81.36	24	100	24	88.83	■	72	10	75.10	4.5
Sparta.....	70.63	90.30	76.70	79.21	27	99	28	r 87.33	16	60	15	70.67	4.8
Thomaston (t).....	75.00	85.30	82.10	80.80	28	97	28	90.67	15	m 69	15	73.00	3.9
Whitemarsh Island.....	77.83	85.00	77.74	80.19	24	r 93	24	86.33	11	v 72	3	g 73.67	4.2
Zebulon.....	77.33	88.83	83.73	83.30	26	r 96	27	90.33	1	w 70	5	76.33	2.8
FLORIDA—													
Atsena.....	79.57	84.10	80.03	81.23	24	x 89	30	y 85.33	2	z 74	11	g 75.33	3.8
Gainesville (aa).....	71.47	84.83	75.37	77.22	25	92	30	81.33	16	67	3	72.33	4.2
Jacksonville.....	79.36	86.26	79.03	81.55	24	r 93	27	86.67	18	70	4	d 76.00	3.5
St. Augustine.....	81.47	84.30	78.90	81.56	■	bb 91	24	86.33	14	74	3	76.00	4.1
Salt Ponds.....	79.30	85.30		82.30	29	d 87	30	w 84.00	12	75	1	80.00	6.1
Warrington.....	81.80	84.97	83.63	83.47	27	93	27	90.67	8	74	10	76.67	3.2
ALABAMA—													
Auburn.....	73.87	86.30	76.00	78.72	27	98	28	87.33	16	■	10	70.67	4.2
Carlowlle.....	72.80	87.47	76.53	78.93	28	cc 98	27	87.33	10	67	10	71.33	3.8
Greene Springs.....	71.36	90.07	77.68	79.70	28	99	28	86.67	15	61	15	71.33	7.7
Greensborough.....	75.31	84.73	79.57	79.87	27	cc 92	27	86.67	15	66	15	71.17	3.1
MISSISSIPPI—													
Columbus.....	72.87	87.00	75.35	78.41	30	93	30	83.80	15	64	15	70.93	3.9
Oxford.....	78.43	82.37	74.40	78.40	30	■	27	85.33	9	64	■	64.67	3.7
TEXAS—													
Austin.....	72.93	89.50	81.73	71.39	7	■	20	dd 84.67	11	67	27	77.33	4.2

a Same temperature on the 22d and 30th.

b Observations taken at 6½ a. m., noon, and 6 p. m.

c Observations taken at sunrise, 2 p. m., and sunset.

d Same temperature on the 3d.

e Observations taken at sunrise, noon, 3 p. m., and sunset.

f Same temperature on the 1st and 22d.

g Same temperature on the 2d.

h Same temperature on the 22d.

i Same temperature on the 30th.

j Observations taken at sunrise and sunset.

k Observations taken by register thermometer.

l Same temperature on the 29th and 30th.

m Same temperature on the 23d.

n Same temperature on the 7th.

o Same temperature on the 1st.

p Same temperature on the 5th.

q Observations taken at 6 a. m., 3 p. m., and 10 p. m.

r Same temperature on the 27th.

s Observations taken at sunrise, 2 p. m., and 9 p. m.

t Observations taken at 7 a. m., 2 p. m., and 7 p. m.

u Same temperature on the 16th.

v Same temperature on the 2d and 3d.

w Same temperature on the 10th.

x Same temperature on the 26th.

y Same temperature on the 26th and 27th.

z Same temperature on the 3d, 4th, 6th, 7th, 10th, and 11th.

aa Observations taken at 5 a. m., 2 p. m., and 9 p. m.

bb Same temperature on the 24th and 27th.

cc Same temperature on the 29th.

dd Same temperature on the 7th and 14th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—Continued.	°	°	°	°		□		□		°		°	
New Braunfels.....	81.83	96.30	83.63	87.25	13	a 101	19	90.67	22	75	3	84.33	4.5
Pin Oak (b).....	70.83	85.20	81.80	79.28	12	c 90	13	83.67	8	55	22	73.33	2.2
TENNESSEE—													
Glenwood.....	67.63	82.78	72.35	74.25	27	92	29	84.00	16	54	15	63.60	4.7
Walnut Grove (d).....	74.80?	92.50?	75.75?	81.02?	21?	96?	22?	81.67?	20?	70?	---	---	3.9
KENTUCKY—													
Ballardsville.....	72.53	86.27	76.97	78.59	27	97	28	87.33	14	61	14	66.33	3.4
Danville.....	75.33	86.87	73.27	78.49	26	97	23	86.00	14	63	17	70.00	2.3
Paris.....	68.77	82.32	71.37	74.15	24	93	29	84.33	51	53	15	57.33	4.2
Springdale.....	60.67	88.45	77.23	75.45	21	e 97	29	84.00	14	44	14	62.83	3.8
OHIO—													
Bellefontaine.....	71.97	81.27	66.72	73.32	23	95	22	82.33	14	j 54	14	61.67	4.4
Cheviot.....	71.77	84.13	73.53	76.48	26	96	22	91.33	1	56	17	66.33	3.4
Cincinnati, [Harper].....	73.20	86.13	75.67	78.00	22	99	22	90.00	14	58	14	68.00	3.3
Cincinnati, [Telegraph] (g).....	67.50	83.07	73.90	74.82	22	h 95	28	84.33	1	i 56	15	j 65.33	2.6
Cleveland.....	68.33	77.34	65.67	70.45	4	91	22	84.33	15	54.5	14	56.17	4.2
Collingwood (k).....	66.20	77.05	69.60	70.95	22	92	22	83.33	16	49	14	55.00	---
Dayton, [Fisher].....	65.60	81.97	72.36	73.31	26	95	22	86.00	1	47	1	61.00	2.6
Germantown, [Groneweg].....	67.10	82.17	68.45	72.57	22	98	22	84.20	1	52	14	61.70	4.5
Germantown, [Binkerd].....	64.45	84.13	68.60	72.39	21	l 97	22	85.67	14	m 50	14	56.67	3.5
Granville.....	67.83	81.20	68.57	72.53	21	n 94	22	83.67	16	54	15	60.00	3.8
Hillsborough.....	66.27	78.67	69.10	71.35	22	91	22	82.17	15	53	14	59.83	3.0
Hiram.....	69.03	79.77	68.17	72.32	21	o 89	22	83.00	14	53	15	j 55.67	5.3
Jefferson.....	70.67	73.97	61.33	68.66	24	91	22	82.67	15	p 52	14	54.67	5.6
Oberlin.....	68.7	80.4	65.3	71.46	24	95	29	85.00	15	54	14	56.67	3.2
Perrysburg (q).....	74.53	82.50	71.30	76.11	4	97	22	89.33	14	56	14	61.67	---
Portsmouth.....	67.21	84.10	72.64	74.65	21	n 95	22	85.67	1	52	17	65.67	4.8
Savannah.....	69.53	82.33	65.03	72.30	22	98	22	84.00	12	c 51	14	57.00	4.4
Unionville.....	66.93	78.97	61.27	69.06	28	93	29	80.00	15	46	15	55.33	3.9
Urbana.....	67.80	84.43	68.70	73.64	22	97	22	85.00	14	55	14	60.33	3.9
Zanesville, [Holston].....	67.90	84.23	72.43	74.85	22	96	29	85.00	1	52	15	61.67	5.6
MICHIGAN—													
Ann Arbor, [Woodruff].....	64.87	79.43	66.73	73.68	22	94	22	83.00	14	49	14	52.33	4.0
Battle Creek.....	68.33	82.47	68.87	73.22	22	r 94	29	85.00	14	50	14	52.00	3.0
Cooper.....	68.07	77.83	63.93	69.94	20	82	22	84.00	14	44	14	48.67	2.0
Copper Falls Mines.....				62.24		86				40			---
Detroit.....	68.77	77.70	65.70	70.72	21	95	3	83.00	14	48	14	51.33	---
Eagle River (u).....	60.03	67.97	59.10	62.36	21	82	23	72.67	13	40	13	43.33	---
Grand Rapids, [Currier].....	64.43	78.00	65.67	69.36	20	v 90	28	83.00	14	46	14	48.67	3.7
Holland.....	65.80	78.90	64.02	69.57	28	82	28	84.67	14	48	14	51.67	4.0
Romeo.....	65.34	76.28	63.78	68.46	21	89	22	80.00	15	47	15	j 50.00	5.0
Monroe.....													5.0
INDIANA—													
New Albany.....	69.33	85.92	69.22	74.82	28	98	28	85.17	15	55	15	62.17	4.1
New Harmony.....	74.30	86.30	74.23	78.28	27	97	26	88.67	14	61	12	70.00	4.6
ILLINOIS—													
Athens.....	70.97	87.20	73.33	77.16	26	100	28	87.00	8	60	15	67.33	2.5
Augusta.....	69.13	84.33	72.20	75.22	25	95	28	85.00	14	55	14	61.33	2.2
Brighton.....	68.37	79.70	73.50	73.86	23	96	28	85.00	5	55	1	58.67	5.2
Manchester (g).....	71.27	84.73	70.13	75.38	25	96	24	84.67	14	52	14	59.67	5.7
Marengo.....	69.07	83.60	69.07	73.91	22	100 w	23	85.33	14	50	15	c 61.33	4.2
Ottawa.....	69.73	83.87	72.86	75.49	23	r 96	23	86.33	14	56	13	61.33	4.2

a Same temperature on the 18th and 19th.

b Observations taken at sunrise, noon, and sunset.

c Same temperature on the 13th.

d For 5 days only, from the 20th to the 24th.

e Same temperature on the 3d.

f Same temperature on the 18th.

g Observations taken at sunrise, 1 p. m., and 9 p. m.

h Same temperature on the 28th.

i Same temperature on the 19th.

j Same temperature on the 14th.

k For the last 20 days of the month only.

Same temperature on the 22d and 25th.

m Same temperature on the 16th.

n Same temperature on the 23d.

o Same temperature on the 29th.

p Same temperature on the 14th and 16th.

q Observations taken at 7 a. m., 1 p. m., and 9 p. m.

r Same temperature on the 24th.

s Same temperature on the 22d and 28th.

t Same temperature on the 21st.

u Observations taken at 9 a. m., 3 p. m., and 9 p. m.

v Same temperature on the 21st, 22d, and 28th.

w Same temperature on the 23d.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
	°	°	°	°		°		°		°		°	
ILLINOIS—Continued.													
Pekin (a) .....				72.30		95				45			
Peoria .....	69.44	87.20	74.58	77.07	24	100	23	87.88	15	54.5	13	63.08	3.1
Riley (b) .....	61.30	84.26		72.78	21	c 94	21	83.50	11	42	13	58.00	
Upper Alton .....	70.14	82.00	72.53	74.89	25	d 91	28	85.33	13	56	15	61.00	2.8
Warsaw .....	69.97	84.93	72.80	75.92	25	e 96	28	85.67	14	55	14	60.33	2.6
West Salem .....	71.10	89.03	72.67	77.60	23	100	28	f 87.67	14	59	14	66.00	3.5
MISSOURI—													
Palmyra (g) .....	77.83	84.12	74.40	78.78	25	h 97	25	89.67	15	h 44	14	64.00	4.1
Rocheport .....	78.76	88.58	76.44	81.26	21	i 98	26	93.00	13	56	11	63.00	1.5
St. Louis .....	72.98	86.93	75.67	78.53	21	99	25	88.67	13	59	16	65.17	3.0
WISCONSIN—													
Appleton .....	65.33	80.13	66.47	70.64	20	j 90	28	84.00	13	48	13	54.00	3.0
Beloit .....	70.36	82.26	67.60	73.40	22	91	23	84.67	14	51	13	56.67	2.8
Janesville .....	65.80	81.77	69.50	72.36	23	95	23	84.00	14	50	13	55.33	4.4
Kenosha .....	66.43	73.78	65.00	68.40	21	88	21	82.00	1	k 51	15	56.33	2.3
Madison, [Schue] .....	70.00	81.70	70.43	74.04	22	96	22	86.00	14	53	13	54.33	3.1
Manitowoc .....				65.00		92				46			
Milwaukee, [Winkler] .....	64.33	74.53	61.33	66.76	21	92	28	81.00	1	48	15	55.33	3.5
Milwaukee, [Pomeroy] .....	67.53	74.87	63.63	68.68	29	94	28	84.67	1	48	14	56.33	5.4
Racine, [Seymour] .....				65.53		92	29	78.00			18	52.00	8.8
Norway .....	67.43	81.10	64.90	71.14	22	96	10	83.33	19	51	15	60.00	4.2
Platteville .....	68.97	84.93	71.93	75.28	21	m 94	23	87.33	13	n 52	13	58.67	3.5
Superior .....	57.50	66.45	62.83	62.26	19	96	13	84.33	3	o 42	4	p 45.67	4.7
IOWA—													
Bellevue (g) .....	59.00	83.00	70.00	70.67		92				42			
Dubuque .....	73.15	82.64	73.70	76.50	23	95	23	90.00	13	56	13	59.00	3.3
Fairfield (r) .....	66.53	85.17	75.67	74.20	23	100	23	89.25	14	50	13	57.25	
Fort Madison .....	71.73	85.10	74.96	77.26	6	95	24	87.67	14	55	14	63.33	3.5
Franklin .....	57.90	80.47	69.87	69.41	23	95	23	c 80.33	14	38	14	49.33	3.5
Iowa City .....	75.13	82.83	71.80	76.59	23	96	23	90.00	13	55	13	59.33	5.1
Muscatoine .....	64.80	83.17	66.13	71.37	24	97	22	87.33	12	45	14	56.33	2.3
Pleasant Plain (t) .....	61.10	88.17	67.90	72.17	26	u 106	23	85.00	15	40	14	55.00	3.9
Quasqueton (v) .....	68.07	83.78	65.34	73.40	23	96	3	83.33	13	45	7	65.33	3.9
MINNESOTA—													
Belle Prairie (w) .....	58.41	76.53	61.94	65.63	19	96	10	75.00	12	45	12	54.00	5.4
Hazlewood .....	64.07	78.85	64.43	69.12	23	x 92	27	79.67	13	46	13	52.33	3.6
CALIFORNIA—													
Sacramento .....	66.83	73.10	68.47	59.46	12	94	12	87.00	1	o 61	1	64.00	0.8
Stockton .....	63.33	79.67	64.40	69.13	13	90	13	77.33	5	58	5	60.67	
MEXICO—													
City of Mexico .....	59.37	74.37	61.23	64.99	10	90	10	69.67	3	54	11	61.33	3.8
Mirador (y) .....				79.25				82.76				75.49	
SOUTH AMERICA—													
Catharina Sophia, Surinam (z) .....	75.57	84.80	80.43	80.27	8	89	8	84.00	25	71	23	aa 78.00	4.9
Colonia Tovar, Venezuela (bb) .....	57.14	63.45	57.02	59.20	21	x 66	27	60.67	29	53	6	57.33	6.6

a Observations taken at sunrise and 1 p. m.

b Observations taken at sunrise and 2 p. m.,

c Same temperature on the 23d.

d Same temperature on the 28th.

e Same temperature on the 26th.

f Same temperature on the 23d.

g Observations taken at 9 a. m., 3 p. m., and 9 p. m.

h Same temperature on the 26th and 27th.

i Same temperature on the 24th and 26th.

j Same temperature on the 21st and 28th.

k Same temperature on the 15th.

l Same temperature on the 13th.

m Same temperature on the 22d and 23d.

n Same temperature on the 14th.

o Same temperature on the 4th.

p Same temperature on the 3d.

q Observations taken at 7 a. m., 2 p. m., and 8 p. m.

r Observations taken at morning, noon, evening, and night.

s Same temperature on 24th.

t Observations taken at sunrise, 2 p. m., sunset, and 9 p. m.

u At 12 m.

v For the first 24 days of the month only.

w For the first 21 days of the month only.

x Same temperature on the 27th.

y Observations taken at 7 a. m., 2 p. m., and 8 p. m.

z Observations taken at 6 a. m., 2 p. m., and 6 p. m.

aa Same temperature on the 11th.

bb For the last 21 days of the month only.



## No. 20.--THERMOMETER AND FACE OF SKY, JULY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Hamilton (a).....	75.74	---	74.81	75.27	17	89	17	88.50	7	60	7	61.50	---
Montreal.....	70.57	80.42	72.97	74.65	26	92	26	86.03	9	57	9	62.73	5.1
St. John's (b).....	58.37	62.22	56.00	58.85	28	85	25	73.33	18	41	18	45.33	---
St. Martin.....	66.13	82.34	67.85	72.11	26	97	26	82.90	2	49	6	56.40	3.4
Toronto (c).....	64.27	77.46	66.30	69.34	17	92	17	81.77	8	51	7	58.78	2.4
MAINE—													
Carmel.....	67.30	84.10	65.84	72.41	27	96	27	83.67	5	51	10	62.67	4.5
Cornish.....	65.48	79.13	66.85	70.49	26	94	25	83.33	7	d 53	9	56.00	2.9
Gardiner.....	69.16	79.10	67.71	71.99	27	94	28	e 84.00	5	59	9	61.67	4.4
Perry (f).....	59.65	68.74	59.65	60.79	25	86	25	73.50	1	g 52	6	53.25	4.7
Portland.....	68.83	80.31	69.03	72.72	27	98	27	86.67	5	57	9	59.33	5.1
Steuben.....	65.00	73.74	62.55	67.10	25	93	25	82.00	12	52	12	56.67	5.9
NEW HAMPSHIRE—													
Concord.....	66.72	80.10	70.90	72.57	27	93	27	84.00	5	54	10	60.33	2.6
Londonderry.....	64.55	79.61	67.00	70.39	27	95	27	83.67	1	51	9	57.00	2.7
Manchester.....	68.43	82.97	71.21	74.20	18	99	18	87.00	7	59	9	60.67	4.3
North Barnstead.....	---	---	---	---	---	---	---	---	---	---	---	---	4.8
Stratford.....	65.48	77.10	62.71	68.43	27	92	26	79.00	4	h 51	7	57.67	5.2
VERMONT—													
Brandon.....	65.86	78.72	68.14	70.91	27	91	18	80.83	5	55	6	i 61.67	3.6
Burlington.....	66.87	83.39	70.16	73.47	26	96	26	84.33	7	49	7	61.33	2.8
Craftsbury.....	63.53	75.19	65.48	68.07	26	86	26	j 79.00	7	49	1	56.00	4.0
Shelburn.....	68.90	79.77	68.03	72.23	26	94	24	82.00	4	52	1	60.33	3.2
MASSACHUSETTS—													
Amherst.....	66.42	80.78	69.63	72.28	18	95	18	83.90	2	56	8	59.40	3.9
Boston (k).....	67.03	81.48	72.29	73.60	18	l 98	18	86.67	5	54	9	57.67	1.6
Bridgewater (m).....	70.31	80.50	71.56	74.12	27	94.5	27	n 85.67	9	55	9	57.33	2.9
Cambridge (o).....	65.42	81.34	69.69	72.15	27	97	18	85.33	5	51	9	57.33	4.0
Lawrence (p).....	61.12	---	---	61.12	---	78	---	---	---	56	---	---	---
Mendon.....	68.58	80.84	71.16	73.53	17	93	17	83.67	5	d 55	9	57.33	3.3
Nantucket.....	70.78	77.89	68.34	72.34	28	88.5	28	80.27	10	60	7	65.17	2.9
New Bedford.....	---	---	---	71.75	---	---	28	81.00	---	---	9	61.20	5.3
Newburyport.....	66.86	79.40	67.99	71.42	27	95	27	84.10	9	54	9	54.90	5.5
North Attleborough.....	68.77	78.69	65.81	71.09	18	93	18	84.93	9	54	9	55.20	3.4
Princeton.....	64.60	76.68	67.66	69.65	18	e 89	27	80.00	9	54	9	54.00	3.1
Richmond.....	64.13	86.00	70.87	73.67	24	95	19	81.00	9	50	9	60.33	3.2
Westfield.....	65.23	80.85	70.39	72.16	18	95	18	82.33	5	55	9	58.00	4.0
Weymouth.....	69.22	---	70.13	69.67	18	83	18	81.00	9	57	9	57.50	---
Williamstown (q).....	63.19	78.41	67.94	69.85	17	r 88	18	80.00	5	51	5	60.90	4.2
Worcester.....	69.06	79.39	72.65	73.70	18	93	27	85.00	9	53	9	55.33	3.6
RHODE ISLAND—													
Providence.....	66.7	81.1	68.4	72.07	26	92	27	82.00	9	57	9	59.00	3.8
CONNECTICUT—													
Georgetown.....	65.64	81.35	67.35	71.45	25	e 98	18	84.00	5	i 56	10	s 62.67	3.7
New London.....	67.81	80.71	72.58	73.70	28	96	28	83.33	9	58	9	61.67	3.2
Norwich.....	69.90	83.71	70.81	74.81	27	98	27	85.67	2	58	9	61.67	3.5
Pomfret.....	68.00	77.48	67.68	71.05	18	91	18	82.67	9	53	9	54.33	4.1
Saybrook.....	69.67	78.35	70.97	73.00	27	88	27	82.00	9	61	9	63.00	3.9
Wallingford.....	65.97	82.19	68.45	72.17	27	97	18	83.00	2	s 56	9	59.50	3.9
NEW YORK—													
Angelica.....	64.52	82.58	66.94	71.35	26	95	26	82.00	5	i 54	1	57.33	2.9
Baldwinsville.....	65.58	77.81	70.39	71.26	17	e 85	16	79.67	2	h 55	1	60.00	2.8
Beverly.....	70.81	80.13	72.42	74.45	27	91	18	84.67	2	h 60	9	66.33	3.8

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 8 a. m., and 3 and 9 p. m. for the last 27 days of the month only.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Same temperature on the 9th.

e Same temperature on the 27th.

f Observations taken at sunrise, 7 a. m., 2 p. m., and 9 p. m.

g Same temperature on the 6th and 23d.

h Same temperature on the 7th.

i Same temperature on the 1st.

j Same temperature on the 25th.

k Observations taken at 6 a. m., and 2 and 10 p. m.

l Same temperature on the 28th.

m Observations taken at 7 a. m., and 2 and 7 p. m.

n Same temperature on the 18th.

o Observations taken at sunrise, and 3 and 9 p. m.

p Observations taken at 6 a. m.

q Observations taken at 6 a. m., and 2 and 9 p. m.

r Same temperature on the 26th.

s Same temperature on the 5th.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mmn.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
NEW YORK—Continued.	□	□	○	□		□		□		□		□	
Blackwell's Island .....	72.77	80.39	75.61	76.26	19	94	18	88.00	10	62	9	64.67	6.2
Clinton .....	68.96	78.55	71.45	72.99	17	92	17	83.33	1	55	1	59.33	4.4
Flatbush .....	70.71	82.62	70.77	74.70	18	96	18	86.17	10	62	10	64.70	4.1
Fordham .....	70.84	83.90	73.32	76.02	18	a 97	18	88.00	10	61	9	64.67	---
Geneva .....	67.32	81.13	70.41	72.95	---	94	17	84.00	---	56	1	61.17	3.8
Houseville .....	67.61	81.19	67.13	71.98	17	b 92	25	81.00	6	51	5	57.67	4.6
Lodi .....	68.97	79.29	71.29	73.18	17	b 90	24	81.33	1	54	1	58.67	3.7
Lowville .....	60.97	80.13	66.16	69.09	---	90	17	79.67	---	42	5	54.67	3.8
Mexico .....	69.02	81.86	66.08	72.32	---	96	17	84.43	---	52	1	58.43	3.3
New York city .....	74.89	82.65	75.49	77.68	27	95	18	88.43	10	63	9	66.56	3.8
North Salem .....	69.61	82.39	69.24	73.75	---	94	17	83.33	---	59	9	64.67	4.4
Oswego .....	68.10	75.65	68.06	70.60	17	92	17	82.33	1	53	1	55.67	3.7
Ovid .....	69.81	79.39	70.19	73.13	17	91	26	c 83.00	1	56	1	61.00	3.8
Penn Yan (d) .....	63.00	81.00	71.00	71.67	25	95	17	81.67	2	48	1	56.00	4.9
Plainville (e) .....	72.05	84.95	68.53	75.18	26	96	28	d 83.33	1	55	21	66.67	5.2
Pompey Hill .....	66.68	76.41	66.36	69.82	---	88	26	e 80.00	---	51	1	56.33	2.3
Rochester, [Harkness] .....	74.5	80.7	74.4	76.53	---	94	---	---	---	64	---	---	---
Rochester, [Pratt] .....	68.3	82.6	72.6	74.50	17	96	17	85.67	1	57.5	7	63.73	5.2
Sag Harbor .....	70.81	84.00	70.16	74.99	27	98	27	85.33	10	59	8	63.33	3.7
Spencertown .....	68.19	82.26	67.48	72.64	18	93	18	82.33	4	52	4	60.67	2.8
Utica .....	68.53	80.35	68.19	72.36	17	b 89	18	80.17	1	58.5	1	62.67	3.9
Wampsville .....	68.87	83.16	67.68	73.24	17	94	26	83.00	1	54	1	58.67	3.6
Waterford (f) .....	66.86	81.25	71.45	74.54	---	97	---	---	---	50	---	---	---
Watertown .....	67.87	82.90	67.61	72.79	17	91	17	80.00	7	48	1	58.67	4.9
NEW JERSEY—													
Bloomfield .....	69.08	86.06	71.40	75.51	26	102	18	86.33	23	50	1	66.00	3.2
Burlington .....	73.16	88.68	73.65	78.50	18	g 98	27	88.67	10	64	10	70.00	3.9
Lambertville .....	73.66	89.81	72.87	78.78	18	101.5	18	90.58	5	50	4	69.33	5.5
Newark .....	---	---	---	76.08	27	97	18	86.37	2	58	9	67.25	---
PENNSYLVANIA—													
Bedford .....	70.81	86.00	76.41	77.74	17	95	18	89.67	23	61	22	71.67	3.8
Cannonsburg .....	66.42	82.00	73.42	73.95	17	93	27	c 80.00	21	58	8	67.33	---
Carlisle .....	73.45	82.03	75.93	77.14	18	94	18	86.67	1	55	9	70.33	3.6
Chromedale .....	72.68	84.96	72.50	76.71	18	94	18	85.33	20	63	0	70.67	4.5
Easton .....	70.42	89.72	73.20	77.78	26	102	30	87.00	2	61	0	68.33	3.8
Fleming (h) .....	60.76	85.61	70.50	72.29	26	c 96	---	---	21	48	---	---	---
Gettysburg .....	71.16	90.55	74.61	78.77	18	98	18	89.33	22	64	8	71.33	3.7
Harrisburg .....	75.48	86.67	75.97	79.37	18	97	18	89.67	2	59	9	72.67	2.9
Lewisburg .....	70.87	82.84	72.68	75.46	26	95	18	84.27	2	60	2	67.73	4.7
Meadville (i) .....	66.92	81.33	66.55	71.60	3	91	3	81.00	8	59	5	j 65.33	3.6
Morrisville .....	69.61	84.29	71.71	75.20	27	96	27	83.67	10	k 62	9	66.33	2.6
Moss Grove .....	67.67	82.32	67.63	72.54	17	94	17	80.00	1	l 56	20	j 65.67	3.4
Nazareth .....	73.68	87.55	75.06	78.76	30	99	30	88.67	9	55	9	m 72.00	4.0
Norristown .....	70.76	84.55	79.16	78.16	18	97	18	87.00	2	61	10	n 69.67	4.1
North Whitehall (h) .....	65.32	83.48	75.71	74.84	17	o 94	18	83.33	2	52	5	67.00	---
Pittsburg .....	69.68	83.13	71.61	74.81	17	96	17	82.67	4	62	8	64.67	---
Paradise .....	---	---	---	85.00	---	---	---	---	---	---	---	---	---
Philadelphia .....	74.98	86.95	78.27	80.07	18	98	18	89.00	20	67	9	73.17	4.9
Pocopson .....	73.50	89.42	74.32	79.08	18	100	18	90.33	5	55	9	72.33	4.5
Shamokin .....	---	---	---	---	30	104	---	---	2	43	---	---	---
Somerset .....	67.56	83.63	67.89	73.03	25	94	18	79.67	20	56	20	63.17	3.5
West Haverford .....	69.22	87.96	---	78.59	18	100	18	89.00	10	p 62	10	70.00	4.0
MARYLAND—													
Annapolis, [Goodman] (q) .....	---	---	---	77.55	18	97.5	---	---	20	56	---	---	---
Bladensburg .....	73.71	89.16	72.00	78.29	18	102	18	84.33	2	61	10	72.00	4.6

a Same temperature on the 26th and 27th.

b Same temperature on the 26th.

c Same temperature on the 17th.

d Observations taken at sunrise, 2 p. m., and sunset.

e Observations at 7 a. m. and 2 p. m. wanting for 11 days in the early part of the month.

f Observations taken at 6 a. m., and 1, 6, and 10 p. m.

g Same temperature on the 27th and 28th.

h Observations taken at sunrise, noon, and sunset.

i For the first 12 days of the month only.

j Same temperature on the 8th.

k Same temperature on the 11th.

l Same temperature on the 2d.

m Same temperature on the 1st.

n Same temperature on the 9th.

o Same temperature on the 18th.

p Same temperature on the 11th and 21st.

q Observations taken by register thermometer.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—Continued.	□	○	○	○		○		○		○		○	
Frederick .....	77.32	86.15	76.21	79.89	18	97	18	90.27	11	67	8	72.50	3.8
Ridge .....	79.23	90.55	82.58	84.12	28	104	18	93.00	20	70	11	74.33	2.3
Sykesville .....	69.71	81.94	72.59	74.68	15	a 89	27	84.33	2	b 60	8	c 66.67	3.3
DISTRICT OF COLUMBIA—													
Washington .....	73.55	86.50	77.27	79.11	18	98	18	88.00	2	61	2	68.33	3.9
VIRGINIA—													
Alexandria .....	76.23	86.42	77.26	79.97	18	98	18	88.33	2	67	8	72.67	3.5
Berryville .....	76.19	86.57	79.26	80.67	17	98	18	90.33	9	70	10	72.33	4.6
Crichton's Store (d) .....	74.10	91.46	86.29	83.95	29	e 103	30	95.33	22	68	11	75.00	3.9
Garysville (f) .....				80.00	30	98	30	89.33	20	g 64	20	54.00	----
Kanawha (h) .....	69.23	88.57	78.90	80.37	17	e 96	17	87.25	21	51	21	73.75	----
Lewisburg .....	68.69	86.13	69.89	74.90	17	e 94	17	80.67	21	54	21	66.33	4.2
Peach Grove Lodge .....	69.35	89.39	71.90	76.88	17	99	27	82.00	21	56	21	68.67	1.4
Poplar Grove .....	66.86	90.94	73.16	76.99	17	103	17	82.33	21	52	8	72.67	3.9
Portsmouth .....	77.16	90.42	76.16	81.25	18	102	18	91.33	21	67	21	73.33	3.2
Rougemon (i) .....	78.06	90.31	80.87	83.70	30	102	17	93.60	21	j 70	2	74.40	----
Smithfield .....				78.39	27	96	30	84.40	21	k 59	20	71.00	----
Trout Run Valley .....	70.13	86.06	67.23	74.47	17	96	18	82.67	20	52	20	65.33	3.4
Wirt Court-house .....	72.06	90.84	73.10	78.67	17	100	17	86.67	21	55	21	69.00	3.4
NORTH CAROLINA—													
Chapel Hill .....	75.29	91.61	78.71	81.87	30	105	30	92.67	21	66	20	76.33	4.2
SOUTH CAROLINA—													
Aiken .....	76.84	85.32	78.31	80.16	30	D 8	28	86.00	24	70	8	75.67	----
All Saints .....	79.77	84.32	81.39	81.83	18	l 91	31	m 85.67	23	72	24	77.33	4.5
Camden .....	77.64	89.16	78.23	81.68	29	e 98	30	89.33	23	n 71	8	73.67	5.2
Charleston, [Dawson] .....	79.32	88.54	81.41	83.09		98				72			----
Charleston, [Johnson] .....	79.03	88.55	81.42	83.00	31	98	31	o 88.00	23	72	24	77.33	----
St. John's (p) .....	73.68	88.52	77.94	80.05	31	94	29	84.33	22	66	22	73.67	----
GEORGIA—													
Savannah .....	78.4	89.8	79.6	82.60	30	98	17	87.60	24	72.5	23	73.27	3.6
Sparta .....	73.06	92.00	79.03	81.36	1	99	30	87.00	21	63	21	75.00	4.6
Whitemarsh Island .....	79.48	86.06	78.87	78.14	31	94	1	85.67	23	q 72	24	72.67	4.1
Zebulon .....	80.83	90.87	85.00	85.67	2	r 96	31	91.33	24	74	24	80.67	3.7
FLORIDA—													
Atsena .....	80.52	83.55	80.45	84.84	2	90	2	87.00	24	72	24	74.00	4.7
Gainesville (s) .....	73.42	84.65	76.32	78.13	29	91	3	t 85.67	21	68	20	71.67	4.2
Jacksonville .....	83.48	86.49	78.70	82.89	1	u 92	1	87.33	23	q 73	23	75.33	4.0
St. Augustine .....	72.71	85.03	79.87	79.20	3	94	3	88.33	23	v 75	23	77.00	4.8
Salt Ponds .....	79.55	85.19		82.37	3	w 88	11	c 84.50	12	x 76	17	y 80.00	7.1
Warrington .....	84.50	87.37	85.43	85.77	9	z 91	16	88.33	12	aa 78	12	83.33	3.4
ALABAMA—													
Auburn .....	77.71	91.03	79.65	82.80	15	bb 98	5	86.67	24	70	26	75.33	3.4
Carlowville .....	79.19	91.29	79.65	83.38	16	e 98	18	90.67	1	72	26	78.00	2.9
Greene Springs (p) .....	73.72	90.13	79.73	81.19	16	102	2	85.33	21	cc 68	19	78.00	5.6
Greensborough .....	77.29	87.68	82.73	82.67	16	94	30	86.33	25	72	25	77.00	2.5
MISSISSIPPI—													
Columbus .....	74.94	91.44	79.01	81.80	28	90	30	bb 85.33	21	69	21	77.67	3.2
TEXAS—													
Austin .....	75.23	93.06	83.94	84.08	6	dd 98	10	ee 87.67	25	70	23	74.67	3.7

a Same temperature on the 18th, 27th, and 28th.

b Same temperature on the 3d.

c Same temperature on the 2d.

d Observations taken at 6½ a. m., noon, and 6 p. m.

e Same temperature on the 30th.

f Observations taken at sunrise, noon, and sunset.

g Same temperature on the 23d.

h Observations taken at sunrise, noon, 3 p. m., and sunset.

i Observations taken at 7 a. m., 12 m., 2 p. m., 7 p. m., and 9 p. m.

j Same temperature on the 8th.

k Same temperature on the 20th and 23d.

l Same temperature on the 19th.

m Same temperature on the 18th.

n Same temperature on the 8th, 20th, 21st, and 24th.

o Same temperature on the 1st.

Observations taken at sunrise, 2 p. m., and 9 p. m.

q Same temperature on the 24th.

r Same temperature on the 29th and 31st.

s Observations taken at 5 a. m., 2 p. m., and 9 p. m.

t Same temperature on the 1st and 2d.

u Same temperature on the 2d and 23th.

v Same temperature on the 20th and 24th.

w Same temperature on the 11th.

x Same temperature on the 17th.

y Same temperature on the 12th.

z Same temperature on the 15th, 16th, and 19th.

aa Same temperature on the 9th.

bb Same temperature on the 15th.

cc Same temperature on the 22d and 26th.

dd Same temperature on the 10th and 12th.

ee Same temperature on the 5th.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—Continued.	□	□	□	□		○		□		□		○	
New Braunfels.....	82.50	100.50	85.65	89.55	11	108	11	94.33	25	70	24	a 80.00	3.3
Pin Oak (b).....	72.23	88.35	84.13	81.57	12	94	12	87.00	25	c 68	23	74.33	2.2
TENNESSEE—													
Glenwood.....	71.19	85.23	74.39	76.94	16	93	29	82.93	21	d 62	21	70.67	3.9
Walnut Grove (e).....	74.70	89.73	77.56	80.66	16	96	16	87.00	22	65	8	76.67	4.9
KENTUCKY—													
Ballardsville.....	75.52	86.94	80.90	81.12	17	98	17	89.00	20	64	20	68.67	3.0
Danville.....	76.03	87.48	76.03	79.85	16	98	29	f 86.67	21	70	21	75.33	2.1
Millersburg.....	74.35	86.42	79.16	79.98	14	98	29	87.33	21	62	20	73.67	3.1
Paris.....	72.48	86.29	74.81	77.86	18	g 95	29	87.33	21	a 61	6	74.33	3.5
Springdale.....	65.24	89.44	80.16	78.28	17	99	29	87.67	21	51	6	71.83	2.0
OHIO—													
Bellefontaine (h).....	74.95	85.90	70.65	77.17	25	98	17	86.33	20	d 64	1	70.33	4.4
Cheviot.....	74.39	84.74	77.10	78.74	3	i 93	17	87.67	31	67	31	72.67	3.5
Cincinnati, [Harper].....	77.47	90.29	79.16	82.31	17	101	17	96.33	21	64	7	72.00	----
Cincinnati, [Telegraph] (j).....	71.68	86.94	78.45	79.02	17	96	17	88.00	22	64	30	72.33	3.3
Cleveland.....	69.13	81.92	70.25	73.77	16	k 92	17	85.83	21	60	1	65.00	3.6
Collingwood.....	67.13	80.61	73.35	73.70	17	95	17	83.33	9	58	1	66.33	----
Dayton, [Fisher].....	68.70	85.13	76.68	76.84	17	95	16	88.00	21	55	21	68.67	2.7
Germantown, [Binkerd].....	70.02	85.66	75.76	77.15	16	98	17	88.33	21	58	21	67.83	3.0
Germantown, [Groneweg].....	70.70	86.90	71.15	76.25	16	96	17	83.97	21	62	21	69.35	3.7
Granville.....	69.35	83.90	70.42	74.50	17	96	17	84.67	21	55	21	66.00	2.5
Hillsborough.....	69.11	83.00	72.60	74.90	17	92.5	17	84.00	21	59	21	66.67	2.5
Hiram.....	69.16	82.52	70.10	73.93	17	97	17	86.33	1	61	4	65.00	3.8
Jefferson.....	74.84	80.97	64.90	73.57	17	f 90	17	83.33	1	54	1	62.67	4.5
Oberlin.....	70.90	86.13	69.23	75.42	17	100	17	89.67	21	m 60	1	66.33	2.2
Perrysburg.....	73.29	85.65	74.32	77.75	17	99	17	92.00	20	60	7	n 70.00	----
Savannah.....	71.97	87.16	66.84	75.32	17	98	17	87.00	21	51	1	65.00	4.6
Unionville.....	69.23	78.71	65.23	71.06	11	f 92	17	82.33	1	54	1	63.33	2.8
Urbana.....	70.74	87.68	71.84	76.75	16	k 96	17	83.00	21	58	21	65.00	3.2
MICHIGAN—													
Ann Arbor, [Winchell].....	66.81	83.32	70.18	73.44	16	94	17	82.67	21	n 59	20	66.00	2.8
Battle Creek.....	69.19	85.84	70.87	75.30	16	100	16	87.00	21	o 62	20	67.67	2.7
Cooper.....	71.77	79.74	68.45	73.32	10	96	16	84.67	2	p 60	12	64.67	2.2
Copper Falls Mines (q).....				67.30		85				53			----
Detroit.....	71.97	84.03	68.42	74.81	17	94	17	86.67	20	56	20	64.67	4.3
Eagle River.....	66.23	72.68	65.58	68.16	26	94	26	83.67	8	49	8	51.00	2.9
Grand Rapids, [Currier].....	68.10	82.58	66.68	72.45	16	94	16	84.00	19	50	20	62.67	2.6
Holland.....	70.77	83.45	65.29	73.17	16	97	16	84.33	20	56	20	63.00	3.4
Monroe.....													3.5
Romeo (r).....	69.15	81.68	67.21	72.68	25	92	17	83.61	1	54	1	61.50	4.2
INDIANA—													
New Harmony.....	76.77	88.68	78.61	81.35	29	98	29	90.00	21	68	20	74.33	3.2
Richmond.....	72.59	85.68	73.68	77.32	16	98	17	87.83	20	63	20	70.41	3.2
ILLINOIS—													
Athens.....	76.29	91.26	78.06	81.87	15	f 103	15	92.33	7	67	11	71.00	3.6
Augusta.....	70.07	84.19	74.58	76.28	16	93	18	s 84.00	30	50	11	69.67	3.1
Brighton.....	70.03	89.45	81.29	80.26	15	f 100	16	91.33	19	52	19	70.00	6.9
Manchester (r).....	72.42	87.77	73.58	77.92	15	f 98	16	87.00	30	62	30	69.67	5.2
Marengo.....	70.42	85.48	70.06	75.32	25	95	16	85.33	7	t 60	7	66.67	3.1
Ottawa.....	75.13	85.06	73.20	77.80	10	f 96	16	86.67	20	64	28	71.67	3.8
Pekin.....				75.45		95				45			----
Riley.....	67.97	82.53	68.13	72.88	10	u 94	16	84.33	1	45	7	v 63.67	2.9

a Same temperature on the 23d.

b Observations taken at sunrise, noon, and sunset.

c Same temperature on the 28th.

d Same temperature on the 22d.

e Month incomplete.

f Same temperature on the 16th.

g Same temperature on the 17th and 29th.

h Observations interrupted from the 3d to the 15th of the month.

i Same temperature on the 16th and 17th.

j Observations taken at 6 a. m., 1 p. m., and 9 p. m.

k Same temperature on the 17th.

l Same temperature on the 25th.

m Same temperature on the 1st.

n Same temperature on the 1st and 30th.

o Same temperature on the 20th.

p Same temperature on the 1st and 12th.

q Observations taken at 6 a. m., noon, and 6 p. m.

r Observations taken at 7 a. m., 1 p. m., and 9 p. m.

s Same temperature on the 15th.

t Same temperature on the 6th.

u Same temperature on the 16th and 24th.

v Same temperature on the 1st.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—Continued.	□	○	○	□		○		□		□		○	
Warsaw	68.55	84.87	74.00	75.81	14	94	16	85.67	30	60	30	67.33	3.3
West Salem	72.48	89.45	75.26	79.06	29	99	29	87.67	21	61	21	71.33	3.7
MISSOURI—													
Palmyra (a)	78.76	84.62	76.58	79.99	29	b 95	16	87.67	19	c 56	11	71.67	7.2
St. Louis	77.61	90.92	81.32	83.28	17	101	17	92.67	12	71	12	77.17	4.4
WISCONSIN—													
Appleton	68.26	83.22	68.87	73.45	16	94	16	84.67	1	55	1	64.00	2.9
Bay City (d)	62.23	78.84	69.45	70.17		110	22	94.00		42	20	59.67	
Beloit	71.42	86.71	72.06	76.73	24	96	16	86.33	6	62	12	71.33	2.1
Janesville	68.52	84.47	70.97	74.65	16	e 96	16	84.67	31	58	1	67.67	4.3
Kenosha	69.71	76.66	67.89	71.42	28	88	16	82.17	7	f 55	7	59.67	2.3
Madison, [Schue]	73.10	83.74	70.47	75.77	25	97	25	85.00	1	65	1	69.33	2.8
Manitowoc (g)				69.00		86				52			
Milwaukee, [Pomeroy]	68.71	79.58	67.03	71.77	16	96	16	87.67	6	54	6	60.67	
Milwaukee, [Winkler]	65.87	76.68	64.00	68.88	16	92	16	79.33	7	54	7	59.00	2.7
Norway	70.65	83.58	69.45	74.56	15	h 96	15	86.67	1	50	1	61.33	3.4
Platteville	73.13	88.71	75.48	79.11	16	95	16	85.00	1	60	18	71.00	4.2
Racine, [Seymour]				68.79			17	76.00			1	60.00	8.6
Superior	64.03	76.88	66.13	69.01	23	98	22	82.33	6	50	6	54.33	4.8
Waukesha	69.61	81.97	68.55	73.38	24	98	16	83.33	7	58	6	66.00	3.8
IOWA—													
Bellevue (i)	64.00	85.00	72.00	73.67		98				51			
Border Plains	72.65	82.58	75.03	76.75	15	e 92	16	88.00	1	58	1	60.00	5.0
Fairfield (j)	72.42	88.03	79.13	77.65	15	97	14	85.25	12	62	30	73.00	
Fort Madison (k)	70.61	85.38	76.16	77.38	24	95	16	85.33	4	55	7	m 71.67	3.8
Franklin	61.48	84.00	71.74	75.74	2	99	2	82.67	18	n 50	18	63.00	3.5
Muscatine	67.29	83.29	70.68	73.75	15	o 93	15	82.33	19	55	18	65.67	2.2
Pleasant Plains (p)	63.06	89.13	70.90	74.44	25	100	16	82.00	19	50	18	66.00	
MINNESOTA—													
Hazlewood	67.65	81.93	68.97	72.85	16	92	25	79.67	30	58	17	65.00	3.3
CALIFORNIA—													
Sacramento	69.97	81.97	73.45	75.13	10	100	10	87.67	28	63	27	68.67	0.2
Stockton	66.84	84.00	64.65	71.83	7	q 96	11	q 80.00	28	r 60	29	66.00	
MEXICO—													
City of Mexico	58.74	75.00	60.10	64.61	13	79	12	66.67	2	55	30	62.00	6.6
Mirador (i)				80.58				85.39				76.39	
SOUTH AMERICA—													
Catharina Sophia, Surinam (s)	75.48	84.48	81.00	80.32	2	t 87	22	82.33	8	71	8	77.67	4.4
Colonia Tovar, Venezuela	56.43	62.57	56.20	58.40	24	69	24	61.50	8	u 54	11	56.17	6.4

a Observations taken at 9 a. m., 3 p. m., and 9 p. m.

b Hour not given.

c Same temperature on the 31st.

d Observations taken at morn, noon, and evening.

e Same temperature on the 25th.

f Same temperature on the 2d.

g Observations taken at 7 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 24th and 25th.

i Observations taken at 7 a. m., 2 p. m., and 8 p. m.

j Observations taken at morn, noon, evening, and night.

k Observations taken at 6 a. m., noon, and 7 p. m.

l Same temperature on the 15th.

m Same temperature on the 4th.

n Same temperature on the 19th and 31st.

o Same temperature on the 16th.

p Observations taken at sunrise, 2 p. m., sunset, and 9 p. m.

q Same temperature on the 10th.

r Same temperature on the 27th.

s Observations taken at 6 a. m., 2 p. m., and 6 p. m.

t Same temperature on the 6th, 19th, 24th, 28th, and 31st.

u Same temperature on the 5th, 7th, 10th, and 25th.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	○	○	○	■		○		○		○		○	
Hamilton (a) -----	69.1		67.9	68.50	2	80	2	79.00	25	57	25	58.50	---
Montreal -----	64.28	70.76	65.34	66.79	■	90	2	82.26	27	52	26	56.33	6.6
St. John's (b) -----	60.47	72.88	56.29	63.21	3	92			■	41			---
St. Martin -----	60.45	72.13	60.49	64.36	2	93	2	79.83	25	43	26	52.93	5.3
Toronto (c) -----	57.90	70.58	60.48	62.99	1	81	2	72.60	25	44.5	25	50.88	4.8
MAINE—													
Cornish -----	60.13	69.87	61.77	63.92	1	82	2	73.00	26	48	30	58.00	5.3
Gardiner -----	63.87	72.10	63.40	66.46	15	81	1	73.33	27	54	20	57.00	2.7
Monson -----													7.6
Perry -----	55.97	65.06	58.19	59.74	■	72	1	65.67	27	47	21	53.33	6.6
Portland -----	63.16	73.70	63.29	66.72	12	83	12	72.33	26	52	21	57.67	7.3
Steuben -----	60.55	66.65	58.74	61.98	4	76	4	69.00	27	47	27	53.00	7.8
NEW HAMPSHIRE—													
Concord -----	64.60	74.43	66.21	68.41	1	84	1	77.00	31	52	21	60.00	6.9
Manchester (h) -----	62.57	75.28	66.35	68.07	11	86	7	73.33	21	55	21	57.67	6.6
North Barnstead -----													6.9
Stratford -----	59.55	67.26	56.90	61.24	1	89	2	76.00	26	42	26	47.33	7.6
VERMONT—													
Brandon -----	59.88	69.65	60.67	63.40	2	90	2	79.83	26	47	25	52.00	5.6
Burlington -----	62.61	74.10	63.26	66.66	2	97	2	83.67	26	48	21	57.67	4.0
Craftsbury -----	58.10	66.39	58.77	61.09	2	84	2	75.00	26	44	26	48.00	6.5
Norwich (i) -----	63.67	76.82	63.86	68.12	2	91	2	79.68	12	56	5	62.33	---
Shelburn -----	62.87	69.63	61.23	64.58	2	92	2	80.33	26	48	26	54.00	5.2
MASSACHUSETTS—													
Amherst -----	61.66	73.18	63.40	66.08	1	87	2	75.90	26	48	26	53.67	5.7
Bridgewater (j) -----	64.77	72.77	66.10	67.88	12	82	12	74.83	26	52	26	57.67	4.1
Cambridge (l) -----	61.87	73.16	64.88	69.97	6	82	1	75.00	27	46	26	55.00	6.7
Lawrence (m) -----	60.54					70				46			---
Mendon -----	63.00	73.13	64.48	66.97	1	80	1	75.33	26	48	26	55.33	5.8
Nantucket -----	69.00	74.76	66.94	70.23	1	80	11	75.17	26	59	26	62.00	4.3
New Bedford -----				68.36			1	75.20			26	56.70	6.5
Newburyport -----	62.45	70.78	63.34	65.52	1	86	1	75.53	27	50.3	30	50.97	7.5
North Attleborough -----	62.46	71.69	60.99	65.05	1	83.5	1	74.27	21	52.8	21	50.33	5.4
Princeton -----	60.06	68.63	60.81	63.17	1	82	1	73.67	27	45	26	51.67	6.3
Richmond (p) -----	61.17	75.93	65.83	66.98	1	87	2	76.00	31	52	20	58.00	6.3
Westfield -----	60.90	73.10	63.39	65.80	1	88	2	75.67	26	49	26	54.00	6.4
Weymouth -----	64.23		65.21	64.72	1	75	1	73.33	27	52		54.00	---
Williamstown (r) -----	60.39	68.90	61.75	63.68	2	84	2	75.50	27	47	27	54.33	6.0
Worcester -----	63.74	72.06	66.26	67.35	1	85	1	77.33	26	51	21	52.00	4.9
RHODE ISLAND—													
Providence (s) -----	64.00	76.3	69.2	69.83	3	87	3	76.33	26	48	26	56.67	5.2
CONNECTICUT—													
Georgetown -----	62.32	73.81	62.77	66.30	1	90	1	75.33	27	46	26	54.00	5.4
New London -----	64.06	75.68	66.10	68.61	1	82	1	78.00	26	50	26	58.33	5.1
Norwich -----	65.06	76.48	65.84	69.13	1	89	1	78.00	27	46	26	56.67	4.5
Pomfret -----	62.43	70.32	62.32	65.02	1	82	2	72.00	26	48	26	53.33	5.6
Saybrook -----	66.68	75.26	68.19	70.04	12	84	11	76.00	26	50	26	57.33	5.1
Wallingford -----	61.65	73.92	63.42	66.33	1	89	1	75.00	27	47	26	54.67	4.4
NEW YORK—													
Angelica -----	56.97	73.77	59.58	63.44	2	92	2	81.00	26	33	26	46.33	3.9
Baldwinsville -----	59.39	69.45	63.48	64.11	2	85	2	76.00	26	47	26	53.00	4.9
Beverly -----	65.32	72.55	67.13	68.33	1	86	1	77.33	26	56	21	60.67	5.4
Blackwell's Island -----	69.00	75.06	71.06	71.71	1	84	1	78.67	26	57	26	61.33	6.5

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 8 a. m., 3 p. m., and 9 p. m.; not reported from the 16th to the 29th.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Same temperature on the 1st.

e Same temperature on the 12th.

f Same temperature on the 5th and 13th.

g Same temperature on the 15th.

h Observations interrupted from the 1st to the 3d, and from the 25th to the 29th.

i For the first 20 days of the month.

j Observations taken at 7 a. m., 2 p. m., and 7 p. m.

k Same temperature on the 27th.

l Observations taken at sunrise, 3 p. m., and 9 p. m.

m Observations taken at 6 a. m.

n Same temperature on the 11th and 12th.

o Same temperature on the 10th, 12th, and 14th.

p Observations interrupted from the 22d to the 28th.

q Same temperature on the 3d.

r Observations taken at 6 a. m., 2 p. m., and 9 p. m.

s Observations taken at 6 a. m., 1 p. m., and 10 p. m.

t Same temperature on the 14th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Buffalo (a) -----	57.80	72.39	62.97	64.39	2	85	2	75.33	26	43	25	54.67	5.0
Cazenovia -----	59.06	67.67	59.68	62.14	1	82	2	76.00	26	43	26	49.67	5.8
Clinton -----	62.94	72.87	61.48	65.76	2	97	2	83.67	26	44	26	48.33	5.6
Fishkill Landing (b) -----	62.67	66.50	63.00	64.06									
Flatbush -----	66.39	76.25	66.80	69.81	1	86	1	76.60	26	54	26	57.67	4.9
Geneva -----	62.48	73.15	63.73	66.45		84	2	78.00		52	25	54.67	5.0
Houseville -----	60.35	71.26	59.90	63.84	2	92	2	82.33	25	48	25	50.67	6.4
Lodi -----	62.77	70.74	61.81	65.11	2	84	2	78.67	25	49	25	52.33	5.7
Lowville -----	55.06	70.42	59.55	61.68		91	2	75.75		43	25	46.75	5.5
Mexico -----	63.21	73.87	61.60	66.23		92	2	81.37		48	25	53.60	5.3
New York city -----	66.33	76.25	70.09	70.86	1	87	1	80.23	26	59	26	61.50	4.8
North Salem -----	64.52	74.18	63.55	67.42		86	1	79.67		46	26	56.00	5.5
Oswego -----	63.65	69.68	63.61	65.65	2	89	2	82.67	26	c 53	26	55.00	5.7
Ovid -----	64.32	76.39	60.58	67.10	2	96	2	82.67	26	48	26	54.00	5.0
Penn Yan (d) -----	55.77	72.48	65.23	64.49	2	83	2	74.67	27	47	25	54.33	6.0
Plainville -----	64.42	74.10	62.29	66.94	2	95	2	80.33	25	52	25	53.67	6.9
Rochester, [Harkness] -----	64.1	69.6	66.2	66.63		90				51			
Rochester, [Pratt] -----	61.81	72.39	65.21	66.47	2	90	2	80.50	26	51	25	56.00	6.0
Sag Harbor -----	66.77	77.87	66.68	70.44	1	e 85	1	76.33	26	53	21	59.67	4.9
Spencertown -----	60.35	70.94	60.94	64.08	2	87	2	77.67	26	44	26	53.67	4.9
Utica -----	62.24	72.00	62.42	65.89	2	89.5	2	80.50	25	48	26	52.67	6.3
Wampsville -----	61.25	73.19	60.48	64.99	2	92	2	78.00	27	45	26	52.00	5.5
Waterford (f) -----	60.55	71.20	63.23	65.75		87				41			
Watertown -----	64.13	76.74	62.06	67.64	1	90	2	76.67	25	g 50	26	h 53.33	6.7
NEW JERSEY—													
Bloomfield -----	64.32	77.61	63.25	68.43	11	90	1	78.00	31	45.5	26	57.50	3.8
Burlington -----	69.26	77.74	69.42	72.14	2	91	2	79.67	26	59	26	64.33	4.3
Lambertville -----	64.79	80.91	65.71	76.47	2	94	3	81.00	26	43	26	57.00	4.9
Newark -----				70.13	1	87.5	1	79.00	26	47.5	26	57.25	---
PENNSYLVANIA—													
Bedford -----	62.88	76.40	66.96	68.75	1	89	1	80.33	27	49	26	58.00	4.7
Cannonsburg -----	60.77	74.50	66.93	67.40	1	8c	1	77.00	27	43	30	61.67	---
Carlisle -----	67.05	76.71	69.23	71.00	1	i 84	2	78.33	27	52	26	60.67	4.1
Chromedale -----	65.90	76.70	66.30	69.63	1	j 87	3	79.67	27	50	26	57.13	4.5
Easton -----	64.03	80.32	66.68	70.34	1	101	1	78.67	27	50	26	58.00	4.9
Fleming (k) -----	58.10	77.66	65.96	66.24	1	92			27	40			
Gettysburg -----	63.58	78.45	66.65	69.56	1	l 89	3	78.33	26	51	30	61.00	3.6
Harrisburg -----	69.10	78.77	65.03	71.30	1	j 88	2	82.67	27	56	26	64.33	3.5
Lewisburg -----	62.71	75.50	65.67	67.96	1	87	3	78.10	26	45.5	26	54.43	5.8
Meadville -----	60.93	75.43	60.23	65.53	2	87	2	80.00	31	45	26	55.00	4.2
Morrisville -----	67.10	78.42	66.39	70.64	1	j 92	2	78.67	27	51	26	61.33	3.6
Nazareth -----	67.55	76.87	65.10	69.84	8	85	1	80.33	31	54	21	62.00	4.9
Norristown -----	65.83	75.56	67.62	69.67	2	87	2	78.67	27	52	26	58.00	4.7
North Whitehall (k) -----	61.06	76.23	69.39	68.89	2	88	2	78.67	27	46	31	52.00	---
Paradise -----				76.00									
Philadelphia -----	68.11	78.73	69.58	72.14	1	i 89	2	m 81.67	27	55	26	59.00	5.0
Pittsburg -----	62.90	74.74	64.76	67.13	1	j 86	1	78.67	26	47	26	53.33	---
Pocopson -----	67.95	79.72	68.39	71.69	1	93	1	82.13	26	54	26	59.67	5.4
Shamokin -----						104				43			
Somerset -----	62.38	73.56	60.19	65.38	1	90	1	77.83	26	45	26	52.00	4.9
West Haverford -----	64.35	79.55		71.95	1	93	2	82.50	26	48	26	58.00	4.3
MARYLAND—													
Annapolis, [Goodman] -----					1	86			27	50			
Bladensburg -----	66.07	80.63	65.77	70.82	2	92	2	80.67	26	n 53	27	64.67	4.9
Frederick -----	68.44	76.50	69.58	71.51	1	85	2	79.18	31	54	26	63.00	4.4
Sykesville -----	65.16	73.81	66.68	68.55	1	85	1	76.33	26	53	26	57.33	3.6

a Observations taken at 6 a. m., 2 p. m., and 9 p. m.

b For 3 days only, the 19th, 20th, and 21st.

c Same temperature on the 30th and 31st.

d Observations taken at sunrise, 2 p. m., and sunset.

e Same temperature on the 7th and 14th.

f Observations taken at 6 a. m., 1 p. m., 6 p. m., and 10 p. m.

g Same temperature on the 26th.

h Same temperature on the 25th.

i Same temperature on the 2d and 3d.

j Same temperature on the 2d.

k Observations taken at sunrise, noon, and sunset.

l Same temperature on the 3d.

m Same temperature on the 1st.

n Same temperature on the 27th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 m.	9 p.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
DISTRICT OF COLUMBIA—	°	°	°			°		°		°			
Washington	67.32	79.56	71.06	72.65	1	a 89	1	80.83	26	57	26	63.00	4.3
VIRGINIA—													
Alexandria	69.85	79.16	70.00	73.00	1	89	1	82.33	26	b 58	26	62.00	4.4
Berryville	69.80	76.96	73.12	73.29	6	89	5	79.67	26	58	19	67.00	5.7
Crichton's Store (c)	71.67	84.35	79.58	78.53	11	95	11	85.67	31	60	30	70.00	4.8
Garysville (d)				70.33	1	92	1	82.00	30	60	29	68.00	---
Kanawha (e)	61.79	82.95	72.59	73.48	15	f 86	15	78.75	27	g 51	30	67.75	---
Lewisburg	62.90	79.32	63.94	68.72	1	94	1	80.00	26	50	26	58.33	4.6
Peach Grove Lodge	63.48	82.29	66.29	70.69	1	92	1	82.67	27	43	30	h 62.67	2.5
Poplar Grove	63.19	82.84	67.26	71.10	10	94	1	78.67	31	48	30	62.33	4.9
Portsmouth	76.52	85.42	70.35	77.43	2	94	2	84.00	26	60	26	66.33	3.9
Rougemont (j)	69.91	84.78	70.30	75.67	7	95	1	85.00	26	60	18	70.20	---
Ruthven	70.58	82.50	69.69	74.26	11	98	8	k 79.67	26	61	26	66.33	3.6
Smithfield				73.37	11	91.7	11	83.35	26	b 52.5	26	62.75	---
Trout Run Valley	59.84	75.03	61.16	65.01	23	84	1	74.67	26	44	26	55.33	3.4
Wirt Court-House	67.23	82.10	68.58	72.64	1	90	7	80.33	29	57	29	64.33	5.0
NORTH CAROLINA—													
Chapel Hill	70.52	84.74	73.06	76.11	1	l 96	11	84.33	31	63	31	63.67	5.4
Goldsborough	73.56	84.04	70.69	76.10	1	96.5	11	85.00	31	63.8	31	65.90	5.7
SOUTH CAROLINA—													
Aiken	74.26	84.70	76.84	78.60	1	m 91	24	84.67	4	n 68	31	69.67	---
All Saints	77.42	83.06	79.81	80.10	1	o 88	2	85.33	21	70	21	74.67	4.5
Camden	74.77	86.55	76.06	79.13	2	97	2	86.67	30	g 66	31	66.67	5.6
Charleston, [Johnson]	78.00	87.58	80.26	81.95	1	a 97	2	87.67	21	71	30	77.00	---
Charleston, [Dawson]	78.00	87.58	80.00	81.86		97				71			---
Edisto Island (p)	78.25	83.50	80.62	80.79	24	87	24	84.67	21	72	30	77.33	4.1
St. John's (q)	72.60	83.84	76.71	77.72	1	93	1	84.00	18	r 66	21	72.67	---
GEORGIA—													
Savannah	77.00	90.2	80.00	82.40	24	99.4	2	87.63	21	71	28	77.47	4.3
Sparta	71.55	88.16	76.74	78.82	10	98	10	86.33	21	62	31	68.00	4.9
Thomaston (s)	71.80?	84.00?	75.00?	76.93?	23	95?			26	70?			4.1
Whitemarsh Island	75.94	86.94	79.73	80.87	24	94	24	86.00	21	72	5	78.67	3.7
Zebulon	74.00	80.47	77.77	77.41	11	91	11	86.33	26	t 65	31	65.67	4.6
FLORIDA—													
Atsena	79.97	84.42	81.26	81.88	27	u 90	25	85.67	5	v 75		77.00	4.1
Gainesville (w)	72.61	86.32	77.55	78.83	25	93	25	82.00	22	68	5	74.67	3.4
Jacksonville	80.58	86.06	80.32	82.32	25	95	24	87.33	3	y 74	27	z 79.33	3.7
St. Augustine	83.06	86.52	80.23	83.27	20	97	20	89.67	21	76	5	78.00	4.2
Salt Ponds	80.74	85.29		83.01	16	88	16	84.50	19	v 78	28	80.00	5.2
Warrington	83.29	87.42	85.26	85.32	25	98	25	93.00	10	75	30	78.00	4.0
ALABAMA—													
Auburn	76.61	87.58	78.55	80.91	24	97	24	91.00	26	70	31	71.00	4.5
Carlowville	80.06	87.68	78.45	82.06	6	aa 96	10	88.00	2	72	13	74.67	3.6
Greensborough (bb)	77.08	86.00	81.75	81.61	7	92		86.50	21	70.5	13	77.00	5.7
MISSISSIPPI—													
Columbus	73.01	89.89	78.26	80.39	10	97.2	24	85.53	21	66	13	74.33	3.2
TEXAS—													
Austin	77.13	96.81	87.42	87.12	12	103	6	91.67	30	72	31	g 80.33	3.5
New Braunfels	82.21	103.63	88.84	91.56	6	109cc	6	97.00	30	75	30	85.00	2.6

a Same temperature on the 2d.

b Same temperature on the 27th.

c Observations taken at 7 a. m., noon, and 6 p. m.

d Observations taken at sunrise, 2 p. m., and sunset.

e Observations taken at sunrise, noon, 3 p. m., and sunset; for the last 23 days of the month only.

f Same temperature on the 17th.

g Same temperature on the 30th.

h Same temperature on the 26th.

i Same temperature on the 1st.

j Observations taken at 7 a. m., 12 m., 2 p. m., 7 p. m., and 9 p. m.

Observations interrupted from the 8th to the 16th of the month. Mean at noon, 80.25; mean at 7 p. m., 73.13.

k Same temperature on the 3d and 7th.

l Same temperature on the 2d, 8th, and 11th.

m Same temperature on the 2d, 23d, and 24th.

n Same temperature on the 20th.

o Same temperature on the 2d and 14th.

p For the last 16 days of the month only.

q Observations taken at sunrise, 2 p. m., and 9 p. m.

r Same temperature on the 21st and 22d.

s Not reliable; only 17 observations during the month.

t Same temperature on the 6th.

u Same temperature on the 23th.

v Same temperature on the 6th.

w Observations taken at 5 a. m., 2 p. m., and 9 p. m.

x Same temperature on the 24th.

y Same temperature on the 5th.

z Same temperature on the 7th.

aa Same temperature on the 8th, 9th, 10th, and 26th.

bb Observations interrupted from the 22d to the 25th, and from the 29th to the 31st.

cc Same temperature on the 7th and 11th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—Continued.	°	°	°	°		°		°	°	°	°		
Pin Oak (a) .....	73. 16	90. 97	88. 52	84. 22	18	98	11	87. 67	30	67	31	79. 33	2. 2
TENNESSEE—													
Glenwood .....	66. 53	82. 25	70. 62	73. 13	7	91	1	80. 00	27	59. 5	26	67. 47	4. 6
Walnut Grove (b) .....	68. 00	79. 93	70. 64	72. 86	10	90	10	79. 00	17	61	27	67. 33	5. 4
KENTUCKY—													
Ballardsville ..	67. 45	80. 55	73. 71	73. 90	6	99	7	82. 67	31	57	30	65. 67	3. 9
Millersburg .....	70. 39	79. 03	72. 26	73. 89	2	c 90	10	81. 33	18	64	18	65. 67	6. 0
Paris .....	64. 81	78. 74	69. 06	70. 87	7	91	7	79. 67	26	55	26	63. 33	4. 0
Springdale .....	58. 82	81. 21	74. 87	71. 63	1	93	1	78. 83	9	d 49	26	64. 00	3. 4
OHIO—													
Bellefontaine .....	64. 13	74. 60	62. 16	66. 96	1	c 90	1	80. 33	30	52	26	56. 33	5. 2
Cheviot .....	62. 90	84. 52	69. 58	72. 00	7	96	1	79. 33	26	e 53	18	63. 00	4. 2
Cincinnati, [Harper] .....	69. 48	82. 45	71. 03	74. 32	7	95	7	82. 33	30	59	18	65. 33	4. 0
Cleveland .....	62. 30	74. 77	64. 27	67. 11	1	85	1	75. 50	31	47	26	57. 00	4. 2
Collingwood ..	61. 13	75. 00	66. 29	67. 47	2	88	2	76. 33	27	48	26	60. 33	---
Dayton, [Fisher] .....	59. 37	77. 37	69. 23	68. 66	2	c 86	2	78. 00	31	42	26	58. 67	2. 9
Germantown, [Groneweg] ..	61. 47	79. 92	64. 40	68. 60	7	91	7	79. 70	31	48	30	58. 10	4. 6
Germantown, [Binkerd] .....	61. 54	80. 43	65. 75	69. 24	6	f 87	10	75. 67	27	49	30	62. 67	3. 6
Granville .....	62. 00	77. 06	64. 77	67. 94	2	88	2	78. 00	26	46	26	58. 33	3. 3
Hillsborough .....	62. 39	75. 74	66. 99	68. 37	7	86	7	79. 00	26	g 53	25	60. 33	3. 4
Hiram .....	63. 26	74. 06	63. 81	67. 04	1	86	1	77. 67	26	e 53	8	58. 00	5. 1
Jefferson .....	66. 77	73. 61	59. 10	66. 49	1	h 88	1	80. 67	30	42	31	d 56. 00	5. 1
Oberlin (i) .....	63. 85	76. 90	64. 87	68. 54	1	94	1	78. 33	26	50	19	j 63. 33	3. 9
Perrysburg (k) .....	65. 23	76. 90	67. 27	69. 80	2	89	1	81. 33	31	48	30	53. 33	---
Savannah .....	63. 45	76. 35	61. 10	63. 63	2	91	1	77. 00	26	42	30	53. 00	4. 4
Unionville .....	64. 45	75. 19	60. 19	66. 61	2	88	2	76. 00	30	44	26	55. 33	3. 9
Urbana .....	63. 03	79. 74	61. 45	68. 07	6	91	1	78. 00	30	45	30	56. 67	4. 0
MICHIGAN—													
Ann Arbor, [Winchell] .....	59. 19	75. 71	62. 69	65. 86	1	87	1	75. 67	31	47	30	56. 67	3. 3
Battle Creek .....	61. 74	77. 58	63. 45	67. 59	1	94	1	79. 67	30	47	30	57. 67	2. 4
Cooper .....	61. 94	72. 19	61. 68	65. 27	1	h 84	2	77. 33	30	48	29	57. 33	1. 2
Copper Falls Mines (l) .....	---	---	---	62. 03	---	92	---	---	---	51	---	---	---
Detroit .....	64. 45	76. 74	65. 39	68. 86	1	90	5	79. 33	31	52	31	59. 00	5. 8
Eagle River .....	60. 06	63. 88	59. 29	61. 08	1	86	1	83. 00	21	m 50	30	n 54. 00	4. 3
Grand Rapids, [Currier] ..	56. 42	73. 61	61. 13	63. 72	6	88	2	71. 33	30	38	30	51. 33	3. 2
Holland .....	60. 90	74. 61	58. 45	64. 65	1	93	1	79. 67	31	44	30	53. 33	3. 1
Monroe .....	---	---	---	---	---	---	---	---	---	---	---	---	4. 0
Romeo (k) .....	63. 24	75. 97	61. 15	66. 79	2	93	2	80. 20	26	47. 5	30	57. 25	4. 6
INDIANA—													
New Harmony .....	68. 26	81. 00	71. 55	73. 60	2	c 91	1	83. 33	31	56	31	62. 33	3. 7
Richmond .....	62. 65	78. 11	66. 32	69. 03	2	89	1	78. 67	26	50	25	64. 00	4. 0
ILLINOIS—													
Athens .....	68. 51	82. 45	70. 90	73. 95	1	94	1	86. 00	31	54	30	66. 33	2. 7
Augusta .....	62. 64	77. 35	67. 09	69. 03	1	90	1	80. 67	30	48	30	60. 00	2. 4
Brighton .....	63. 00	79. 45	69. 32	70. 59	4	o 98	2	81. 00	27	44	27	61. 00	6. 3
Manchester (k) .....	64. 06	79. 13	65. 48	69. 56	1	h 90	1	81. 33	30	46	30	57. 67	3. 5
Marengo .....	64. 39	80. 16	62. 58	69. 04	1	92	1	80. 67	26	p 50	30	56. 67	3. 3
Ottawa .....	66. 93	77. 88	65. 90	70. 24	1	89	1	82. 33	26	47	25	61. 33	4. 0
Pekin .....	---	---	---	68. 06	---	88	---	---	---	41	---	---	---
Peoria .....	64. 58	82. 24	68. 90	71. 91	1	91. 6	1	82. 24	30	47. 5	30	61. 17	2. 6
Riley .....	65. 03	80. 00	60. 68	68. 57	1	94	1	82. 67	29	48	31	59. 67	2. 6
Upper Alton .....	66. 10	78. 00	67. 68	70. 59	1	90	1	81. 33	30	51	26	57. 33	2. 6
Warsaw .....	67. 00	79. 39	65. 19	70. 53	1	90	1	81. 00	26	p 57	26	61. 00	2. 7
West Salem .....	64. 90	82. 84	68. 77	72. 17	7	94	1	81. 33	31	52	31	e 63. 00	3. 8

a Observations taken at sunrise, noon, and sunset.

b Month incomplete.

c Same temperature on the 7th.

d Same temperature on the 26th.

e Same temperature on the 30th.

f Same temperature on the 8th, 10th, and 22th.

g Same temperature on the 27th.

h Same temperature on the 2d.

i For the first 28 days of the month only.

j Same temperature on the 8th.

k Observations taken at 7 a. m., 1 p. m., and 9 p. m.

l Observations taken at 6 a. m., noon, and 6 p. m.

m Same temperature on the 23th and 30th.

n Same temperature on the 25th.

o Same temperature on the 12th.

p Same temperature on the 29th, 30th, and 31st.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	W'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSOURI—	□	□	□	□	□	○		○		□			
Palmyra (a) .....	72.47	78.64	69.67	73.59	1	b 89	1	83.33	28	b 42	---	---	7.3
St. Louis .....	69.8	80.6	72.7	74.37	1	93	1	84.33	30	57	26	64.67	3.8
WISCONSIN—													
Appleton .....	59.32	74.35	61.79	65.15	1	89	1	78.67	26	45	25	54.67	4.2
Bay City (c) .....	55.68	73.68	65.71	65.02	---	96	1	84.33	---	42	31	57.33	---
Beloit .....	64.58	83.26	66.09	71.31	1	94	1	83.00	26	d 50	30	62.33	2.3
Janesville .....	61.29	79.19	66.35	68.94	1	94	1	80.33	26	45	29	57.33	4.5
Kenosha .....	62.78	71.21	62.86	65.62	10	82	1	74.83	25	e 51	25	54.33	2.1
Madison, [Schue] .....	69.06	75.90	67.00	69.99	1	93	6	75.00	29	59	12	66.00	2.7
Milwaukee, [Winkler] .....	60.03	72.29	59.42	63.91	10	f 83	2	72.00	29	48	29	55.33	2.7
Milwaukee, [Pomeroy] .....	61.55	70.03	61.10	64.56	10	86	10	73.33	15	45	25	56.33	---
Manitowoc (g) .....	---	---	---	64.00	---	82	---	---	---	47	---	---	---
Norway .....	64.16	80.22	61.35	68.58	1	94	1	83.33	29	h 50	25	56.00	3.4
Platteville .....	64.42	83.03	68.09	71.85	1	i 94	1	85.33	29	46	29	59.00	2.7
Superior .....	61.35	69.55	61.13	64.01	1	91	1	81.33	11	j 52	25	53.33	4.2
Waukesha .....	61.77	76.84	62.45	67.02	1	93	1	80.00	31	46	26	58.00	3.4
IOWA—													
Bellevue (k) .....	54.00	83.00	66.00	67.67	---	94	---	---	---	40	---	---	---
Border Plains .....	64.71	78.10	69.26	70.69	1	97	1	88.00	30	40	30	58.33	8.0
Fairfield (l) .....	65.71	75.35	73.94	70.69	1	88	1	82.50	25	e 46	24	59.25	---
Fort Madison (m) .....	62.96	78.29	69.45	70.23	1	88	1	80.00	26	47	30	60.00	4.9
Franklin .....	51.97	73.74	64.58	63.43	16	88	1	76.00	30	37	30	54.00	3.0
Muscatine .....	57.35	77.87	61.19	65.47	1	91	1	78.33	30	40	30	53.00	2.6
Pleasant Plain (n) .....	53.90	81.87	62.68	66.71	1	94	1	79.75	26	36	26	53.50	---
MINNESOTA—													
Hazlewood .....	57.68	72.48	60.16	63.44	15	o 82	6	70.00	29	p 50	30	55.33	3.3
CALIFORNIA—													
Sacramento .....	64.94	76.13	67.77	69.61	7	98	7	84.00	26	q 58	27	e 62.67	0.7
MEXICO—													
City of Mexico .....	58.23	74.29	59.84	64.12	1	r 76	15	65.33	21	s 52	22	61.33	7.4
Mirador (t) .....	---	---	---	81.61	---	---	---	84.20	---	---	---	77.45	---
Vera Cruz (u) .....	81.11	87.46	82.92	83.83	24	90½	26	86.73	18	77	16	81.10	---
SOUTH AMERICA—													
Catharina Sophia, Surinam (v) .....	76.58	86.58	83.06	82.07	17	92	17	85.33	19	73	11	78.67	3.9
Colonia Tovar, Venezuela .....	57.97	63.35	56.61	59.31	1	w 66	23	62.33	21	54	12	57.00	6.2

a Observations taken at 9 a. m., 3 p. m., and 9 p. m.

b Hour not given.

c Observations taken at morning, noon, and evening.

d Same temperature on the 30th.

e Same temperature on the 26th.

f Same temperature on the 11th.

g Observations taken at 7 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 31st.

i Same temperature on the 4th.

j Same temperature on the 25th.

k Observations taken at 7 a. m., 2 p. m., and 8 p. m.

l Observations taken at morning, noon, evening, and night.

m Observations taken at 6 a. m., 12 m., and 7 p. m.

n Observations taken at sunrise, 2 p. m., sunset, and 9 p. m.

o Same temperature on the 16th.

p Same temperature on the 30th and 31st.

q Same temperature on the 28th.

r Same temperature on the 9th.

s Same temperature on the 22d.

t Observations taken at 7 a. m., 2 p. m., and 8 p. m.

u For the last 20 days only.

v Observations taken at 6 a. m., 2 p. m., and 6 p. m.

w Same temperature on the 4th, 22d, and 23d.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) -----	60.83	-----	60.4	60.61	10	78	10	77.50	24	46	24	46.50	-----
Montreal -----	56.27	65.77	60.64	60.89	5	80	6	72.30	25	47	17	52.30	5.7
St. John's (b) -----	56.57	74.52	54.17	61.75	18	89	-----	-----	1	45	-----	-----	-----
St. Martin -----	52.43	67.83	55.34	58.53	6	86	6	73.67	1	41	17	47.70	4.4
Toronto (c) -----	50.80	64.33	54.59	58.57	9	75	10	71.83	22	37	24	44.43	4.9
Wolfville -----	58.87	67.89	53.83	59.53	5	80	11	70.10	29	42	17	51.67	4.1
MAINE--													
Carmel (d) -----	49.62	68.07	49.39	55.69	15	73	11	66.00	26	35	28	49.33	6.3
Cornish (e) -----	52.88	65.95	55.94	58.26	5	80	5	70.67	25	42	25	48.67	4.3
Gardiner -----	58.97	67.93	59.00	61.97	5	80	5	70.67	15	42	25	52.67	3.6
Perry -----	51.37	62.03	54.37	55.92	8	71	5	62.33	17	f 40	26	49.33	3.2
Portland -----	57.86	70.28	60.19	62.78	5	g 84	11	72.33	25	44	25	53.67	5.8
Steuben -----	56.30	64.47	54.47	58.41	5	80	5	68.00	18	h 46	18	50.67	4.9
NEW HAMPSHIRE--													
Concord -----	57.37	70.87	61.33	63.19	11	83	11	74.33	2	i 48	25	55.33	3.9
Manchester -----	54.14	70.59	61.14	61.96	11	85	11	75.00	25	j 42	25	54.00	5.7
Stratford -----	50.50	65.07	53.40	56.32	5	82	11	71.00	25	38	25	44.33	6.4
West Enfield -----	54.10	66.13	56.93	59.05	10	82	11	71.33	25	42	25	45.67	3.9
VERMONT--													
Brandon -----	52.92	65.24	56.07	58.08	10	80	10	73.33	28	42	23	k 49.67	5.0
Burlington -----	53.70	68.77	58.53	60.33	10	81	10	74.67	28	41	23	51.67	3.0
Craftsbury -----	50.47	63.00	55.13	56.20	10	78	10	71.00	28	k 40	24	46.00	5.1
Shelburn -----	54.53	65.00	56.20	58.58	5	l 78	10	73.00	28	42	24	49.00	4.8
MASSACHUSETTS--													
Amherst -----	54.67	69.04	58.97	60.89	10	80	10	70.67	29	38	25	51.33	5.0
Boston (c) -----	56.10	70.63	59.17	61.97	11	84	11	73.67	26	j 44	27	50.67	3.0
Bridgewater (m) -----	59.10	70.50	63.07	64.22	5	81.5	19	77.33	25	46	25	53.33	3.0
Cambridge (n) -----	55.20	71.20	60.77	62.39	11	83	11	73.33	25	43	25	50.67	5.2
Lawrence (o) -----	60.54	-----	-----	60.54	-----	70	-----	-----	-----	41	-----	-----	-----
Mendon -----	56.67	69.53	60.33	62.18	10	p 78	10	p 71.67	25	46	24	54.33	4.3
Nantucket -----	64.16	70.68	63.17	66.00	11	79	11	75.00	25	56	25	58.67	3.8
New Bedford -----	63.96	-----	-----	-----	-----	-----	-----	69.50	-----	-----	25	53.30	5.1
Newburyport -----	57.01	69.00	60.02	62.01	10	82	11	73.10	25	44.6	26	52.53	6.8
North Attleborough -----	53.21	66.03	53.96	57.73	5	76.9	10	66.40	25	40	25	46.00	3.7
North Barnstead -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.9
Princeton -----	55.00	66.10	57.23	59.44	11	78	10	68.33	9	38	25	49.40	5.1
Richmond -----	50.10	72.07	59.33	60.50	11	90	10	75.00	14	38	21	50.00	4.6
Westfield -----	53.98	70.20	59.33	61.17	5	l 82	10	73.00	25	37	25	48.33	4.4
Weymouth -----	59.03	-----	60.80	59.91	10	q 70	10	70.00	25	46	25	48.50	-----
Williamstown -----	53.56	66.08	58.43	59.36	12	80	18	70.33	28	40	24	48.87	5.2
Worcester -----	60.53	68.80	62.90	64.08	10	p 79	10	72.33	25	49	25	54.00	4.6
RHODE ISLAND--													
Providence (r) -----	56.7	73.4	59.6	63.23	11	83	11	73.67	25	44	24	56.00	3.7
CONNECTICUT--													
Georgetown -----	54.37	71.63	58.60	61.53	18	84	9	71.33	25	k 40	25	50.00	4.5
New London -----	59.20	74.40	61.63	65.08	10	p 81	11	72.67	25	45	24	54.67	3.4
Norwich -----	58.37	73.03	61.37	64.26	7	84	7	74.33	25	41	25	51.67	3.4
Pomfret -----	56.57	67.76	59.10	61.14	7	78	7	68.33	25	44	25	49.67	4.7
Saybrook -----	62.20	71.13	65.17	66.17	7	80	7	73.33	25	48	24	54.67	3.9
Wallingford -----	55.07	71.73	59.63	62.14	11	84.5	11	73.83	25	40	25	51.67	3.5
NEW YORK--													
Angelica -----	47.93	72.20	55.43	58.52	7	88	7	74.67	20	32	23	43.00	2.3
Baldwinsville -----	53.97	65.50	58.53	59.33	18	80	10	72.00	25	43	24	46.67	4.0

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 8 a. m., 3 p. m., and 9 p. m. Seven days not reported, from the 20th to the 26th.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d For the last 20 days of the month only.

e Observations interrupted from the 6th to the 20th.

f Same temperature on the 27th.

g Same temperature on the 6th.

h Same temperature on the 3d.

i Same temperature on the 17th.

j Same temperature on the 28th.

k Same temperature on the 24th.

l Same temperature on the 10th and 11th.

m Observations taken at 7 a. m., 2 p. m., and 7 p. m.

n Observations taken at 7 a. m., 3 p. m., and 9 p. m.

o Observations taken at 6 a. m.

p Same temperature on the 11th.

q Same temperature on the 9th.

r Observations taken at 6 a. m., 1 p. m., and 10 p. m.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Beverly .....	59.00	68.12	63.11	63.41	7	78	10	74.33	24	43	23	52.67	4.0
Blackwell's Island .....	63.90	71.33	67.33	67.52	18	80	11	78.00	25	53	24	57.00	6.0
Buffalo .....	53.00	67.97	57.17	59.38	7	82	10	75.00	2	39	24	a 46.00	4.6
Cazenovia .....	52.63	64.57	54.73	57.31	18	81	10	73.33	25	39	24	43.00	4.8
Clinton .....	55.53	70.27	56.27	60.69	5	87	10	78.67	27	41	24	47.33	4.2
Flatbush .....	59.29	72.13	61.71	64.38	11	87	11	76.00	25	44.5	25	52.63	4.0
Fordham .....	60.59	73.21	63.32	65.71	11	88	11	76.67	25	47	25	54.33	2.8
Geneva .....	56.17	71.42	58.85	62.15	---	89	10	76.83	---	40	24	46.77	4.7
Lodi .....	56.87	69.17	58.13	61.39	18	86	7	75.00	25	40	30	46.00	4.9
Lowville .....	50.30	67.73	55.27	57.77	---	82	10	73.33	---	36	24	46.00	4.8
McGrawville .....	55.25	64.45	60.93	60.21	10	77.5	7	72.50	23	42	23	47.33	4.5
Mexico .....	56.69	70.85	55.88	61.14	---	88	10	77.50	---	43	24	47.10	4.4
New York city .....	63.15	72.94	65.72	67.27	11	86	11	77.63	25	48	24	55.90	3.6
North Salem .....	57.87	71.80	60.03	63.25	---	86	11	75.50	---	42	24	49.83	4.4
Oswego .....	56.37	67.60	58.33	60.77	18	85	10	75.67	25	44	24	49.33	5.8
Ovid .....	56.40	69.87	59.83	62.03	18	87	10	78.33	25	42	24	46.33	4.8
Penn Yan (c) .....	52.13	71.57	62.67	62.12	18	88	10	76.00	2	37	30	47.00	4.9
Plainville .....	60.37	72.27	57.47	60.04	10	88	10	79.33	22	d 46	24	49.33	7.0
Rochester, [Harkness] .....	59.7	66.8	57.4	61.30	---	87	---	---	---	41	---	---	---
Rochester, [Pratt] .....	56.39	68.41	58.85	61.22	9	87	10	75.33	23	41	23	46.00	7.8
Sag Harbor .....	62.50	75.37	62.60	66.82	18	85	11	e 73.67	25	52	25	57.67	3.8
Spencertown .....	54.13	69.07	60.07	61.09	18	85	18	73.00	2	41	25	49.00	4.0
Utica .....	57.07	69.00	58.70	61.59	10	86	10	76.0	25	44	23	53.33	5.0
Wampsville .....	54.93	71.00	57.13	61.02	10	88	10	79.33	28	42	24	47.67	3.7
Waterford (f) .....	56.32	69.50	60.18	62.87	---	82	---	---	---	45	---	---	---
Watertown .....	58.53	72.63	57.63	62.93	10	88	6	77.33	24	44	23	49.00	6.5
NEW JERSEY—													
Bloomfield .....	56.15	74.70	61.27	64.04	11	91	11	80.17	25	40	25	51.00	3.3
Burlington .....	62.07	75.47	64.30	67.28	18	90	18	77.33	25	48	25	55.67	4.1
Lambertville .....	54.63	76.17	60.61	64.40	11	92.2	11	78.08	28	40.5	24	51.67	5.7
Newark .....	---	---	---	64.58	11	87	11	77.87	25	42.2	25	52.25	---
Salem .....	---	---	---	---	---	---	---	---	---	---	---	---	3.9
PENNSYLVANIA—													
Bedford .....	53.69	73.38	62.96	63.34	18	90	18	75.67	25	36	23	43.00	3.5
Cannonsburg .....	55.43	72.83	63.67	63.98	17	90	10	77.67	22	41	30	47.00	4.6
Carlisle .....	58.50	76.71	64.08	66.43	10	91.5	10	80.83	25	41	24	51.67	3.3
Chromedale .....	56.89	72.08	60.31	63.09	11	86	11	76.23	25	41	25	49.00	3.1
Easton .....	56.13	77.47	61.72	65.11	7	93	7	e 78.33	25	40	24	51.67	4.0
Fleming (g) .....	46.40	74.63	62.70	61.24	18	92	---	---	23	28	---	---	---
Gettysburg .....	55.43	77.83	62.67	65.31	10	91	16	80.33	25	37	24	48.67	3.2
Harrisburg .....	62.19	76.04	69.96	69.40	18	89	10	82.33	25	47	24	54.67	2.6
Lewisburg .....	53.28	73.66	60.72	62.55	18	90	18	75.23	25	37	24	49.30	4.8
Meadville .....	52.30	71.55	55.90	59.92	10	h 90	10	80.33	21	34	24	41.33	4.2
Morrisville .....	57.27	73.83	61.43	64.18	11	88	11	75.33	25	44	25	52.00	2.2
Moss Grove .....	52.90	68.63	56.14	59.22	17	86	10	77.67	25	i 38	24	40.67	3.6
Nazareth .....	56.77	73.30	56.57	62.21	11	88	18	74.00	25	41	25	49.33	4.3
Norristown .....	57.92	70.85	62.00	63.59	11	e 87	11	77.67	25	43	25	47.67	3.5
North Whitehall (g) .....	53.20	72.97	65.87	64.01	11	90	11	79.33	25	39	24	50.67	5.8
Paradise .....	---	---	---	72.00	---	---	---	---	---	---	---	---	---
Philadelphia .....	60.18	74.87	63.47	66.17	11	90	18	79.33	25	43	24	51.83	4.5
Pittsburg .....	56.23	70.93	61.03	62.73	9	90	10	79.00	22	40	24	a 46.33	---
Pocopson .....	59.55	76.38	62.62	66.18	11	91	11	80.67	25	45	24	52.33	4.7
Shamokin .....	---	---	---	---	10	94	---	---	25	27	---	---	---
Somerset .....	51.00	69.78	54.43	58.40	10	84	7	73.50	25	33	24	39.67	3.7
Tarentum .....	53.17	76.00	61.67	63.61	10	j 90	10	80.33	19	34	30	47.00	---
West Haverford .....	59.97	74.77	---	67.37	11	90	11	81.00	25	48	24	55.00	3.4

<sup>a</sup> Same temperature on the 30th.<sup>b</sup> Same temperature on the 10th.<sup>c</sup> Observations taken at sunrise, 2 p. m., and sunset.<sup>d</sup> Same temperature on the 24th.<sup>e</sup> Same temperature on the 18th.<sup>f</sup> Observations taken at 6 a. m., 1 p. m., 6 p. m., and 10 p. m. Mean at 6 p. m., 65.46.<sup>g</sup> Observations taken at sunrise, noon, and sunset.<sup>h</sup> Same temperature on the 17th.<sup>i</sup> Same temperature on the 21st, 22d, 23d, and 24th.<sup>j</sup> Same temperature on the 15th and 17th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—	°	°	°	°		°		°		°			
Annapolis, [Goodman].....				65.22	11	91			25	36			
Bladensburg.....	57.19	75.71	61.26	64.72	11	90	11	78.67	25	39	25	50.67	4.3
Frederick.....	59.08	74.15	64.52	65.92	18	86	10	78.50	25	44	24	50.83	3.1
Ridge.....	70.22	78.88	70.32	73.14	11	94	11	85.00	24	52	24	57.33	2.9
Sykesville.....	60.00	71.43	62.63	64.69	11	a 82	11	78.33	24	46	24	50.00	2.8
DISTRICT OF COLUMBIA—													
Washington.....	60.73	75.80	65.70	67.41	11	92	11	81.33	25	45	24	51.33	3.6
VIRGINIA—													
Alexandria.....	62.20	73.95	64.72	66.96	11	88	18	78.33	25	42	24	52.00	3.3
Berryville.....	62.21	75.11	67.52	68.28	11	88	9	a 79.67	25	46	24	51.33	3.3
Crichton's Store (b).....	64.73	75.96	76.32	72.34	18	89	9	a 82.67	24	49	23	54.33	3.8
Garysville (c).....				61.00	8	d 84	7	77.67	25	33	25	52.33	
Kanawha (e).....	56.67	76.57	66.17	66.47	10	91	10	79.00	25	41	30	49.33	
Lewisburg.....	56.90	78.10	60.21	65.07	10	91	10	80.00	25	36	23	44.00	4.3
Peach Grove Lodge (f).....	54.05	74.66	58.83	62.51	9	90	9	80.00	22	33	30	46.33	3.2
Poplar Grove.....	57.30	77.70	63.87	66.29	17	95	10	80.67	25	37	23	47.00	4.3
Portsmouth.....	65.13	77.63	64.83	69.20	11	92	11	81.33	25	40	24	g 50.67	3.7
Rougmont (h).....	66.53	79.13	67.17	72.47	11	93	11	86.00	24	45	23	50.60	
Ruthven.....	65.58	77.57	68.31	70.49	11	89	11	81.67	25	47	25	55.00	2.6
Smithfield.....				67.42	11	a 88	11	79.50	24	39	24	51.00	
Trout Run Valley.....	51.47	74.10	57.20	60.92	17	92	18	76.00	24	g 32	24	38.33	2.4
Wirt Court-House.....	59.33	76.87	62.90	66.37	17	94	10	80.33	25	36	23	49.00	3.7
NORTH CAROLINA—													
Chapel Hill.....	64.47	79.20	67.40	70.36	16	i 92	10	j 81.33	24	46	23	51.33	3.9
Goldsborough.....	68.04	78.25	66.88	71.06	17	90	18	81.77	25	48	24	53.33	3.1
SOUTH CAROLINA—													
Aiken (k).....	67.50	78.75	73.09	73.11	11	84	11	77.67	1	l 64	2	68.67	
All Saints.....	69.27	78.03	73.00	73.43	16	84	10	a 78.67	24	49	25	61.00	2.9
Camden.....	64.53	79.81	67.70	70.68	17	90	11	80.33	24	45	24	52.00	4.2
Charleston, [Johnson].....	69.40	81.80	72.87	74.69	12	89	12	m 81.33	24	50	24	59.33	
Charleston, [Dawson].....	69.26	81.80	72.86	74.64		89				50			
Columbia.....	63.53	78.47	70.57	70.86	9	n 88	11	80.83	24	44	24	53.67	3.0
Edisto Island.....	70.63	78.90	73.90	74.48	14	o 84	12	80.33	24	52	24	59.00	2.9
St. John's (p).....	62.52	75.96	67.80	68.76	17	85	17	74.33	25	44	24	52.67	
GEORGIA—													
Savannah.....	67.00	82.00	71.6	73.53	12	87.5	14	79.23	24	50	24	58.30	2.8
Sparta.....	62.67	81.47	68.40	70.85	11	q 89	11	79.33	25	42	30	53.33	3.7
Thomaston.....	63.47	81.27	80.43	75.06	10	d 90	10	81.33	24	g 42	30	55.33	3.0
Whitemarsh Island.....	68.97	78.40	71.30	72.89	12	r 84	12	78.67	24	54	24	59.00	2.5
Zebulon.....	68.50	76.13	62.80	69.14	19	86	19	82.67	25	50	25	56.67	3.7
FLORIDA—													
Atsena.....	73.27	82.60	77.43	77.77	8	s 89	9	82.00	25	t 58	24	65.67	2.2
Gainesville (u).....	67.13	83.60	72.87	74.53	9	90	9	80.33	25	53	24	61.67	2.6
Jacksonville.....	73.73	81.70	73.53	76.32	1	88	1	82.00	24	58	24	63.00	1.8
St. Augustine.....	78.90	81.00	77.10	79.00	1	92	8	v 82.00	30	65	24	69.00	3.2
Salt Ponds.....	78.30	82.63		80.46	1	w 86	1	d 83.00	25	74	28	76.00	5.4
Warrington (x).....	76.73	84.87	80.73	84.11	20	91	11	87.00	25	58	30	68.67	2.1
ALABAMA—													
Auburn.....	67.63	81.23	72.53	73.80	8	90	8	82.00	24	46	30	54.00	2.9
Carlowville.....	68.77	82.27	72.87	74.60	10	d 92	9	y 84.67	24	46	30	52.33	2.5
Greene Springs.....	64.87	84.47	71.67	73.67	9	93	9	83.00	25	38	30	49.67	3.2

a Same temperature on the 18th.

b Observations taken at 7 a. m., noon, and 5 p. m.

c Observations taken at sunrise, 2 p. m., and sunset.

d Same temperature on the 11th.

e Observations taken at sunrise, 1½ p. m., and sunset.

f Observations interrupted from the 9th to the 22d.

g Same temperature on the 25th.

h Observations taken at 8 a. m., 12 m., 2 p. m., and 6 and 8 p. m.

i Same temperature on the 17th and 18th.

j Same temperature on the 17th.

k For the first 12 days of the month only.

l Same temperature on the 2d and 3d.

m Same temperature on the 20th.

n Same temperature on the 10th and 11th.

o Same temperature on the 15th, 16th, and 17th.

p Observations taken at sunrise, 2 p. m., and 9 p. m.

q Same temperature on the 19th.

r Same temperature on the 14th.

s Same temperature on the 9th.

t Same temperature on the 24th.

u Observations taken at 6 a. m., 2 p. m., and 9 p. m.

v Same temperature on the 12th.

w Same temperature on the 9th, 10th, and 11th.

x Observations taken at 7 a. m., noon, and sunset.

y Same temperature on the 10th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSISSIPPI—	°	■	°	°		°		°		■		°	
Columbus.....	67.99	78.99	67.93	69.97	2	92	9	80.70	25	41.5	30	48.27	3.3
Natchez.....	74.30	79.00	76.33	76.54	10	a 89	11	86.00	30	49	30	53.67	4.5
Port Gibson.....	64.47	81.57	72.53	72.86	18	b 91	7	83.00	25	43	24	c 53.67	5.2
TEXAS—													
Austin.....	68.43	85.70	72.97	75.70	12	d 94	14	83.67	23	52	22	56.00	4.7
New Braunfels.....	72.66	91.47	78.40	80.64	1	104	14	88.33	24	57	22	59.00	5.1
Pin Oak (e).....	66.53	81.30	78.33	75.39	14	91	14	83.67	24	54	22	56.67	2.7
TENNESSEE—													
Glenwood.....	57.66	74.60	62.72	64.99	10	89	10	80.37	24	37	30	44.57	3.7
Knoxville.....	60.33	72.29	63.10	65.24	10	85	11	78.83	25	37	30	46.67	3.7
KENTUCKY—													
Ballardsville.....	59.93	73.43	65.03	66.13	16	87	9	80.00	23	39	30	42.00	2.8
Paris.....	56.50	73.69	60.10	63.43	17	88	10	80.67	25	37	30	45.00	3.0
Springdale.....	52.78	74.36	67.00	64.71	10	f 89	10	80.33	24	29.5	30	44.00	3.3
OHIO—													
Cheviot.....	57.07	79.13	63.57	66.59	3	96	10	82.00	30	36	30	39.33	3.6
Cincinnati, [Harper].....	61.80	76.67	65.33	67.93	17	93	10	82.67	30	40	30	44.00	3.8
Cincinnati, [Telegraph] (g).....	57.90	73.23	65.43	65.52	16	88	10	79.00	22	33	22	41.33	3.0
Cleveland.....	57.12	70.72	59.48	62.44	17	94	10	82.33	23	41	23	43.17	4.9
Collingwood.....	54.77	66.20	59.57	60.18	10	86	7	77.00	21	h 40	30	41.67	---
Dayton, [Fisher].....	53.10	72.25	64.76	63.37	10	86	10	79.33	24	34	30	41.00	2.8
German town, [Groneweg].....	57.07	72.05	57.87	62.00	17	88	10	78.12	24	34	30	39.20	4.0
Granville.....	56.41	70.45	60.45	62.44	10	f 88	10	80.33	24	i 38	23	45.00	3.7
Hillsborough.....	56.23	70.58	60.50	62.44	17	85	10	77.00	30	36	30	41.17	2.8
Hiram.....	56.93	69.79	58.48	61.73	17	90	17	79.00	30	41	30	43.67	4.5
Jefferson.....	58.67	70.33	54.87	61.29	4	82	10	80.67	23	j 40	24	45.33	4.0
Madison.....	56.77	70.43	55.67	60.96	9	k 90	10	83.00	30	42	30	44.67	4.5
Oberlin.....	57.14	73.14	57.88	62.72	10	90	10	81.67	24	41	23	42.33	3.5
Perrysburg (l).....	57.27	73.03	61.50	63.93	4	96	10	82.00	24	38	30	46.00	---
Portsmouth (l).....	59.07	74.96	64.85	66.29	10	f 91	17	80.33	25	39	23	j 49.33	---
Savannah.....	55.33	72.97	55.17	61.16	4	93	4	78.00	23	34	23	38.00	4.3
Sidney.....	59.80	71.48	61.37	64.22	17	91	10	m 80.00	30	36	30	40.67	5.7
Urbana.....	55.43	74.50	57.77	62.57	10	91	10	80.00	30	34	30	39.67	3.3
West Bedford.....	55.80	71.27	60.37	62.48	17	87	10	77.33	24	38	23	43.33	3.8
Zanesville, [Dayton] (n).....	58.68	76.87	64.25	66.60	10	95	6	86.00	22	36	30	47.00	4.0
MICHIGAN—													
Battle Creek.....	54.97	70.10	56.87	60.65	10	90	10	79.00	23	o 36	30	40.33	3.3
Cooper.....	56.73	55.73	55.80	59.42	9	84	9	74.67	22	p 40	30	44.00	3.0
Copper Falls Mines (q).....				51.09		76				32			---
Detroit.....	54.83	69.40	55.93	60.05	10	90	10	79.00	23	r 40	30	43.00	4.7
Eagle River.....	53.30	57.67	52.86	54.61	3	78	3	74.67	29	37	29	38.67	7.6
Grand Rapids, [Currier].....	52.23	66.00	53.77	57.37	4	87	9	77.33	24	33	30	40.67	3.6
Holland.....	55.16	68.83	54.90	59.63	4	93	9	80.33	23	32	30	35.67	4.3
Monroe.....													6.1
Romeo (l).....	55.42	68.57	55.61	59.87	10	88	10	79.25	25	41.2	30	44.50	5.4
INDIANA—													
New Harmony.....	59.53	74.10	63.60	65.74	9	89	9	s 83.00	30	38	30	41.67	3.6
Richmond (t).....	50.10	72.09	59.33	60.50	3	82	10	75.00	2	56	21	50.00	5.5
ILLINOIS—													
Athens.....	60.23	76.66	64.40	67.10	17	99	9	83.00	23	j 37	30	41.67	3.5
Augusta.....	54.53	73.02	60.50	62.68	15	f 90	9	81.00	22	j 35	30	39.33	2.4
Brighton.....	54.40	72.50	66.60	64.50	10	f 86	16	76.67	22	28	30	41.33	6.4
Manchester (l).....	55.60	74.33	57.90	62.61	10	u 90	9	78.00	22	v 34	30	39.33	5.3

a Same temperature on the 11th.

b Same temperature on the 19th.

c Same temperature on the 25th.

d Same temperature on the 14th, 15th, and 16th.

e Observations taken at sunrise, noon, and sunset.

f Same temperature on the 17th.

g Observations taken at 6 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 23d and 24th.

i Same temperature on the 27th.

j Same temperature on the 24th.

k Same temperature on the 10th and 17th.

l Observations taken at 7 a. m., and 1 and 9 p. m.

m Same temperature on the 16th.

n Observations incomplete at 9 p. m.

o Same temperature on the 30th.

p Same temperature on the 24th and 29th.

q Observations taken at 6 a. m., noon, and 6 p. m.

r Same temperature on the 24th and 30th.

s Same temperature on the 10th.

t For the first 9 days of the month only.

u Same temperature on the 15th.

v Same temperature on the 23d.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—Continued.	°	°	°	°		°		°		°		°	
Marengo.....	57.78	70.89	58.07	62.25	9	90	9	81.33	28	a 30	28	b 34.67	3.9
Ottawa (c).....	58.38	70.70	69.50	62.86	9	d 89	14	80.00	30	30	30	32.67	4.3
Pekin (e).....				61.00		90				31			
Peoria.....	56.30	76.52	62.39	65.07	15	95	9	83.20	30	36	30	40.25	3.2
Riley.....	51.47	67.50	53.77	57.58	16	86	9	77.33	24	29	30	32.67	3.6
Warsaw.....	58.13	75.27	59.90	64.43	11	94	9	84.33	30	35	30	41.00	3.1
West Salem.....	58.47	78.13	62.03	66.21	9	f 92	10	82.67	30	37	30	40.33	3.5
MISSOURI—													
Palmyra (g).....	64.20	69.65	61.06	64.97	13	h 89	15	82.01	24	i 32	31	44.67	7.9
St. Louis.....	60.00	74.70	64.2	66.30	10	92	9	81.83	30	41	29	43.67	3.2
WISCONSIN—													
Appleton.....	51.83	66.07	55.27	57.72	9	84	3	78.00	30	31	30	34.67	4.3
Bay City (j).....	47.40	61.30	54.53	54.41		90	3	74.00		33	30	36.33	
Beloit.....	54.06	73.40	58.43	61.96	3	k 90	9	81.00	24	32	30	35.33	3.6
Janesville.....	52.20	68.20	57.87	59.42	9	90	9	80.67	30	30	30	32.00	4.7
Kenosha.....	54.35	64.98	55.90	58.41	9	l 81	9	77.00	30	32	30	34.83	7.3
Manitowoc (m).....				57.00		81				31			
Milwaukee, [Winkler].....	53.27	65.77	54.20	57.75	9	89	9	79.00	30	30	30	34.33	3.5
Milwaukee, [Pomeroy].....	55.23	68.97	55.27	59.82	17	84	6	71.67	23	38	23	43.00	
Norway.....	54.33	69.23	54.83	59.46	9	90	9	80.00	30	31	30	35.33	5.1
Platteville.....	54.77	70.83	59.17	61.59	9	90	9	82.33	21	30	30	33.33	4.5
Superior.....	50.40	58.32	52.77	53.83	3	88	3	75.33	30	34	30	36.00	5.8
Waukesha.....	54.03	68.53	56.43	59.66	9	88	9	80.33	30	34	30	36.33	4.9
IOWA—													
Bellevue (n).....	49.00	71.00	58.00	59.33		90				30			
Border Plains.....	59.77	73.33	64.47	65.86	9	90	9	82.67	30	34	28	42.00	6.2
Fairfield (o).....	59.87	65.60	73.90	63.18	9	93	9	82.50	22	32	30	39.75	
Fort Madison (p).....	53.20	72.86	62.23	62.76	14	90	9	82.00	22	q 32	30	39.67	4.8
Franklin.....	44.77	71.30	58.00	58.02	9	90	9	81.67	30	19	30	31.00	2.8
Iowa City.....	65.23	72.03	64.87	67.38	9	88	9	81.33	20	r 54	28	56.00	5.0
Mount Vernon (s).....	49.21	59.14	57.85	55.40	17	86	17	79.33	30	34	30	38.00	
Muscataine.....	50.17	71.07	56.50	59.25	9	91	9	80.00	24	28	30	38.33	3.2
Pleasant Plain (t).....	50.77	75.13	59.50	62.03	9	u 92	9	81.50	24	27	3	42.50	
MINNESOTA—													
Hazlewood.....	45.53	56.90	47.33	49.92	3	88	3	67.33	29	13	29	29.00	
CALIFORNIA—													
Sacramento.....	63.77	79.97	69.40	71.05	18	95	17	78.33	21	57	14	62.67	0.9
MEXICO—													
City of Mexico (n).....	57.23	72.53	53.17	60.98	2	v 75	4	64.67	9	50	9, 15	60.00	2.8
SOUTH AMERICA—													
Catharina Sophia, Sur'm(w).....	76.07	85.17	82.67	81.30	8	x 91	1	y 84.00	12	73	30	81.00	3.2
Colonia Tovar, Venezuela.....	57.30	64.73	57.10	59.38	11	69	13	61.67	30	52	30	56.67	6.5
Mirador (n).....				78.39				82.40				76.69	
Vera Cruz.....	78.26	85.40	80.08	81.25	23	z 90	3	87.03	14	73½	25	?	

a Same temperature on the 29th and 30th.

b Same temperature on the 30th.

c Hours of observation not uniform.

d Same temperature on the 17th.

e Observations taken at sunrise and 1 p. m.

f Same temperature on the 10th, 15th, and 16th.

g Observations taken at 9 a. m., 3 p. m., and 9 p. m.

h Same temperature on the 17th. Hour not given.

i Same temperature on the 31st. Hour not given.

j Observations taken at morning, noon, and evening.

k Same temperature on the 9th.

l Same temperature on the 14th.

m Observations taken at 7 a. m., 1 p. m., and 9 p. m.

n Observations taken at 7 a. m., 2 p. m., and 6 p. m.

o Observations taken at morn, noon, eve, and night.

p Observations taken at 6 a. m., noon, and 7 p. m.

q Same temperature on the 24th.

r Same temperature on the 22d, 28th, and 29th.

s For the last 15 days of the month only.

t Observations taken at sunrise, 2 p. m., sunset, and 9 p. m. Mean at sunset, 62° 73.

u Same temperature on the 5th.

v Same temperature on the 4th, 5th, and 7th.

w Observations taken at 6 a. m., 2 p. m., and 6 p. m.

x Same temperature on the 25th.

y Same temperature on the 7th.

z Same temperature on the 2d and 3d.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
BRITISH AMERICA—	°	°	°	°	°	°	°	°	°	°	°	°	
Hamilton (a) .....	47. 7	-----	48. 9	48. 30	10	65	10	62. 50	24	35	24	35. 50	-----
Montreal .....	47. 50	54. 47	48. 83	50. 27	10	75	10	67. 56	24	33. 4	31	36. 36	4. 7
St. John's, Newfoundland (b) .....	47. 44?	54. 61?	43. 12?	48. 39?	-----	-----	-----	-----	-----	-----	-----	-----	-----
St. Martin .....	39. 63	55. 19	42. 85	45. 89	10	80. 6	10	65. 40	15	25	24	32. 10	3. 2
Toronto (c) .....	40. 83	51. 20	43. 44	45. 16	9	70	10	56. 72	24	23	24	31. 52	8. 1
Wolfville .....	45. 68	53. 34	47. 47	48. 83	10	68. 5	10	62. 00	18	32	15	35. 80	4. 0
MAINE—													
Carmel .....	38. 36	55. 21	41. 00	44. 86	10	83	10	63. 33	17	23	17	31. 00	4. 0
Cornish .....	43. 87	57. 61	44. 61	48. 70	10	d 80	10	69. 67	24	27	24	30. 67	2. 5
Gardiner .....	43. 97	56. 61	48. 26	49. 61	12	71	30	63. 33	20	30	20	36. 67	4. 5
Perry .....	41. 87	52. 61	44. 52	46. 33	11	68	11	61. 33	25	30	24	31. 67	4. 1
Portland .....	44. 56	59. 39	48. 58	50. 84	10	82	10	69. 33	26	30	24	36. 00	3. 6
Steuben .....	43. 55	53. 74	45. 29	47. 52	10	71	11	62. 00	15	29	15	31. 33	5. 2
NEW HAMPSHIRE—													
Concord .....	42. 06	59. 48	47. 84	49. 79	10	78	10	63. 33	15	26	24	34. 67	2. 4
Great Falls .....	41. 63	60. 53	44. 92	49. 02	10	83	10	67. 00	15	26	24	34. 00	2. 9
Manchester .....	39. 42	58. 23	48. 32	48. 66	10	79	10	63. 67	16	25	24	34. 33	3. 2
Stratford .....	37. 00	53. 42	40. 42	43. 61	9	d 77	9	60. 33	25	20	24	29. 67	4. 9
West Enfield .....	41. 23	52. 52	45. 03	46. 26	10	76	9	d 65. 00	15	24	14	e 32. 00	2. 7
North Barnstead .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4. 5
VERMONT—													
Brandon .....	40. 81	54. 75	44. 41	46. 66	10	76	10	62. 67	15	24	24	31. 17	4. 3
Burlington .....	42. 35	55. 61	46. 74	48. 23	10	76	10	65. 33	25	25	25	34. 00	2. 4
Craftsbury .....	38. 74	52. 01	42. 45	44. 40	10	74	10	64. 00	26	23	24	29. 00	4. 1
Norwich .....	38. 23	54. 13	41. 52	44. 63	10	f 74	11	58. 67	15	18	25	29. 67	6. 4
Shelburn .....	40. 48	53. 45	43. 13	45. 69	10	74	10	63. 33	16	g 22	25	30. 33	3. 8
MASSACHUSETTS—													
Amherst .....	41. 08	58. 12	47. 11	48. 77	11	75. 5	6	62. 80	25	25	24	35. 14	3. 9
Bridgewater (h) .....	45. 15	59. 26	55. 34	53. 25	10	81	10	68. 00	25	30	24	37. 67	1. 8
Cambridge (i) .....	43. 35	58. 45	48. 59	50. 13	10	78	10	65. 33	15	27	24	34. 33	3. 7
Lawrence (j) .....	40. 93	-----	-----	-----	-----	50	-----	-----	-----	23	-----	-----	-----
Mendon .....	44. 77	59. 13	48. 52	50. 81	10	f 76	10	66. 33	16	g 30	24	35. 67	3. 3
Nantucket .....	53. 57	60. 19	54. 01	55. 92	10	76	10	66. 23	24	40	24	43. 20	3. 2
New Bedford .....	-----	-----	-----	51. 84	-----	-----	11	65. 50	-----	-----	24	35. 50	4. 0
Newburyport .....	45. 29	59. 07	48. 62	50. 99	10	83	10	69. 10	15	k 32	24	34. 33	5. 1
North Attleborough .....	44. 46	59. 14	46. 45	50. 02	10	83	10	65. 67	25	28. 7	24	34. 20	2. 8
Princeton .....	45. 49	54. 45	46. 26	48. 73	10	77	10	69. 57	24	27	24	30. 83	3. 6
Richmond .....	39. 03	60. 19	47. 52	48. 91	11	82	11	69. 00	15	11	15	33. 67	4. 0
Westfield .....	40. 39	59. 03	46. 74	48. 72	10	79	10	62. 00	16	25	15	34. 33	3. 6
Weymouth (l) .....	50. 77	-----	52. 77	51. 77	11	63	11	61. 50	15	32	15	34. 00	-----
Williamstown .....	39. 91	53. 95	44. 32	46. 06	10	72	11	57. 63	16	25	15	31. 23	4. 0
Worcester .....	48. 00	58. 45	49. 26	51. 90	10	76	10	67. 00	24	g 31	24	33. 67	3. 3
RHODE ISLAND—													
Providence .....	44. 3	59. 3	46. 9	50. 17	10	76	6	64. 67	25	28	24	33. 33	3. 3
CONNECTICUT—													
Georgetown .....	42. 58	60. 35	47. 12	50. 02	11	82	10	64. 67	24	g 30	24	35. 33	3. 2
New London .....	45. 77	59. 39	49. 32	51. 49	11	73	10	64. 33	25	28	25	33. 00	3. 5
Norwich .....	43. 03	60. 52	48. 26	50. 60	10	78	6	66. 00	16	26	15	k 35. 67	2. 8
Pomfret .....	44. 45	56. 77	46. 52	49. 25	10	f 74	10	63. 33	15	28	24	33. 33	3. 5
Saybrook .....	49. 48	59. 48	53. 52	54. 16	10	70	10	65. 67	25	30	24	39. 33	3. 6
Wallingford .....	42. 42	61. 10	46. 63	50. 05	11	79	10	64. 00	25	26	15	36. 00	2. 7
NEW YORK—													
Angelica .....	36. 52	54. 55	41. 39	44. 15	5	73	5	58. 00	14	22	15	26. 33	3. 9
Baldwinsville .....	42. 23	52. 29	46. 94	47. 15	10	66	6	59. 00	25	26	24	33. 00	3. 5
Beverly .....	45. 35	58. 21	49. 90	51. 15	11	74	10	65. 00	15	g 31	15	37. 67	4. 0
Blackwell's Island .....	50. 84	59. 65	54. 29	54. 93	11	77	11	69. 67	25	33	31	39. 33	6. 6
Buffalo (m) .....	41. 90	54. 77	45. 23	47. 30	10	71	5	64. 00	16	27	24	34. 33	5. 0

a Observations taken at 9 a. m. and 9 p. m.

b Observations reported only from the 1st to the 9th and from the 18th to the 24th; taken at 8 a. m., 3 p. m., and 9 p. m.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Same temperature on the 10th.

e Same temperature on the 25th and 31st.

f Same temperature on the 11th.

g Same temperature on the 25th.

h Observations taken at 7 a. m., 2 p. m., and 7 p. m.

i Observations taken at 7 a. m., 3 p. m., and 9 p. m.

j Observations taken at 6 a. m.

k Same temperature on the 24th.

l For the first 22 days of the month only.

m Observations taken at 6 a. m., 2 p. m., and 9 p. m.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Tem	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°				°		°	
Cazenovia .....	39.35	51.73	41.84	44.31	5	72	5	61.33	25	21	24	22.00	4.8
Clinton .....	42.42	55.74	43.84	47.33	10	79	5	68.00	23	23	14	32.67	4.6
Flatbush .....	46.57	59.89	49.71	52.06	11	77	11	66.40	15	33.3	24	37.67	3.9
Fordham .....	48.29	61.16	51.19	53.55	9	a 80	6	67.00	15	b 35	24	38.33	2.1
Geneva .....	43.82	56.45	47.29	49.19	---	75	5	63.50	---	29	24	34.00	3.9
Lowville .....	37.87	53.10	42.16	41.38	---	74	5	57.33	---	20	24	28.67	4.1
McGrawville .....	41.84	50.87	47.15	46.62	11	67	5	60.80	25	25.5	15	33.60	4.4
Mexico .....	41.24	56.38	43.26	46.96	---	79	5	63.20	---	22	24	31.10	4.3
New York city .....	49.70	60.42	53.59	54.57	11	77.5	6	67.20	25	35	24	40.63	3.7
North Salem .....	42.32	59.61	45.53	49.15	---	77	6	66.67	---	21	24	33.67	3.7
Oswego .....	43.23	55.27	45.23	47.91	5	75	9	59.67	25	26	24	33.33	5.3
Ovid .....	44.23	54.68	47.61	48.84	5	77	5	67.33	25	27	14	34.00	4.6
Penn Yan (c) .....	41.23	54.06	49.58	48.29	5	a 79	5	66.33	25	23	31	32.33	6.0
Rochester, [Harkness] .....	45.8	56.2	47.8	94.93	---	77	---	---	---	31	---	---	---
Rochester, [Pratt] .....	44.6	56.5	48.1	49.73	5	76	5	65.83	16	31	31	36.33	7.4
Sag Harbor .....	50.27	65.12	52.39	55.93	10	82	11	67.67	24	36	24	41.00	3.0
Spencertown .....	40.68	55.29	44.71	46.89	10	d 74	6	61.67	25	21	24	30.67	3.3
Townsendville .....	43.58	55.10	45.73	48.14	5	77	5	66.67	25	26	31	31.33	4.7
Wampsville .....	41.42	57.61	44.90	47.98	5	a 76	5	62.00	15	e 26	24	31.33	4.0
Watertown .....	45.19	55.23	44.87	48.43	5	72	5	68.67	15	20	15	26.67	6.1
Waterford (c) .....	45.47	56.25	48.23	50.46	---	70	---	---	---	28	---	---	---
NEW JERSEY—													
Bloomfield .....	45.21	60.68	48.89	51.59	9	74	11	64.00	16	28	24	35.83	3.3
Burlington .....	50.16	63.48	52.52	55.39	6	74	6	66.67	25	35	31	43.67	3.9
Lambertville .....	43.55	63.22	49.35	52.04	11	81.4	6	67.10	25	22.3	24	37.07	5.9
Newark .....	---	---	---	52.00	11	76.5	6	66.37	25	28.7	24	37.62	---
PENNSYLVANIA—													
Bedford (f) .....	44.29	61.71	49.61	52.89	11	78	11	62.67	31	28	31	32.33	3.5
Cannonsburg .....	45.16	59.71	52.42	52.43	4	86	4	64.67	31	30	31	32.33	5.5
Carlisle .....	42.75	59.41	47.56	49.91	6	77	11	68.33	25	28	25	35.33	3.4
Chromedale .....	45.09	60.00	47.77	50.95	6	74.3	6	65.60	25	28	15	b 38.00	3.4
Easton .....	42.65	63.74	48.31	51.57	11	83	6	68.67	16	26	31	37.00	3.5
Fleming (g) .....	36.12	58.87	49.71	48.23	13	80	---	---	16	20	---	---	---
Gettysburg .....	42.77	66.65	49.23	52.88	10	92	6	71.00	25	27	31	33.67	3.2
Harrisburg (h) .....	48.23	59.89	53.62	53.91	6	75	6	70.33	25	33	25	40.33	4.0
Lewisburg .....	39.75	59.52	45.67	48.31	6	79	6	64.33	25	24	25	34.40	5.6
Meadville .....	40.60	58.93	44.23	47.92	9	d 80	5	61.67	16	23	31	29.67	4.7
Morrisville .....	45.03	60.32	49.74	51.70	11	77	6	63.67	25	31	31	38.67	3.0
Moss Grove .....	41.32	57.50	43.90	47.57	8	i 78	22	62.33	15	24	31	29.00	4.0
Nazareth .....	43.90	59.19	45.16	49.42	6	76	6	64.67	16	26	31	35.33	3.9
Norristown .....	45.88	58.94	49.68	51.50	6	79	6	66.33	25	30	31	38.00	3.5
North Whitehall (g) .....	41.71	58.82	49.82	50.12	11	77	6	67.33	25	24	15	35.00	6.3
Paradise .....	---	---	---	57.00	---	---	---	---	---	---	---	---	---
Philadelphia .....	47.32	61.39	51.55	53.42	11	78	11	69.00	25	29.5	24	36.67	4.7
Pittsburg .....	43.94	60.84	48.35	51.04	3	j 78	5	65.67	15	k 30	24	38.67	---
Pocopscn .....	46.65	61.81	49.47	52.64	6	79	6	68.67	25	31	24	39.33	4.3
Shamokin .....	---	---	---	---	---	82	---	---	25	13	---	---	5.0
Somerset .....	40.03	56.39	43.56	46.66	11	l 73	6	60.67	31	20	31	25.67	4.3
Tarentum .....	43.16	63.55	50.45	52.39	12	83	12	65.67	31	31	31	33.33	6.1
West Haverford .....	48.78	61.52	---	55.15	6	m 74	6	68.00	---	32	24	38.50	2.9
MARYLAND—													
Annapolis, [Goodman] .....	---	---	---	53.78	6	76	---	---	25	32	---	---	---
Bladensburg (n) .....	44.00	66.00	47.22	52.41	6	78	13	65.33	31	25	31	33.00	4.5
Frederick .....	46.16	59.44	50.76	52.12	6	77	6	68.33	25	33.5	31	38.33	3.9
Ridge .....	55.50	67.57	54.67	59.25	---	85	6	73.00	31	38	31	41.00	2.9
Sykesville .....	44.65	59.26	50.16	51.36	5	o 75	6	67.00	25	28	15	35.00	3.5

a Same temperature on the 10th.

b Same temperature on the 24th.

c Observations taken at sunrise, 2 p. m., and sunset.

d Same temperature on the 11th.

e Same temperature on the 25th.

f Observations interrupted from the 14th to the 25th of the month.

g Observations taken at sunrise, noon, and sunset.

h For the last 26 days of the month only.

i Same temperature on the 9th, 10th, and 11th.

j Same temperature on the 9th and 10th.

k Same temperature on the 31st.

l Same temperature on the 12th.

m Same temperature on the 10th and 11th.

n Observations interrupted from the 13th to the 25th of the month.

o Same temperature on the 11th and 13th.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
DISTRICT OF COLUMBIA—	°	°	■	■		■	°		°		°		
Washington .....	46.98	63.71	53.84	54.84	■	79	6	68.67	25	32.5	31	39.50	4.0
VIRGINIA—													
Alexandria .....	49.06	63.40	54.63	55.70	6	77	13	68.67	25	35	31	41.17	4.0
Berrysville (a) .....	50.70	62.05	56.05	56.27	■	76	23	65.67	31	36	31	39.67	2.8
Crichton's Store (b) .....	52.72	64.63	63.42	60.26	5	85	10	70.00	15	36	15	38.33	3.4
Garysville (c) .....				53.00	6	80	6	73.00	29	33	31	43.00	---
Kanwaha (d) .....	47.13	65.16	55.71	56.00	12	81	4	69.33	29	31	31	39.67	---
Lewisburg .....	45.14	66.69	48.59	53.47	10	82	12	67.33	15	e 32	15	36.00	5.0
Poplar Grove .....	45.39	67.81	53.97	55.72	11	f 84	4	66.67	29	30	31	39.00	4.6
Portsmouth .....	50.90	68.19	54.32	57.80	13	81	5	68.33	29	38	29	48.00	3.2
Rougmont (g) .....	52.73	66.88	57.00	60.59	12	h 83	23	74.00	31	31	31	38.60	---
Ruthven .....	50.08	64.92	53.35	56.12	23	80	5	70.00	31	34	31	42.67	2.7
Smithfield (i) .....				58.76	23	79	5	68.00	1	35	1	47.50	---
Trout Run Valley .....	39.32	62.45	46.39	49.39	6	80	13	63.00	31	24	31	30.00	2.7
Winchester .....	48.16	63.71	52.39	54.75	■	80	6	68.67	31	32	31	38.00	3.0
Wirt Court-House .....	46.45	66.29	53.19	55.31	7	85	■	68.33	29	29	30	34.67	4.6
NORTH CAROLINA—													
Chapel Hill .....	51.43	68.28	56.64	58.78	6	86	6	73.33	15	37	15	40.00	7.7
Gaston .....	53.90	66.45	56.65	59.00	■	j 80	5	71.00	15	k 36	15	40.67	---
Goldsborough .....	55.84	68.79	57.12	60.58	5	83	4	72.40	31	37	15	45.50	3.7
Murfreesborough .....	50.39	64.96	55.93	57.09	5	l 79	■	69.00	29	36	31	44.67	2.7
SOUTH CAROLINA—													
Aiken (m) .....	50.26	64.60	53.14	56.00	28	74	28	70.67	18	34	11	46.00	---
All Saints .....	57.84	69.19	63.19	63.41	27	78	10	73.33	31	43	15	49.00	3.2
Camden .....	50.58	70.84	55.71	59.04	7	83	11	69.33	31	36	15	43.67	4.5
Charleston, [Johnson] .....	59.48	72.03	64.68	65.40	14	83	14	76.00	1	47	15	50.33	---
Charleston, [Dawson] .....	59.48	72.32	64.67	65.49		83				47			---
Columbia .....	52.06	68.45	61.94	60.82	6	n 79	10	70.33	19	40	15	k 43.33	4.0
Edisto Island .....	61.46	70.11	65.07	65.55	9	79	14	75.33	15	49	15	51.00	4.1
St. John's (o) .....	54.46	68.48	59.94	60.96	14	77	14	71.00	2	42	15	48.00	---
GEORGIA—													
Savannah .....	57.8	72.9	63.1	64.60	14	83	13	75.80	18	45	16	49.87	3.6
Sparta .....	52.10	72.58	58.94	61.21	5	p 83	5	70.00	1	40	15	45.00	3.2
Thomaston .....	55.19	73.61	65.58	64.79	5	84	5	n 74.00	31	40	15	47.67	3.5
Whitemarsh Island .....	59.61	70.65	63.23	64.50	6	82	■	q 73.00	16	47	16	49.33	3.4
Zebulon .....	65.70	72.86	70.82	69.79	7	83	7	80.33	16	r 48	16	51.33	4.1
FLORIDA—													
Atsena .....	65.55	75.94	68.35	69.95	20	83	20	75.67	16	s 52	16	55.00	3.3
Gainesville (t) .....	60.77	77.82	65.07	67.89	25	85	5	73.33	17	42	17	51.67	3.6
Jacksonville .....	64.41	74.29	65.51	68.07	7	q 81	14	75.67	16	51	16	52.33	3.2
St. Augustine .....	60.94	75.68	70.58	72.07	28	84	4	u 77.67	17	53	16	57.33	4.1
Salt Ponds .....	75.06	79.29		77.18	20	v 84	21	82.00	9	s 72	1	s 73.50	4.6
Warrington (w) .....	67.26	76.48	68.32	70.69		84	12	79.67	17	46	31	60.33	4.0
ALABAMA—													
Auburn .....	57.39	74.45	64.48	65.44	12	84	11	73.67	17	41	15	48.00	3.3
Carlowville .....	58.84	74.84	65.10	66.26	7	84	11	76.00	17	42	15	47.00	3.8
Greene Springs .....	56.00	76.93	61.57	64.83	12	x 89	11	77.33	1	y 38	31	45.67	2.9
Greensborough .....	60.24	72.76	65.90	66.30	12	81.5	11	76.50	16	41	16	48.17	3.4
MISSISSIPPI—													
Columbus .....	53.83	72.78	60.52	62.38	12	84	11	73.30	31	32	31	44.77	3.8
Natchez .....	61.97	72.39	65.45	66.60	7	87	12	77.33	28	43	15	47.67	4.3
Port Gibson .....	56.77	72.94	63.52	64.41	13	z 82	23	75.00	1	aa 37	16	47.00	6.2

a Observations interrupted from the 13th to the 19th of the month.

b Observations taken at 8 a. m., noon, and 6 p. m.

c Observations taken at sunrise, 2 p. m., and sunset.

d Observations taken at sunrise, 1½ p. m., and sunset.

e Same temperature on the 19th.

f Same temperature on the 12th.

g Observations taken at 8 a. m., 12 m., 2 p. m., 6 p. m., and 8 p. m.

Mean at 12 m., 65.63; mean at 6 p. m., 60.69.

h Same temperature on the 13th and 23d.

i For the first 23 days of the month only.

j Same temperature on the 6th, 22d, and 24th.

k Same temperature on the 16th.

l Same temperature on the 6th.

m Month incomplete.

n Same temperature on the 7th.

o Observations taken at sunrise, 2 p. m., and 9 p. m.

p Same temperature on the 6th and 13th.

q Same temperature on the 14th.

r Same temperature on the 31st.

s Same temperature on the 17th.

t Observations taken at 6 a. m., 2 p. m., and 9 p. m.

u Same temperature on the 13th.

v Same temperature on the 21st.

w Observations taken at 7 a. m., noon, and sunset.

x Same temperature on the 13th and 21st.

y Same temperature on the 16th, 17th, and 31st.

z Same temperature on the 23d.

aa Same temperature on the 16th, 18th, and 31st.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
LOUISIANA—	°	°	°	°		°		°		°			
Black River.....	58.39	74.58	66.68	66.55	6	a 84	11	77.00	31	36	16	47.33	4.6
TEXAS—													
Austin.....	57.32	77.55	63.61	66.16	10	88	22	77.33	17	34	15	b 49.00	5.5
New Braunfels.....	61.55	78.10	68.19	69.28	5	90	22	81.00	17	38	15	52.33	5.0
Pin Oak (c).....	58.90	71.10	69.77	66.59	10	81	21	76.00	16	36	15	45.00	2.2
TENNESSEE—													
Glenwood.....	52.56	59.03	58.39	59.99	8	83	7	72.23	1	34.7	31	43.70	4.6
Knoxville.....	50.87	65.74	54.37	56.99	13	78	13	66.83	31	33	31	38.67	3.6
KENTUCKY—													
Ballardsville.....	51.10	65.74	57.10	58.05	8	82	7	72.00	31	30	31	36.33	3.2
Millersburg.....	49.90	65.23	52.74	55.96	5	88	5	71.33	1	30	31	36.00	7.4
Paris.....	46.32	63.63	51.52	53.82	7	d 79	23	64.67	31	30	31	31.67	4.1
Springdale.....	45.26	71.27	59.50	58.68	5	e 88.5	8	71.00	31	29	31	38.00	3.9
OHIO—													
Cheviot.....	48.23	71.45	55.97	58.55	12	94	6	73.67	31	29	30	37.33	3.8
Cincinnati, [Harper].....	50.32	69.45	55.65	58.47	8	f 84	7	71.67	31	33	31	38.67	4.0
Cleveland.....	44.32	60.76	49.37	51.48	5	g 82	5	68.50	16	25	31	30.67	5.1
College Hill.....	48.89	67.20	53.10	56.40	5	h 82	22	69.67	31	29	31	34.67	3.5
Collingwood.....	45.23	58.94	51.65	51.94	4	i 78	9	70.00	31	27	30	33.00	---
Dayton, [Fisher].....	43.79	64.11	50.29	52.73	22	81	6	69.00	29	27	31	35.00	3.6
Germantown, [Groneweg].....	44.82	63.50	49.10	52.47	8	79	11	66.65	31	32	31	33.35	5.2
Germantown, [Binkerd].....	44.85	65.30	52.96	54.37	11	83	12	68.67	31	28	31	33.33	4.3
Granville.....	47.32	63.42	48.90	53.21	4	81	5	68.33	31	30	31	33.00	4.8
Hillsborough.....	46.97	62.42	52.89	54.09	5	j 76	6	66.83	15	30	31	35.17	3.5
Hiram.....	47.71	58.67	49.26	51.88	9	k 79	5	68.67	31	28	31	30.33	4.6
Jefferson.....	42.55	57.42	44.61	48.19	9	l 78	22	64.00	16	22	15	32.00	4.6
Madison.....	42.90	58.26	44.10	48.42	10	79	22	65.33	16	24	31	32.67	4.7
Oberlin.....	45.5	51.2	47.5	48.07	4	78	5	67.33	16	30	16	39.67	3.7
Perrysburg (m).....	46.29	61.81	50.97	53.02	9	k 85	22	71.33	19	n 29	31	33.67	---
Portsmouth.....	49.45	65.19	56.26	56.97	4	86	4	73.00	29	n 35	31	40.00	5.3
Savannah.....	43.29	61.19	46.19	50.22	4	o 83	5	69.33	31	27	31	30.33	4.9
Sidney.....	46.06	64.44	50.01	53.50	8	88	5	73.67	31	26	31	32.58	7.0
Urbana.....	43.29	67.71	48.19	53.06	9	89	5	68.33	31	25	31	32.00	3.9
West Bedford.....	49.97	62.00	51.90	54.62	5	84	5	75.00	31	30	1	36.67	4.3
MICHIGAN—													
Battle Creek.....	45.35	59.10	48.29	50.91	8	i 81	9	68.00	17	26	16	31.67	3.9
Cooper.....	46.19	56.26	49.00	50.48	4	p 80	4	72.00	---	26	31	28.67	3.1
Copper Falls Mines.....				42.37		79				24		---	---
Detroit.....	42.71	59.65	46.55	49.64	9	k 82	9	63.67	31	26	31	30.67	7.6
Eagle River.....	45.74	50.65	45.23	47.21	9	78	9	70.00	31	28	31	30.67	2.9
Grand Rapids, [Currier].....	42.58	57.35	46.06	48.66	9	82	4	66.33	16	q 22	31	27.00	3.8
Romeo (m).....	43.55	59.02	47.25	49.94	9	83	22	66.08	16	25.5	31	30.83	6.0
Monroe.....												---	4.5
INDIANA—													
New Harmony.....	50.90	69.03	56.23	58.72	7	84	24	70.67	31	27	31	39.00	4.1
Richmond (r).....	43.19	62.84	49.90	51.98	8	d 84	5	67.67	31	28	31	34.00	4.3
ILLINOIS—													
Athens.....	53.63	71.06	58.66	61.12	3	g 88	4	a 75.33	31	21	30	36.00	4.6
Augusta.....	47.71	65.45	54.55	55.90	8	86	8	74.33	17	22	30	34.33	3.7
Brighton.....	49.45	63.94	57.61	57.00	7	s 87	7	78.00	2	23	2	35.00	8.2
Manchester (m).....	47.35	68.58	53.13	56.35	8	t 88	21	76.33	31	20	15	u 35.00	4.0
Marengo.....	47.23	60.06	48.23	51.84	9	86	4	d 74.67	30	26	30	28.67	3.9
Ottawa.....	48.23	61.65	48.65	52.84	8	86	5	71.33	16	26	17	36.00	4.7

a Same temperature on the 7th.  
b Same temperature on the 16th.  
c Observations taken at sunrise, noon, and sunset.  
d Same temperature on the 9th.  
e Same temperature on the 27th.  
f Same temperature on the 11th, 12th, and 23d.  
g Same temperature on the 8th.  
h Same temperature on the 8th, 9th, and 12th.  
i Same temperature on the 9th and 10th.  
j Same temperature on the 11th.  
k Same temperature on the 10th.

l Same temperature on the 10th and 11th.  
m Observations taken at 7 a. m., 1 p. m., and 9 p. m.  
n Same temperature on the 31st.  
o Same temperature on the 8th and 11th.  
p Same temperature on the 8th and 9th.  
q Same temperature on the 17th.  
r For the last 19 days of the month only.  
s Same temperature on the 22d.  
t Same temperature on the 21st.  
u Same temperature on the 30th.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—Continued.	°	□	□	□		°		□		°		°	
Pekin (a).....				54.26		83				20			
Peoria.....	49.05	67.89	55.90	57.61	3	90	4	74.75	31	23	30	36.50	5.3
Riley.....	41.84	56.19	43.97	47.33	22	82	9	68.33	31	14	31	31.00	4.3
Warsaw.....	51.65	66.74	55.00	57.80	3	b 88	8	75.00	31	28	30	36.33	4.2
West Salem.....	51.03	72.90	56.58	60.17	7	c 90	8	73.67	31	26	30	37.33	3.1
MISSOURI—													
Cape Girardeau (d).....	51.59	68.40	59.84	59.88	7	82	----	?	31	29	----	?	7.0
Palmyra (e).....	57.80	65.83	57.86	60.50	3	f 85	7	76.33	17	21	30	39.00	6.6
St. Louis.....	52.8	68.8	57.8	59.80	8	85	10	73.50	31	29.5	30	34.67	4.9
WISCONSIN—													
Appleton.....	44.67	57.45	47.22	49.78	8	84	8	g 70.67	31	25	30	28.33	4.1
Beloit.....	46.16	63.51	50.26	52.98	5	h 84	4	72.67	31	18	30	28.00	3.3
Janesville.....	42.06	59.45	47.81	49.77	8	85	4	71.00	31	24	30	27.67	5.2
Kenosha.....	44.80	55.00	46.93	48.91	22	79	8	67.17	31	23	30	27.67	5.8
Manitowoc (i).....				47.0		74				22			
Milwaukee, [Winkler].....	42.69	55.44	44.68	47.60	8	84	8	67.00	31	17	30	26.50	4.1
Milwaukee, [Pomeroy].....	43.45	54.52	45.61	47.86	10	84	6	73.33	31	22	31	25.00	----
New London.....	39.48	61.25	44.29	48.34	8	92	10	g 67.33	16	20	30	27.67	4.1
Norway.....	43.42	61.58	46.35	50.45	4	b 82	10	72.33	31	15	30	26.33	4.7
Platteville.....	46.68	61.67	50.70	53.02	8	86	8	75.67	31	20	30	27.33	4.0
Racine, [Durham].....	47.58	51.39	46.90	48.62	22	73.4	9	62.77	31	20	30	30.20	5.6
Superior.....	41.61	49.55	43.16	44.77	12	64	9	56.67	30	25	30	26.33	6.2
Waukesha.....	44.40	60.76	48.69	51.28	8	84	4	71.67	31	14	30	28.67	5.2
IOWA—													
Bellevue (j).....	43.00	61.00	49.00	51.00	----	84				28			
Border Plains.....	51.07	59.82	53.89	54.93	8	84	9	78.33	30	26	30	34.00	8.5
Fairfield (k).....	51.32	62.58	58.26	57.03	6	87	22	73.00	31	22	30	31.25	----
Fort Madison (l).....	46.73	63.22	55.61	55.19	7	85	7	74.00	31	22	30	33.33	6.9
Franklin.....	42.33	57.94	51.97	50.75	7	m 82	22	76.00	15	20	30	29.00	3.4
Iowa City.....													
Mount Vernon (n).....	47.00	56.03	50.03	51.02	7	82	7	72.67	31	22	30	29.33	----
Muscatoine.....	45.13	61.23	50.45	52.27	8	g 82	4	70.33	31	18	30	31.33	4.7
Pleasant Plain (o).....	44.61	64.32	51.16	53.74	7	87	7	72.75	31	19	30	32.25	4.4
MINNESOTA—													
Hazlewood (p).....	46.58	61.00	50.22	52.60	7	82	7	67.67	14	30	1	43.33	4.6
Princeton.....	40.26	52.89	46.56	46.57	7	78	7	73.67	15	17	30	26.00	5.0
CALIFORNIA—													
Sacramento.....	51.74	64.90	57.81	58.15	29	77	29	67.00	22	41	22	49.33	2.6
MEXICO—													
City of Mexico.....	55.06	68.74	55.77	59.86	13	77	13	71.33	25	51	25	q 58.00	2.8
Mirador (r).....				78.71	----		----	82.85	----	----	----	69.19	----
Vera Cruz.....	76.97	85.53	78.60	80.37	9	95	9	85.53	29	70	15	75.90	----
WEST INDIES—													
Port of Spain, Trinidad....	75.02	85.12	80.26	80.13	12	90.3	12	84.47	21	74.5	20	76.43	6.0
SOUTH AMERICA—													
Catharina Sophia, Surin'm (s).....	75.74	87.68	83.55	82.32	13	92	13	86.00	26	72	17	80.00	3.5
Colonia Tovar, Venezuela..	57.35	63.78	57.29	59.47	11	68	8	61.67	10	t 54	22	57.00	6.4

a Observations taken at sunrise and 1 p. m.

b Same temperature on the 7th, 8th, and 10th.

c Same temperature on the 8th

d Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 53.75.

e Observations taken at 9 a. m., and 3 and 9 p. m.

f Same temperature on the 7th. Hour not given.

g Same temperature on the 9th.

h Same temperature on the 7th, 8th, 9th, and 23d.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Observations taken at 7 a. m., 2 p. m., and 8 p. m.

k Observations taken at morn, noon, eve, and night.

l Observations taken at 6 a. m., noon, and 7 p. m.

m Same temperature on the 8th, 9th, and 23d.

n Observations taken at 6 a. m., noon, and 9 p. m.

o Observations taken at sunrise, 2 p. m., sunset, and 9 p. m. Mean at sunset, 55.90.

p For the last 18 days of the month only.

q Same temperature on the 30th.

r Observations taken at 7 a. m., 2 p. m., and 8 p. m.

s Observations taken at 6 a. m., 2 p. m., and 6 p. m.

t Same temperature on the 11th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) .....	39.9	—	39.7	29.80	7	58	2	55.00	30	28	30	29.00	—
Montreal .....	32.42	37.73	34.19	34.78	8	61	4	54.50	29	17	29	17.67	5.7
St. Martin .....	27.36	36.60	29.13	31.03	8	62	4	51.00	29	12	29	13.33	5.7
Toronto (b) .....	35.58	40.46	36.54	37.53	4	56	3	48.98	29	9	29	26.57	8.1
Wolfville .....	36.61	41.59	36.44	38.21	5	66	4	54.63	29	21	30	25.83	5.4
MAINE—													
Carmel (c) .....	28.35	42.14	30.10	33.53	2	62	8	47.67	21	12	11	24.00	5.1
Cornish .....	30.53	39.10	32.13	33.92	3	62	3	55.33	28	14	29	19.67	3.9
Gardiner .....	31.87	41.93	35.15	36.32	3	63	4	54.33	20	21	30	24.67	6.4
Perry .....	32.23	39.10	33.60	34.98	3	56	3	49.33	29	d 18	29	21.67	5.1
Portland .....	32.70	43.78	36.32	37.60	2	e 57	4	54.00	30	21	30	26.33	5.4
Steuben .....	30.93	39.00	33.63	34.50	2	60	2	50.00	29	17	29	21.67	6.5
NEW HAMPSHIRE—													
Concord .....	31.50	42.43	36.73	36.89	3	65	4	55.67	16	14	29	24.33	4.7
Great Falls .....	30.28	42.10	35.10	35.83	3	68	3	54.00	11	f 18	29	22.67	5.6
Manchester .....	29.96	43.60	37.30	36.95	3	65	4	59.33	16	15	29	24.00	5.9
Stratford .....	25.87	35.63	28.77	30.09	3	60	3	52.67	21	8	29	18.00	7.4
West Enfield .....	29.30	37.83	31.47	32.87	3	65	3	58.33	21	13	29	18.00	5.9
VERMONT—													
Brandon .....	29.41	39.53	33.23	34.06	2	g 63	4	60.67	11	h 14	29	20.33	6.6
Burlington .....	32.93	41.10	35.07	36.37	8	65	4	58.67	21	15	29	21.67	3.6
Craftsbury .....	26.77	35.20	29.73	30.57	4	60	4	55.00	11	i 12	30	j 17.00	5.7
Norwich .....	27.97	39.70	30.77	32.81	3	65	4	57.33	21	9	15	19.00	6.4
Shelburn .....	31.03	38.26	32.00	33.76	8	63	8	57.67	21	12	29	20.33	6.8
West Fairlee (k) .....	26.33	38.83	29.50	31.55	25	l 42	27	35.00	29	16	29	19.67	—
MASSACHUSETTS—													
Amherst .....	31.86	43.61	36.94	37.48	4	64	4	58.90	21	18	29	25.60	5.1
Bridgewater (m) .....	35.13	46.13	41.20	40.82	3	65	4	62.33	11	20	16	28.33	3.6
Cambridge (n) .....	33.37	44.63	39.00	39.00	4	65	4	59.33	11	21	29	36.33	5.2
Canton (o) .....	31.00	44.00	33.91	36.30	22	56	22	48.00	30	17	30	24.67	4.3
Lawrence (p) .....	30.53	—	—	—	—	50	—	—	—	16	—	—	—
Mendon .....	34.17	45.90	37.33	39.13	4	67	4	55.67	20	f 20	29	25.33	4.9
Nantucket .....	43.00	48.12	44.08	45.07	4	65	4	63.00	30	30.5	30	35.50	4.0
New Bedford .....	36.92	46.88	40.73	41.51	4	63	4	61.67	11	g 22.5	30	30.50	5.3
Newburyport .....	33.68	44.75	36.66	38.36	2	67	2	56.13	30	20	29	24.80	8.1
North Attleborough .....	33.77	46.51	37.27	39.18	2	65	4	61.77	21	20	29	27.63	4.3
Princeton .....	31.17	41.38	34.87	35.81	3	64	4	59.33	20	16	29	21.17	5.1
Richmond .....	28.13	40.50	34.27	34.30	4	66	4	57.00	11	r 18	18	22.33	8.8
Westfield .....	31.58	44.75	37.55	37.96	4	65	4	59.00	21	18	29	25.00	4.7
Weymouth .....	35.33	—	39.10	37.22	4	64	4	62.00	11	f 22	30	25.50	—
Williamstown .....	31.72	41.00	35.53	36.08	4	64	4	61.00	21	17	29	23.70	5.5
Worcester .....	33.97	46.76	38.27	39.67	—	s 66	4	62.33	30	20	29	23.33	4.9
RHODE ISLAND—													
Providence (t) .....	34.9	45.7	37.7	39.43	4	65	4	63.00	20	f 22	29	27.33	4.3
CONNECTICUT—													
Georgetown .....	32.55	48.63	39.13	40.10	22	l 66	4	62.67	21	f 22	29	27.33	4.6
New London .....	36.63	48.10	41.03	41.92	4	62	4	61.00	11	u 24	29	29.67	3.8
Norwich .....	34.40	48.33	39.60	40.78	2	v 64	4	63.00	21	17	29	28.00	3.4
Pomfret .....	33.07	44.52	36.83	38.14	4	64	4	61.67	20	20	29	25.00	4.8
Saybrook .....	38.87	48.13	44.20	43.73	4	61	4	60.33	20	f 25	30	j 30.33	4.2
Wallingford .....	33.47	48.08	37.88	39.81	2	66	4	56.33	20	w 20	20	29.50	4.0
NEW YORK—													
Angelica .....	30.84	39.24	32.24	34.11	10	55	10	41.00	7	22	8	28.00	5.0
Baldwinsville .....	35.77	41.60	37.60	38.32	8	61	4	54.00	21	23	29	26.00	5.0

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 6 a. m., 2 p. m., and 10 p. m.

c Month incomplete.

d Same temperature on the 28th.

e Same temperature on the 3d.

f Same temperature on the 30th.

g Same temperature on the 4th and 8th.

h Same temperature on the 19th.

i Same temperature on the 21st and 28th.

j Same temperature on the 29th.

k For the last 6 days of the month only.

l Same temperature on the 26th.

m Observations taken at 7 a. m., 2 p. m., and 7 p. m.

n Observations taken at 7 a. m., 3 p. m., and 9 p. m.

o For the last 11 days of the month only.

p Observations taken at 6 a. m.

q Same temperature on the 20th and 30th.

r Same temperature on the 16th and 18th.

s Same temperature on the 4th.

t Observations taken at 6 a. m., 1 p. m., and 3 p. m.

u Same temperature on the 20th.

v Same temperature on the 3d and 4th.

w Same temperature on the 21st.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	□	○	○	□		□		○		○		○	
Beverly.....	35.97	47.27	40.87	41.37	2	65	4	58.33	17	24	29	29.33	4.5
Blackwell's Island.....	39.20	48.43	42.03	43.22	2	64	2	57.33	15	a 30	29	33.00	7.2
Buffalo (b).....	36.30	42.96	37.65	38.97	2	c 59	3	55.00	20	22	29	21.33	7.3
Cazenovia.....	33.07	38.04	33.40	34.84	4	62	2	53.67	15	a 19	29	21.33	7.8
Clinton.....	35.33	40.97	35.43	37.24	1	70	4	59.00	20	16	29	22.67	7.5
Fishkill Landing (d).....	33.37	44.21	36.94	38.17	26	58	24	49.33	20	25	29	28.67	4.2
Flatbush.....	37.78	48.63	41.84	42.75	4	65	8	54.17	11	27	20	33.27	5.4
Lowville.....	30.60	38.80	31.90	33.77	---	63	4	53.33	---	13	15	a 20.33	6.7
Mexico.....	38.47	41.91	34.78	38.39	---	68	4	54.57	---	16	29	24.97	7.7
New York city.....	40.71	49.71	44.17	44.86	1	68	4	62.76	11	29	29	34.33	4.9
North Salem.....	32.57	46.27	37.28	38.71	---	66	4	62.83	---	17	20	27.33	4.8
Oswego.....	36.03	41.70	38.07	38.60	1	62	3	55.00	21	a 24	29	25.17	7.8
Ovid.....	36.07	41.50	37.27	38.28	4	65	2	57.33	6	a 23	29	25.67	7.0
Penn Yan (e).....	34.60	44.20	39.23	39.34	4	64	3	57.67	6	21	29	28.33	2.4
Rochester, [Harkness].....	37.6	43.5	38.6	39.90	---	69	---	---	---	26	---	---	---
Rochester, [Pratt].....	37.64	42.54	38.92	39.71	4	70	4	56.70	6	26	29	29.17	8.6
Sag Harbor.....	39.23	51.17	41.80	44.07	1	f 64	4	62.67	11	28	20	33.67	4.2
Spencertown.....	31.77	41.60	35.30	36.22	1	66	4	62.67	11	15	20	22.33	5.0
Townsendville.....	34.90	42.03	35.37	37.43	1	65	2	56.67	6	g 23	5	26.00	7.3
Troy (h).....	36.76	45.23	39.08	40.36	4	66.5	4	58.30	21	21	29	28.70	5.9
Utica.....	34.70	43.37	36.43	38.17	1	68	4	59.33	15	i 22	29	24.83	5.2
Wampsville.....	37.10	45.20	36.50	39.60	4	72	4	60.67	21	20	29	26.00	7.3
Watertown.....	33.30	40.30	33.67	35.76	2	c 64	1	62.00	29	11	29	18.33	7.9
Waterford (j).....	34.03	43.44	35.88	38.60	---	66	---	---	---	18	---	---	---
NEW JERSEY—													
Bloomfield.....	35.93	49.65	40.95	42.18	4	71	4	58.33	20	k 23	20	31.67	3.4
Burlington.....	39.30	51.48	40.93	43.90	4	70	4	64.67	20	k 26	20	34.67	4.5
Lambertville.....	30.04	51.37	40.82	40.74	4	69.4	4	63.47	20	22.6	20	33.23	5.0
Newark.....	---	---	---	42.33	4	69.5	4	61.75	21	24.2	29	32.00	---
PENNSYLVANIA—													
Bedford.....	33.41	49.00	38.04	40.15	4	68	4	58.67	6	18.5	10	29.67	4.8
Berwick.....	34.40	47.17	39.23	40.27	4	70	4	58.33	21	22	15	31.00	3.8
Cannonsburg.....	35.00	45.21	39.57	39.93	1	60	2	58.00	1	18	1	28.00	7.1
Carlisle.....	33.78	43.73	39.21	38.91	4	66	1	55.83	20	22	10	32.50	4.2
Chromedale.....	35.58	49.80	39.80	41.73	4	68	1	63.23	6	l 24	6	31.00	4.7
Easton.....	34.90	49.77	40.20	41.62	4	68	4	59.33	11	23	29	33.00	4.8
Fleming (m).....	31.73	45.26	40.76	39.25	2	63	---	---	6	l 19	---	---	---
Gettysburg.....	33.10	47.83	37.70	39.54	1	70	4	58.67	20	19	20	29.00	4.6
Harrisburg.....	39.50	49.18	44.37	44.35	4	68	4	59.67	20	29	20	36.67	4.5
Lewisburg.....	32.73	45.42	37.77	38.64	2	n 64	4	54.03	20	19	20	29.93	6.3
Meadville.....	34.27	43.14	37.67	38.36	3	65	3	57.67	20	15	5	29.33	7.2
Morrisville.....	36.33	50.43	40.33	42.36	4	68	4	62.33	20	k 24	21	33.67	3.0
Moss Grove.....	33.59	42.34	35.79	37.24	7	60	3	56.33	1	18	1	26.67	6.1
Nazareth.....	33.77	46.36	36.51	38.88	4	65	4	53.33	20	23	20	29.67	4.9
Norristown.....	39.94	48.77	40.60	43.10	4	71	4	61.67	6	o 27	20	32.33	4.4
North Whitehall (m).....	34.23	47.57	42.43	41.41	4	64	4	57.33	21	23	6	32.67	6.2
Paradise.....	---	---	---	37.00	---	---	---	---	---	---	---	---	---
Philadelphia.....	37.37	51.03	41.32	43.24	2	n 69	4	63.67	6	25.5	1	33.33	4.8
Pittsburg.....	37.37	46.83	39.10	41.10	2	n 65	3	58.33	10	21	3	28.33	---
Pocahontas.....	35.37	50.77	40.17	42.10	4	70	4	62.67	20	k 22	20	31.33	5.3
Shamokin.....	28.13	51.10	38.47	41.23	2	80	2	62.00	11	13	20	23.00	5.0
Somerset.....	30.86	41.72	32.73	35.10	2	64	3	55.00	6	l 13	10	22.80	5.7
West Haverford.....	39.37	51.50	---	45.44	4	70	4	67.00	1	p 27	6	36.00	4.4
DELAWARE—													
Newark, [Craven].....	39.52	51.28	43.42	44.74	4	71	4	65.00	21	27	10	35.33	4.1

a Same temperature on the 29th.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Same temperature on the 3d.

d For the last 16 days of the month only.

e Observations taken at sunrise, 2 p. m., and sunset.

f Same temperature on the 8th.

g Same temperature on the 10th.

h Observations taken at 8 a. m., 2 p. m., and 10 p. m.

i Same temperature on the 21st and 29th.

j Observations taken at 7 a. m., and at 1, 6, and 10 p. m.

k Same temperature on the 21st.

l Same temperature on the 20th.

m Observations taken at sunrise, noon, and sunset.

n Same temperature on the 4th.

o Same temperature on the 11th, 20th, and 21st.

p Same temperature on the 7th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—	°	°	°	■		■		°		°		°	
Annapolis, [Goodman] .....				43.97	4	68			6	26			
Bladensburg .....	36.28	52.76	41.26	43.43	4	71	4	63.33	6	a 21	30	35.33	5.2
Frederick .....	36.55	47.88	40.27	41.57	4	65	4	57.83	20	26	20	32.17	4.6
Ridge (b) .....	45.81	54.10	45.85	48.79	4	72	4	69.00	10	c 32	10	39.00	3.3
Sykesville .....	34.20	50.87	40.43	41.83	2	d 67	4	62.67	11	20	26	30.67	4.0
DISTRICT OF COLUMBIA—													
Washington .....	38.00	51.36	42.60	43.99	26	68.5	4	61.00	11	27	6	34.67	4.0
VIRGINIA—													
Alexandria .....	39.12	52.23	43.98	45.13	4	72	4	65.00	6	a 27	6	e 36.33	4.4
Berryville (f) .....	37.84	50.38	43.96	44.06	4	70	4	60.67	11	26	10	e 36.67	4.5
Crichton's Store (g) .....	44.42	52.74	55.60	50.92	3	74	26	69.33	11	32	19	39.33	3.6
Garysville (h) .....				47.00	26	72	26	66.00	11	24	11	37.33	
Kanawha (i) .....	36.53	52.90	44.20	44.54	7	69	21	58.00	19	20	19	30.67	
Lewisburg .....	34.70	51.33	39.53	41.85	1	j 68	26	57.33	10	c 20	10	30.67	4.2
Mossy Creek (k) .....	33.20	48.50	34.85	38.85	26	66	26	54.67	19	16	19	26.33	4.2
Poplar Grove .....	35.73	52.67	43.20	43.87	2	l 66	3	56.00	10	m 22	5	n 32.33	5.3
Portsmouth .....	45.10	63.60	48.23	52.31	3	79	4	69.33	18	28	18	40.33	3.2
Rougement (o) .....	41.20	55.81	44.54	48.41	26	72	26	65.80	6	p 30	10	34.00	
Ruthven (q) .....	42.79	60.39	29.75	44.31	26	74	3	66.67	19	24	18	34.67	3.1
Smithfield .....				48.41	4	74	3	69.50	10	a 25	10	35.25	
Trout Run Valley (r) .....	29.94	54.25	35.62	39.94	2	68	3	56.00	10	14	11	29.00	4.3
Winchester .....	37.17	51.03	40.17	42.79	2	70	3	60.00	20	25	20	33.67	3.7
Wirt Court-House .....	33.07	48.80	38.67	40.18	2	66	2	59.33	19	15	18	c 26.33	5.3
NORTH CAROLINA—													
Chapel Hill .....	42.27	58.87	48.50	49.88	2	75	26	66.33	6	29	18	37.67	9.1
Gaston .....	39.73	56.27	42.17	46.06	3	s 72	4	67.33	19	20	19	30.67	
Goldsborough .....	47.45	55.62	50.53	51.20	3	77.5	3	73.17	18	31	6	40.33	4.4
Murfreesborough .....	42.10	55.76	48.63	48.83	3	t 72	3	67.33	11	28	19	35.00	3.0
SOUTH CAROLINA—													
Aiken (f) .....	50.26	64.20	53.14	56.00	28	74	28	70.67	18	34	11	46.00	
All Saints .....	51.47	63.53	55.43	56.81	3	d 78	3	75.67	19	32	18	41.67	4.3
Camden .....	44.67	62.93	49.43	52.34	3	79	3	70.00	19	24	18	35.33	5.0
Charleston, [Johnson] .....	54.93	65.17	58.17	59.42	3	81	3	76.00	6	41	18	46.67	
Charleston, [Dawson] .....	54.93	65.16	58.16	59.42		81				41			
Edisto Island .....	57.68	65.08	56.08	59.61	27	77	27	69.33	14	u 37	18	44.00	5.6
St John's (v) .....	50.74	63.50	55.38	56.54	28	75	28	70.00	15	31	15	41.33	
GEORGIA—													
Savannah .....	53.2	66.9	58.5	59.53	3	80	3	76.10	18	38	18	46.90	5.2
Sparta .....	48.07	63.50	52.93	54.83	25	w 76	28	71.33	19	31	11	43.33	4.6
Thomaston .....	47.70	61.90	57.37	55.66	3	75	3	71.00	9	31	10	43.00	4.4
Whitemarsh Island .....	54.47	64.77	58.63	59.29	3	78	3	74.67	16	40	18	47.33	5.1
Zebulon .....	47.83	58.97	54.80	53.87	3	78	3	73.33	25	x 28	26	34.00	2.3
FLORIDA—													
Atsena .....	60.77	70.50	65.83	65.67	2	y 80	20	76.36	6	46	5	54.67	3.6
Belair .....	55.48	67.44	60.26	61.06	2	z 76	23	71.00	16	32	9	52.33	5.6
Gainesville (f) .....	56.83	73.06	61.47	63.79	4	82	4	72.67	15	45	14	53.00	3.7
Jacksonville .....	59.86	70.72	62.73	64.44	3	84	3	78.67	16	45	5	54.00	3.8
St. Augustine (aa) .....	66.70	73.03	67.33	69.02	4	84	3	77.33	15	53	18	58.00	4.5
Salt Ponds .....	72.87	77.70		75.29	2	bb 84	4	81.50	16	66	16	67.00	3.0
Warrington .....	61.37	67.50	63.93	64.27	3	79	3	76.33	19	46	19	51.33	4.4

a Same temperature on the 11th.  
b Observations taken at 7½ a. m., 1 p. m., and 8 p. m.

c Same temperature on the 19th.

d Same temperature on the 4th.

e Same temperature on the 20th.

f Month incom. let.

g Observations taken at 5 a. m., noon, and 5½ p. m.

h Observations taken at sunrise, 2 p. m., and sunset.

i Observations taken at sunrise, 1½ p. m., and sunset.

j Same temperature on the 24 and 26th.

k For the last 20 days of the month only.

l Same temperature on the 7th and 24th.

m Same temperature on the 19th and 20th.

n Same temperature on the 10th.

o Observations taken at 8 a. m., 12 m., 6 p. m., and 8 p. m. Mean at 12 m., 53.96; mean at 6 p. m., 46.52.

p Same temperature on the 18th and 19th.

q Observations interrupted from the 11th to the 15th of the month.

r For the first 17 days of the month only.

s Same temperature on the 4th, 8th, and 26th.

t Same temperature on the 8th and 26th.

u Same temperature on the 18th.

v Observations taken at sunrise, 2 p. m., and 9 p. m.

w Same temperature on the 2th.

x Same temperature on the 26th.

y Same temperature on the 3d.

z Same temperature on the 23d.

aa Observations taken at 8 a. m., 2 p. m., and 10 p. m.

bb Same temperature on the 3d and 1th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ALABAMA—	°	°	°	°		■		°		°		°	
Auburn .....	50.55	65.61	55.00	57.05	3	79	5	76.00	■	32	9	42.33	5.0
Carlowlville .....	49.67	62.90	56.27	56.28	28	76	28	71.67	9	31	9	39.33	5.3
Greene Springs .....	47.37	61.97	50.83	53.39	2	a 78	28	71.33	9	b 30	18	37.67	4.5
Greensborough .....	49.26	58.38	55.31	54.32	28	74.5	28	71.67	9	31.5	18	39.16	4.9
MISSISSIPPI—													
Columbus .....	44.27	58.59	50.67	51.18	2	73	3	67.60	18	27	18	36.70	4.5
Natchez .....	50.96	62.07	56.17	56.40	3	81	25	69.33	8	c 36	8	39.00	4.9
Port Gibson .....	45.50	62.47	54.50	54.16	3	83	3	73.00	■	30	18	38.67	7.1
LOUISIANA—													
Black River .....	47.40	66.13	56.37	56.63	3	84	3	76.33	■	30	18	40.67	5.3
Trinity (d) .....	61.50?	70.50?	63.00?	65.00									
TEXAS—													
Austin .....	44.63	65.63	51.60	53.95	2	e 82	2	70.00	8	27	8	36.00	4.7
New Braunfels .....	48.67	66.67	54.07	56.47	7	84	2	72.00	8	30	8	40.00	3.7
Pin Oak (f) .....	47.57	61.00	58.23	55.66	14	76	24	67.67	8	26	8	37.33	2.4
TENNESSEE—													
Glenwood .....	37.47	52.89	45.00	45.12	2	71	3	64.10	19	22	9	31.10	4.1
Walnut Grove (g) .....	36.22	55.40	38.59	43.40	7	65	7	60.33	11	23	9	33.33	4.4
KENTUCKY—													
Ballardsville .....	36.60	48.33	42.33	42.42	2	70	3	64.00	■	20	9	26.33	3.9
Danville .....	40.27	35.20	45.37	46.95	2	71	3	63.00	19	24	■	32.33	2.9
Millersburg .....	37.83	49.70	41.33	42.95	2	66	■	60.67	19	c 20	19	26.67	7.3
Paris .....	34.40	48.48	39.60	40.83	2	66	2	59.00	19	16	18	26.00	4.0
Springdale .....	35.05	51.18	45.02	44.08	■	73	2	64.50	19	16	9	28.50	3.8
OHIO—													
Cheviot .....	34.71	52.00	40.00	42.24	1	71	2	61.67	■	19	8	30.00	4.0
Cincinnati, [Harper] .....	36.93	52.93	40.47	43.44	2	79	2	67.67	9	22	9	30.33	4.4
Cleveland .....	36.68	44.52	39.45	40.22	1	63	3	57.33	9	c 23	9	27.67	7.4
College Hill .....	34.77	47.05	39.40	40.41	2	71	3	62.7	■	16	9	23.83	3.8
Collingwood .....	35.20	43.23	38.73	39.05	1	h 62	3	57.33	19	i 19	28	27.67	---
Germanstown, [Groneweg] ..	32.90	47.07	36.72	38.90	2	69	2	61.47	19	15	9	25.25	5.4
Germanstown, [Binkerd] ..	34.16	46.44	35.48	38.69	2	68	2	60.67	9	18	9	24.67	5.4
Granville .....	35.52	46.23	39.24	40.33	1	63	2	58.67	19	16	9	26.00	5.1
Hillsborough .....	35.47	46.30	39.52	40.43	2	67	3	61.33	9	19	9	25.83	4.2
Hiram .....	38.17	43.13	40.53	40.61	2	69	2	65.00	9	24	9	25.00	6.7
Jefferson .....	34.40	43.73	36.53	38.22	3	64	3	59.33	20	10	20	21.33	8.0
Madison .....	35.70	43.69	36.30	38.53	3	e 62	3	58.00	20	17	20	24.33	7.5
Oberlin (k) .....	37.50	45.27	38.82	40.53	1	62	7	54.33	■	c 20	9	25.00	5.4
Perrysburg (l) .....	36.43	45.40	38.73	40.19	3	65	3	62.33	19	18	9	m 29.33	---
Portsmouth (n) .....	38.96	52.86	43.64	45.15	1	77	2	64.33	10	23	9	30.33	4.7
Savannah .....	30.73	42.77	34.17	35.89	1	68	2	56.67	10	m 10	19	21.00	6.0
Sidney .....	33.60	46.59	36.68	38.96	2	68	2	61.33	■	m 16	9	24.00	6.3
Urbana .....	32.07	47.23	35.63	38.31	2	71	2	61.67	19	11	19	22.00	5.2
West Bedford .....	38.60	44.93	41.97	41.83	2	64	2	59.33	9	o 26	9	30.00	5.6
MICHIGAN—													
Battle Creek .....	34.43	43.50	37.50	38.48	3	63	3	56.00	9	20	19	26.67	6.4
Cooper .....	32.10	39.67	31.73	34.50	1	h 50	2	44.67	19	16	19	25.33	6.2
Copper Falls Mines (p) ..	28.03	31.18	27.50	28.90	6	43	1	38.00	9	12	8	15.33	8.0
Detroit .....	33.67	41.83	35.70	37.07	1	62	3	52.33	19	i 18	19	26.33	6.3
Eagle River .....	28.47	32.53	27.90	29.63	12	44	11	m 40.00	29	16	28	18.00	4.3
Grand Rapids, [Strong] (q) ..	32.18	42.36	34.06	36.20	21	52	21	44.67	19	i 18	19	28.67	6.6
Grand Rapids, [Currier] ..	32.66	39.54	34.31	35.50	3	56	3	52.33	18	17	9	24.67	7.1
Monroe .....													4.0
Romeo .....	32.28	40.23	34.60	35.70	1	56	7	51.58	19	19	5	25.50	2.3

*a* Same temperature on the 28th.*b* Same temperature on the 18th.*c* Same temperature on the 19th.*d* Only seven observations for the month.*e* Same temperature on the 7th.*f* Observations taken at sunrise, noon, and sunset.*g* Month incomplete.*h* Same temperature on the 2d.*i* Same temperature on the 20th.*j* Same temperature on the 3d.*k* For the first 17 days of the month only.*l* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*m* Same temperature on the 19th.*n* Observations interrupted from the 15th to the 20th; also on the 23d and 24d.*o* Same temperature on the 10th and 19th.*p* Observations taken at 6 a. m., noon, and 6 p. m.*q* For the last 17 days of the month only.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—	°	°	°	°		°		°		°		°	
New Harmony.....	35.53	49.60	40.37	41.83	2	71	2	a 65.67	9	20	8	b 27.33	3.9
Richmond.....	34.95	46.11	38.88	39.98	2	69	2	61.90	9	18	9	25.60	5.3
ILLINOIS—													
Athens.....	33.03	46.00	36.33	38.45	1	72	1	63.67	18	13	8	23.67	5.4
Augusta.....	30.90	40.26	34.33	35.16	1	59	1	c 51.00	8	11	8	16.33	5.4
Brighton.....	32.80	45.93	39.57	39.43	1	69	2	60.33	18	16	8	25.00	4.0
Chicago (d).....	31.77	39.15	34.94	35.29	23	52	23	45.33	18	16	18	26.00	6.1
Manchester (e).....	31.57	45.07	32.70	36.45	1	72	1	57.33	8	12	8	15.33	5.2
Marengo.....	31.63	40.13	33.10	34.95	1	54	1	c 47.33	9	12	8	15.33	6.4
Ottawa.....	31.58	40.75	34.24	35.52	1	55	2	50.50	8	15	8	18.00	5.2
Pekin (f).....				34.81		63				10			
Peoria.....	32.70	44.41	36.61	37.91	1	61	2	56.00	8	12	8	20.37	5.6
Riley.....	27.80	39.03	29.17	32.00	2	51	2	46.33	8	8	8	14.67	5.8
Upper Alton.....	32.38	44.33	35.17	37.29	2	65	2	59.00	8	g 14	8	20.00	3.1
Warsaw.....	30.93	41.53	35.00	35.82	13	59	1	52.33	8	10	8	19.33	5.7
West Salem.....	34.90	51.70	39.90	42.17	2	78	2	69.33	9	b 18	8	24.00	4.3
MISSOURI—													
Cape Girardeau (h).....	51.39	68.40	59.84	59.88	7	82		? 31	29			? 7.0	
Palmyra (i).....	35.46	41.14	37.41	38.00	1	j 65	2	52.67	8	j 11	8	19.67	4.9
St. Louis.....	35.52	47.28	39.25	40.68	1	75	1	63.33	8	19	8	26.17	4.6
WISCONSIN—													
Appleton.....	29.43	37.00	31.93	32.79	2	55	2	51.00	19	11	27	21.00	7.0
Beloit.....	31.33	41.43	34.03	35.60	1	c 54	2	48.67	9	10	8	18.00	5.2
Janesville.....	27.63	39.43	31.97	33.01	2	54	2	46.33	9	k 10	8	16.67	7.1
Kenosha.....	31.92	40.69	35.15	35.92	2	55.5	2	48.5	9	10	8	19.00	5.4
Madison.....	29.59	37.43	32.31	33.11	2	52	6	42.33	8	13	8	18.00	6.1
Manitowoc (e).....				35.00		56				14			
Milwaukee, [Winkler].....	30.50	39.52	32.33	34.12	7	63	7	53.33	9	9	9	18.00	5.6
Milwaukee, [Pomeroy].....	33.33	40.97	35.23	36.51	2	54	2	47.67	18	17	9	l 24.33	6.9
New London.....	27.53	37.50	29.17	31.40	2	66	2	50.33	19	8	18	18.33	6.8
Norway.....	29.70	39.77	33.83	34.43	1	56	2	46.00	9	7	8	18.00	6.8
Platteville.....	27.80	38.43	31.07	32.43	1	56	1	c 47.33	8	6	8	12.67	6.2
Racine, [Durham].....	33.18	35.59	34.80	34.52	1	53	2	46.40	9	12	8	21.50	5.9
Superior.....	24.00	31.30	28.67	27.99	6	49	6	43.00	8	8	27	15.00	6.6
Waukesha.....	31.67	40.14	34.10	35.30	2	56	2	49.67	9	13	9	20.33	7.0
IOWA—													
Border Plains.....	28.27	37.20	38.20	34.56	12	55	1	45.67	8	8	8	17.67	8.7
Fairfield (m).....	29.97	41.53	38.30	36.17	13	58	1	51.25	8	5	8	18.75	---
Fort Madison (n).....	29.27	39.70	34.70	34.56	1	58	1	48.33	8	10	8	16.00	4.9
Franklin.....	25.43	34.23	31.90	30.52	1	50	2	42.67	8	4	8	12.67	5.7
Mount Vernon (o).....	26.20	36.63	32.43	31.75	2	54	2	48.67	8	2	8	6.67	---
Muscatine.....	28.13	38.83	32.13	33.03	1	p 54	2	48.67	8	4	8	9.67	5.6
Pleasant Plain.....	27.67	41.10	32.50	33.76	13	58	1	50.00	8	4	8	10.67	4.4
MINNESOTA—													
Hazlewood.....													4.4
Lake Winnibigoshish.....	21.07	27.96	23.07	24.03	1	43	1	38.67	8	— 4 q	8	6.67	7.7
Princeton.....	21.13	33.57	26.77	27.16	13	46	2	41.00	8	— 2 r	29	10.67	6.3
CALIFORNIA—													
Sacramento.....	46.03	58.57	52.03	52.21	1	c 77	2	68.00	28	36	30	42.67	3.8
MEXICO—													
City of Mexico.....	49.57	66.10	50.17	55.25	---	70	29	58.33	---	40	21	50.67	---
Mirador (s).....				74.75	---			80.89	---			66.49	---
Vera Cruz.....	71.80	78.98	74.84	75.21	8	84	---		6	64	---		---

a Same temperature on the 3d.

b Same temperature on the 19th.

c Same temperature on the 2d.

d For the last 14 days of the month only.

e Observations taken at 7 a. m., 1 p. m., and 9 p. m.

f Observations taken at sunrise and 1 p. m.

g Same temperature on the 9th.

h Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at

9 a. m., 42.36.

i Observations taken at 9 a. m., 3 p. m., and 9 p. m.

j Hour not given.

k Same temperature on the 8th.

l Same temperature on the 18th.

m Observations taken at morning, noon, evening, and night. Mean at night, 34.90.

n Observations taken at 6 a. m., noon, and 7 p. m.

o Observations taken at 6 a. m., noon, and 9 p. m.

p Same temperature on the 2d, 6th, and 13th.

q Same temperature on the 30th.

r Same temperature on the 29th.

s Observations taken at 7 a. m., 2 p. m., and 8 p. m.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG		WARMEST DAY		LOWEST DEG		COLDEST DAY.		
					Date. Temp		Date. M'n temp		Date. Temp.		Date. Mean temp		
WEST INDIES —	°	°	°	°		■		°		■		°	
Port of Spain, Trinidad ----	77.46	82.08	79.18	79.57	19	87	19	82.00	5	74.5	22	77.10	5.8
SOUTH AMERICA—													
Catharina Sophia, Surinam(a)	74.97	84.77	82.43	80.72	9	90	9	85.00	5	b 70	18	77.67	4.5
Colonia Tovar, Venezuela --	55.47	62.59	54.83	57.63	■	70	13	60.67	28	c 52	21	55.33	5.4
AZORES—													
Horta, Fayal -----	61.03	65.30	60.67	62.33	3	74	3	66.33	30	d 54	6	55.00	6.9

a Observations taken at 6 a. m., 2 p. m., and 6 p. m.  
b Same temperature on the 15th and 18th.

c Same temperature on the 30th.  
d Same temperature on the 8th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Hamilton (a) .....	25. 1	-----	24. 4	24. 75	11	40	11	39. 50	18	— 2	18	2. 00	-----
Montreal .....	12. 10	18. 22	15. 87	15. 40	12	40	12	37. 60	18	—17	18	—12. 00	6. 5
St. Martin .....	6. 82	16. 76	8. 10	10. 56	12	38	12	35. 40	18	—24	18	—16. 30	5. 5
Toronto (b) .....	21. 56	25. 35	22. 09	23. 00	11	41. 2	11	37. 80	18	— 8. 8	18	— 2. 08	7. 6
Wolfville .....	24. 35	28. 55	25. 64	25. 18	24	48	24	45. 10	18	— 6. 5	18	— 3. 17	6. 6
MAINE—													
Carmel (c) .....	9. 97	20. 50	14. 71	15. 06	14	42	24	28. 67	18	—20	18	—12. 33	5. 8
Cornish .....	15. 13	23. 26	17. 23	18. 54	12	39	12	35. 67	18	—20	18	—11. 67	3. 6
Gardiner .....	17. 81	28. 13	21. 16	22. 37	12	d 42	12	37. 33	18	—10	18	— 5. 33	5. 1
Perry .....	20. 19	25. 58	22. 45	22. 74	12	46	12	41. 67	18	— 9	18	— 4. 00	6. 5
Portland .....	18. 06	28. 30	22. 52	22. 96	13	d 43	12	38. 33	18	—10	18	— 4. 00	5. 2
Steuben .....	17. 71	25. 13	20. 06	21. 30	11	e 40	12	37. 33	18	—13	18	— 7. 67	7. 9
NEW HAMPSHIRE—													
Concord .....	15. 35	24. 77	20. 68	20. 27	12	43	12	39. 33	18	—12	19	— 7. 33	4. 1
Great Falls .....	16. 19	26. 65	20. 24	21. 03	12	45	12	39. 00	18	—11	18	— 6. 67	4. 1
Manchester .....	15. 30	25. 25	21. 80	20. 78	12	46	12	43. 67	18	—12	18	— 7. 33	4. 7
Shelburne (f) .....	12. 19	21. 45	18. 00	17. 21	12	42	12	38. 67	18	—19	18	—11. 67	6. 6
Stratford .....	9. 48	17. 39	13. 23	13. 37	20	39	12	32. 67	19	—27	18	—17. 00	7. 9
West Enfield .....	8. 06	18. 39	14. 45	13. 63	12	38	12	35. 33	12	—22	18	—17. 67	6. 3
VERMONT—													
Brandon .....	12. 68	22. 71	17. 10	17. 50	11	39	12	36. 83	18	g—12. 5	18	—10. 16	6. 0
Burlington .....	13. 50	21. 58	17. 65	17. 58	12	43	12	38. 33	19	—18	18	—13. 33	3. 9
Norwich (h) .....	9. 14	20. 18	13. 16	14. 16	12	44	12	38. 67	19	—24	18	—16. 00	-----
Shelburn .....	12. 55	21. 04	17. 53	17. 04	12	d 40	12	37. 67	18	g—13	18	—11. 67	7. 6
West Fairlee .....	13. 74	22. 77	17. 71	18. 07	12	40	12	36. 67	18	—18	18	—11. 00	-----
MASSACHUSETTS—													
Amherst .....	18. 78	26. 06	23. 02	22. 62	20	47	12	38. 67	19	— 7	18	— 1. 57	5. 6
Boston (b) .....	22. 97	31. 11	26. 90	26. 99	11	51	12	44. 67	18	— 6	18	— 0. 50	3. 8
Bridgewater (i) .....	22. 71	29. 61	28. 27	26. 86	14	52	14	43. 67	18	— 5	18	— 1. 33	4. 2
Cambridge (j) .....	20. 74	28. 21	24. 18	24. 38	14	50	14	42. 67	18	— 8	18	— 4. 33	5. 2
Canton .....	21. 23	30. 23	25. 00	25. 49	21	70	14	41. 67	18	— 6	18	— 1. 67	4. 5
Lawrence (k) .....	17. 51	-----	-----	-----	-----	37	-----	-----	-----	—10	-----	-----	-----
Mendon .....	19. 84	28. 81	24. 32	24. 32	11	50	12	39. 67	18	— 7	18	— 3. 00	5. 3
Nantucket .....	30. 70	35. 37	31. 73	32. 60	14	48	14	45. 33	18	— 4	18	— 7. 23	5. 7
New Bedford .....	24. 65	31. 65	26. 63	27. 64	11	47. 5	11	42. 17	18	— 4	18	— 1. 00	5. 3
Newburyport .....	18. 96	26. 54	20. 86	22. 12	14	50	14	41. 30	18	—10	18	— 6. 27	7. 6
North Attleborough .....	21. 89	29. 90	25. 52	25. 77	14	48	14	40. 73	18	— 4	18	— 0. 00	4. 8
North Barnstead .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5. 3
Princeton .....	17. 35	23. 94	20. 78	20. 69	20	46	12	35. 67	18	—11	18	— 7. 33	4. 8
Richmond .....	18. 13	26. 03	21. 03	21. 73	14	42	13	35. 33	18	—12	18	— 8. 33	7. 3
Westfield .....	18. 74	25. 95	23. 10	22. 60	20	46	12	37. 00	19	— 7	18	— 3. 33	5. 9
Weymouth .....	23. 19	-----	25. 42	24. 30	14	52	14	44. 00	18	— 5	18	— 2. 50	-----
Williamstown .....	16. 35	22. 14	19. 20	19. 23	14	43. 6	14	36. 20	19	—11	19	— 8. 77	7. 5
Worcester .....	21. 58	28. 65	26. 55	25. 59	20	47	12	39. 67	18	— 8	18	— 4. 33	4. 2
RHODE ISLAND—													
Providence (l) .....	21. 9	30. 0	24. 5	25. 47	11	50	12	39. 67	18	— 5	18	— 1. 67	4. 8
CONNECTICUT—													
Columbia .....	21. 29	32. 32	27. 81	27. 14	12	53	13	42. 67	18	— 4	18	— 2. 00	5. 3
Georgetown .....	22. 77	33. 19	27. 61	27. 86	14	52	14	44. 67	18	g 0	18	— 3. 33	5. 7
New London .....	24. 39	32. 84	27. 58	28. 27	11	50	14	45. 00	18	— 2	18	— 2. 33	4. 7
Norwich .....	21. 52	31. 58	26. 19	26. 43	11	50	14	43. 00	19	— 5	18	— 0. 00	4. 3
Pomfret .....	20. 52	27. 62	24. 03	24. 06	11	49	11	39. 67	18	— 5	18	— 1. 67	5. 5
Saybrook .....	25. 42	32. 77	28. 16	28. 78	11	50	11	45. 00	18	— 0	18	— 3. 33	5. 1
Wallingford .....	20. 5	30. 6	24. 7	25. 27	20	49	14	41. 33	18	— 3	18	— 1. 00	4. 7
NEW YORK—													
Angelica .....	21. 42	26. 58	21. 23	23. 08	13	44	12	36. 33	18	—10	18	— 2. 00	7. 1
Baldwinsville .....	19. 68	26. 16	22. 29	22. 71	14	42	11	37. 67	18	— 8	18	— 3. 67	8. 1

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 6 a. m., 2 p. m., and 10 p. m.

c Observations interrupted from the 8th to the 12th.

d Same temperature on the 20th.

e Same temperature on the 12th.

f Observations taken at sunrise, noon, and sunset.

g Same temperature on the 19th.

h For the first 24 days of the month only.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Observations taken at 7 a. m., 3 p. m., and 9 p. m.

k Observations taken at 6 a. m.

l Observations taken at 6 a. m., 1 p. m., and 10 p. m.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Beverly .....	24.06	30.45	27.23	27.25	11	49	11	41.67	19	— 3	18	1.67	5.8
Blackwell's Island .....	28.10	32.97	30.90	30.66	14	54	14	47.33	19	— 4	18	8.00	6.7
Buffalo (a) .....	23.54	27.90	22.24	24.56	11	44	11	40.00	18	— 1	18	3.33	8.0
Cazenovia .....	16.94	22.84	19.94	19.91	14	42	11	37.33	18	—13	18	—10.67	7.6
Clinton .....	17.58	24.23	20.03	20.61	11	43	12	35.67	18	—17	18	—12.00	8.8
Fishkill Landing .....	23.77	31.77	26.45	27.33	14	49	14	42.67	19	— 3	18	3.33	3.5
Flatbush .....	27.23	34.07	29.27	30.19	14	52	11	45.40	19	— 4	18	7.90	5.6
Fordham .....	27.32	34.23	29.52	30.36	12	55	11	49.00	18	— 5	18	8.33	3.2
Lowville .....	12.26	20.23	16.97	16.49	—	40	14	36.00	—	—22	18	—18.00	7.1
Mexico .....	18.22	26.55	19.44	21.40	—	44	12	36.73	—	—24	18	—16.67	7.2
New York city .....	29.63	35.53	34.94	33.37	14	54	11	47.26	19	— 5	18	10.26	5.4
North Salem .....	22.92	30.52	25.08	26.17	—	50	20	43.67	—	— 2	18	1.33	5.6
Oswego .....	19.29	27.32	24.19	23.60	11	43	20	36.00	18	—11	18	— 2.67	9.0
Ovid .....	22.77	27.77	23.32	24.62	14	b 44	12	40.33	19	— 5	18	2.00	6.4
Penn Yan (c) .....	22.26	29.45	25.19	25.63	14	44	14	38.33	18	— 3	18	1.33	8.5
Rochester, [Harkness] .....	22.2	27.7	23.4	24.43	—	46	—	—	—	— 2	—	—	—
Rochester, [Pratt] .....	22.84	26.83	23.87	24.51	11	42	11	38.40	18	— 3	18	3.83	9.0
Sag Harbor .....	27.32	35.52	29.00	30.61	3	58	11	47.33	19	— 2	18	5.33	4.8
Saratoga .....	17.32	29.23	19.81	22.12	14	b 40	20	38.33	18	—20	18	— 7.33	2.6
Spencertown .....	17.03	22.97	20.97	20.32	11	45	11	38.00	19	—11	18	— 8.67	6.0
Townsendville .....	19.45	26.52	21.10	22.36	11	45	11	38.00	18	— 6	18	— 3.33	8.1
Troy .....	21.26	29.25	26.10	25.54	20	47	12	41.00	19	— 8.5	18	— 2.70	7.5
Utica .....	16.35	26.26	24.70	22.44	13	b 42	13	36.67	18	—15	22	11.33	2.5
Wampsville .....	19.20	27.07	21.87	22.71	20	45	13	37.67	18	—11	18	— 7.67	8.3
Waterford (d) .....	17.06	25.34	20.40	21.36	—	47	—	—	—	—12	—	—	—
Watertown .....	15.03	23.23	14.81	17.69	11	e 44	11	40.00	18	—20	19	—15.33	7.3
NEW JERSEY—													
Bloomfield .....	26.18	35.98	29.42	30.53	11	55	14	47.50	19	— 4	18	7.50	4.2
Burlington .....	29.71	36.89	31.90	32.83	14	57	14	49.00	19	— 7	18	13.33	4.6
Lambertville .....	25.38	37.40	28.69	30.49	14	54	11	46.93	19	— 1.6	18	10.53	5.0
Newark .....	—	—	—	29.81	14	53.5	14	43.75	19	— 1.2	19	9.87	—
PENNSYLVANIA—													
Beauford .....	23.08	34.76	27.81	28.55	12	66	12	46.33	23	— 2	23	8.00	5.5
Berwick .....	23.52	32.77	26.77	27.69	11	f 50	11	46.33	18	— 2	18	6.67	4.5
Cannonsburg .....	22.52	31.13	26.48	26.71	28	50	11	40.33	23	— 2	23	7.67	6.9
Carlisle .....	24.90	33.40	28.71	29.00	11	50	11	42.00	18	g 10.5	23	15.17	4.4
Easton .....	24.84	34.00	27.00	28.61	14	50	12	h 43.00	19	— 4	18	7.67	5.3
Gettysburg .....	22.45	34.16	27.10	27.90	11	48	12	41.00	22	— 4	22	12.00	3.8
Harrisburg .....	28.77	36.03	31.76	32.19	11	49	11	44.33	23	— 12	18	17.67	4.1
Lewisburg .....	23.20	31.97	26.48	27.22	11	49	11	43.63	18	— 5	18	8.33	6.3
Lima .....	26.25	36.15	28.80	30.40	14	52.5	11	47.00	19	g 9.5	18	16.33	4.7
Meadville .....	21.29	28.83	21.83	23.98	12	44	12	37.00	18	—12	18	2.33	6.2
Morrisville .....	25.87	36.29	29.77	30.64	14	54	20	43.33	19	— 6	18	12.00	3.3
Moss Grove .....	20.43	26.35	20.32	22.37	10	j 42	28	37.33	18	g— 4	18	2.67	6.8
Nazareth (k) .....	22.89	31.23	24.92	26.35	14	45	11	39.00	18	— 5	18	8.00	5.0
Norristown .....	26.5	33.7	33.1	31.10	11	50	11	46.00	19	— 8	18	11.90	5.0
North Whitehall (l) .....	24.81	32.77	30.61	29.40	11	50	11	43.33	18	m 5	18	9.67	6.5
Paradise .....	—	—	—	34.00	—	—	—	—	—	—	—	—	—
Philadelphia .....	26.10	35.50	28.73	30.11	14	53.5	11	45.50	19	— 7	18	11.00	4.9
Pittsburg .....	23.84	30.06	25.29	26.40	14	58	11	43.00	23	— 4	23	6.00	—
Pocopson .....	26.16	37.07	28.74	30.66	11	52	11	46.00	19	— 9	18	13.67	5.2
Shamokin .....	21.54	31.77	26.77	26.69	11	48	11	42.67	22	— 0	18	8.67	5.5
Somerset .....	17.78	26.81	20.35	21.65	11	48	28	42.60	23	— 6	23	1.67	5.8
West Haverford .....	27.74	37.32	—	32.53	11	51	14	47.50	19	— 6	18	13.50	5.1
DELAWARE—													
Newark, [Craven] (n) .....	31.00	39.31	33.06	34.46	3	f 51	12	e 44.33	18	— 10	10	24.00	3.8

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 20th.

c Observations taken at sunrise, 2 p. m., and sunset.

d Observations taken at 7 a. m., 1 p. m., 6 p. m., and 10 p. m. Mean at 6 p. m., 22.64.

e Same temperature on the 3d.

f Same temperature on the 14th.

g Same temperature on the 23d.

h Same temperature on the 11th.

i Same temperature on the 18th.

j Same temperature on the 11th and 12th.

k For the first 25 days of the month only.

l Observations taken at sunrise, noon, and sunset.

m Same temperature on the 19th.

n For the first 18 days of the month only.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'a temp.	Date.	Temp.	Date.	Meantemp.	
MARYLAND—	°	°	°	°		°		°		°			
Annapolis, [Goodman].....	—	—	—	31.99	3	60.5	—	—	23	10	—	—	
Bladensburg.....	24.12	35.62	28.07	29.27	11	56	11	47.67	23	5.5	23	12.17	
Frederick.....	27.68	35.44	29.99	31.04	3	48	11	42.50	23	9	24	14.53	
Ridge (a).....	32.38	38.83	32.58	34.60	3	65	3	56.67	23	4	23	10.67	
Sykesville.....	22.84	36.94	28.13	29.30	11	53	11	44.00	23	0	23	14.33	
DISTRICT OF COLUMBIA—													
Washington.....	27.10	37.77	30.40	31.76	3	54	11	46.00	23	8	23	14.67	
VIRGINIA—													
Alexandria.....	28.87	39.31	32.42	33.53	11	55	11	49.33	23	9	23	18.67	
Berryville.....	27.56	38.27	34.88	33.57	14	60	28	44.33	23	7	23	13.33	
Crichton's Store (b).....	35.58	41.58	42.69	39.95	3	70	3	62.00	23	10	23	15.67	
Garysville (c).....	—	—	—	37.00	3	72	3	61.67	23	6	23	12.67	
Kanawha (d).....	26.81	36.74	33.10	32.22	2	56	2	52.67	23	5	23	10.33	
Lewisburg.....	23.39	36.35	27.26	29.00	1	58	11	47.33	23	— 3	23	4.33	
Montross.....	28.87	39.23	32.39	33.50	3	60	3	53.67	23	6	23	13.33	
Mossy Creek.....	21.16	39.29	27.39	29.28	28	60	3	45.00	23	— 1	23	9.33	
Poplar Grove.....	26.10	40.90	29.57	32.19	11	57	2	51.00	25	6	23	13.33	
Portsmouth.....	33.71	47.97	36.71	39.46	3	69	3	62.67	23	9	23	14.33	
Rougement (e).....	28.81	38.27	31.58	34.34	28	66	28	54.80	23	3	23	12.40	
Ruthven.....	27.89	42.55	30.96	33.80	28	66 f	3	56.33	23	—	23	14.33	
Smithfield.....	—	—	—	36.62	3	66	2	58.75	22	4	23	14.75	
Winchester.....	25.87	37.06	29.32	30.75	28	58	28	44.67	23	2	23	10.67	
Wirt Court-House.....	21.35	33.39	27.15	27.30	14	58 g	2	51.33	25	— 1	22	7.33	
NORTH CAROLINA—													
Chapel Hill.....	32.87	46.68	36.23	38.59	28	68	11	55.67	23	10	23	15.33	
Gaston.....	26.65	46.74	31.32	34.90	21	78	3	56.67	23	8	23	13.33	
Goldsborough.....	35.98	47.17	39.59	40.91	3	70	11	61.23	23	10	23	17.50	
Murfreesborough.....	32.29	43.16	37.38	37.61	3	67	3	59.00	23	10	23	16.00	
SOUTH CAROLINA—													
Aiken.....	39.18	50.96	40.24	43.46	27	67	1	55.33	23	12	23	17.67	
All Saints.....	41.71	53.03	44.90	46.55	2	75	2	68.33	23	19	23	23.67	
Camden.....	34.39	50.68	39.03	41.37	27	70	2	60.33	23	12	23	19.33	
Charleston, [Johnson].....	44.16	55.23	47.90	49.10	2	70	2	67.33	23	18	23	23.67	
Charleston, [Dawson].....	44.16	55.22	47.93	49.10	—	70	—	—	—	18	—	—	
Edisto Island (h).....	47.38	57.75	47.88	51.00	1	75	2	67.33	22	30	8	39.33	
St. John's (i).....	40.32	51.95	43.83	45.37	2	77	2	68.33	23	17	23	22.50	
GEORGIA—													
Savannah.....	43.3	55.9	48.1	49.10	2	77	2	70.63	24	19	23	26.20	
Sparta.....	37.81	52.32	43.58	44.57	2	75	2	69.33	23	16	23	22.00	
Thomaston.....	37.67	45.97	43.10	42.25	26	64	28	60.00	23	14	23	20.00	
Whitemarsh Island.....	44.39	55.93	49.03	49.78	2	72	2	68.33	24	20	24	32.00	
Zebulon.....	39.05	49.93	46.03	45.00	27	65 j	29	62.33	23	18 k	23	22.00	
FLORIDA—													
Atsena.....	50.19	58.90	55.61	54.90	2	75	1	67.33	24	28	23	36.00	
Gainesville.....	47.16	62.23	53.32	54.24	1	80	2	71.33	24	21	23	33.67	
Jacksonville.....	48.87	62.03	52.61	54.50	1	76 g	2	72.00	24	24	23	32.33	
St. Augustine (l).....	55.65	63.16	56.90	58.57	2	82	2	79.33	24	27	23	35.33	
Salt Ponds.....	66.74	73.13	—	69.93	3	82	4	77.50 f	24	50	24	51.00	
Warrington.....	50.19	59.48	54.84	54.84	2	80	2	75.00	23	27	23	36.00	
ALABAMA—													
Auburn.....	39.65	51.29	44.58	45.17	2	75	2	68.67	23	16	23	21.00	
Carlowville.....	38.73	52.13	45.53	45.46	2	78	2	67.00	23	10	23	25.00	
Greene Springs.....	36.93	49.62	42.09	42.88	2	79	2	65.67	24	16	23	23.00	
Greensborough.....	39.74	47.66	43.65	43.68	2	73	2	64.33	23	19	23	23.83	

a Observations taken at 7½ a. m., 1 p. m., and 8 p. m.

b Observations taken at 9 a. m., noon, and 5 p. m.

c Observations taken at sunrise, 2 p. m., and sunset.

d Observations taken at sunrise, 1½ p. m., and sunset.

e Observations taken at 8 a. m., 12 m., 2 p. m., 6 p. m., and 8 p. m.

Mean at 12 m., 39.44; mean at 6 p. m., 33.58.

f Same temperature on the 3d.

g Same temperature on the 2d.

h Observations taken at 8 a. m., 2 p. m., and 9 p. m.

i Observations taken at sunrise, 2 p. m., and 9 p. m.

j Same temperature on the 29th.

k Same temperature on the 24th.

l Observations taken at 8 a. m., 2 p. m., and 10 p. m.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSISSIPPI—	°	°	°	°		°		°		°	°		
Columbus.....	35.60	47.34	40.99	41.31	2	73	2	62.67	23	19	23	23.00	4.3
Port Gibson.....	39.68	53.35	46.84	46.62	1	73 <sup>a</sup>	1	68.67	21	24 <sup>b</sup>	23	32.33	4.6
Natchez.....	47.64	-----	50.22	48.93	12	78	12	67.00	23	28	23	20.00	4.7
LOUISIANA—													
Black River.....	41.13	57.16	47.97	48.75	1	76 <sup>c</sup>	1	72.00	21	22	21	33.33 <sup>d</sup>	4.8
St. Francisville (e).....	44.00	58.67	51.00	50.89	1	76	1	72.00	21	26	21	35.00	-----
Trinity.....	42.10	63.06	47.81	50.99	1	80	1	74.33	21	23	20	35.67	4.5
TEXAS—													
Austin.....	39.23	58.06	45.55	47.61	1	77	1	71.33	21	21	11	30.33	4.5
New Braunfels.....	42.50	60.45	47.61	50.19	1	79 <sup>f</sup>	1	73.67	21	22	6	33.00	3.1
Pin Oak (g).....	40.35	54.61	53.00	49.32	13	76	1	70.67	21	21	6	32.33	2.1
Washington.....	40.86	54.97	44.31	46.71	13	78	26	69.33	21	18	21	29.67	6.1
TENNESSEE—													
Glenwood.....	28.93	39.96	33.65	34.18	2	70	2	58.93	23	6	23	13.07	4.7
Walnut Grove (h).....	26.28 <sup>?</sup>	-----	-----	-----	10	56 <sup>?</sup>	-----	-----	23	4 <sup>?</sup>	-----	-----	5.3
KENTUCKY—													
Ballardsville.....	24.55	32.94	29.06	28.85	2	64	2	56.00	23	— 6	22	4.00	6.1
Danville.....	27.68	39.65	31.45	32.93	2	65	2	58.00	23	— 5	23	5.00	3.8
Millersburg.....	25.81	33.26	28.58	29.22	2	60	2	52.00	23	2	22	4.67	8.0
Paris.....	25.32	33.53	28.83	29.23	2	60	2	55.00	23	1	23	6.33 <sup>i</sup>	5.0
Springdale.....	23.97	36.23	32.05	30.75	2	66.5	2	60.50	23	— 5.5	22	6.67	5.3
OHIO—													
Cincinnati, [Harper].....	24.94	35.58	29.19	29.90	19	55	2	50.00	22	— 2	22	2.33	4.6
Cincinnati, [Telegraph] (j).....	26.87	33.45	31.26	20.53	2	58	2	50.33	22	— 3	22	4.67	4.0
Cleveland.....	22.34	28.13	23.65	24.71	14	46	11	40.67	22	2.5	22	9.67	7.3
College Hill.....	22.00	31.37	25.52	26.30	2	58	2	49.60	23	— 11	22	— 0.83	4.5
Collingwood.....	20.61	27.03	23.55	23.73	10	44 <sup>k</sup>	12	37.00	26	5	18	15.00	-----
Germantown, [Groneweg].....	19.85	29.30	22.32	23.82	2	55	2	46.40	22	— 3	22	0.05	5.8
Germantown, [Binkerd].....	20.50	29.86	25.32	25.23	2	54	2	46.00	22	— 4	22	— 0.67	5.8
Granville.....	23.24	30.70	29.33	27.76	10	47 <sup>l</sup>	2	42.33	22	— 2	22	7.00	5.1
Hillsborough.....	22.61	30.27	26.19	26.36	2	59	2	48.67	22	— 2	22	2.50	4.7
Hiram (m).....	25.16	24.00	22.06	23.74	1	46	19	38.33	17	10 <sup>n</sup>	21	12.00	3.5
Jefferson.....	22.90	27.03	23.10	24.34	12	46	11	38.67	23	0	22	9.33	9.1
Madison.....	21.39	28.48	23.90	24.59	12	46	11	38.33	27	6	23	16.00	7.6
Perrysburg (o).....	21.10	29.65	24.16	24.97	11	50	11	43.33	22	6	22	10.67	-----
Portsmouth (p).....	26.00	34.82	29.64	26.82	2	63	2	52.33	22	5	22	9.67	5.4
Savannah.....	19.23	27.52	20.71	22.49	19	43 <sup>q</sup>	11	38.67	22	— 5	22	10.00 <sup>r</sup>	7.3
Sidney.....	18.29	25.90	19.26	21.15	1	48	2	39.25	22	— 4	22	— 2.33	6.1
Urbana.....	17.45	29.68	22.16	23.10	1	50	2	39.67 <sup>s</sup>	22	— 4	22	0.00	5.1
West Bedford.....	20.39	28.33	23.26	23.99	2	50	2	42.00	22	— 4	22	4.67	6.3
MICHIGAN—													
Battle Creek.....	19.23	27.94	21.32	22.83	10	44	10	38.00	17	— 4	17	11.00	7.4
Cooper.....	17.55	24.26	20.55	20.79	10	44 <sup>s</sup>	1	38.00	17	6 <sup>t</sup>	22	10.00	7.5
Copper Falls Mines.....	15.88	18.80	16.97	17.22	10	35	10	33.40	22	— 2	16	3.00	-----
Eagle River.....	16.45	19.32	17.52	17.76	10	34	10	33.33	22	0	17	5.33	3.5
Grand Rapids, [Currier].....	19.35	25.00	21.48	21.94	10	42	10	38.67	26	— 3	22	11.00	7.7
Grand Rapids, [Strong].....	19.71	29.42	23.51	24.21	10	48	10	42.67	26	— 3	22	12.67	8.2
Monroe.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.0
Romeo.....	19.81	26.02	20.76	22.20	1	41	11	38.83	18	— 1	18	9.00	7.5
INDIANA—													
New Harmony.....	25.84	36.48	31.29	31.20	2	66	2	55.33	23	2	23	11.67	5.2
Richmond.....	22.58	29.54	26.77	26.30	2	49.5	2	43.56	22	— 1	22	0.33	5.8

<sup>a</sup> Same temperature on the 2d and 19th.<sup>b</sup> Same temperature on the 24th.<sup>c</sup> Same temperature on the 19th and 27th.<sup>d</sup> Same temperature on the 20th.<sup>e</sup> Observation taken at sunrise, 1 p. m., and 9 p. m.<sup>f</sup> Same temperature on the 26th.<sup>g</sup> Observations taken at sunrise, noon, and sunset.<sup>h</sup> Only eight observations taken.<sup>i</sup> Same temperature on the 22d.<sup>j</sup> Observations taken at 6 a. m., 1 p. m., and 9 p. m.<sup>k</sup> Same temperature on the 19th.<sup>l</sup> Same temperature on the 11th.<sup>m</sup> Observations interrupted from the 3d to the 11th, and from the 23d to the 26th of the month.<sup>n</sup> Same temperature on the 21st and 22d.<sup>o</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.<sup>p</sup> For the first 22 days of the month only.<sup>q</sup> Same temperature on the 12th.<sup>r</sup> Same temperature on the 21st.<sup>s</sup> Same temperature on the 1st.<sup>t</sup> Same temperature on the 18th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ILLINOIS—	°	°	°	°		°		°		°		°	
Athens .....	18.45	29.61	22.61	23.56	19	50	19	42.67	22	—4	22	2.33	5.4
Augusta .....	17.42	26.77	21.09	21.76	1	46	1	42.68	22	—3	22	2.00	4.7
Brighton .....	19.81	32.32	28.13	26.75	27	54	27	50.67	22	0 <sup>a</sup>	22	8.67	4.4
Chicago .....	16.00	21.28	18.47	18.58	1	39.5	1	37.50	22	—5	22	3.50	5.7
Manchester (h) .....	19.32	29.30	22.61	23.74	1	54	1	44.67	22	—1	22	3.33	5.1
Marengo .....	13.23	22.23	15.29	16.92	19	44	19	36.67 <sup>c</sup>	15	—8	22	3.67	4.1
Ottawa .....	15.99	23.54	19.47	19.67	1	44 <sup>d</sup>	1	38.33	23	—6	22	3.00	6.6
Pekin (e) .....				19.18		45				—11			
Peoria .....	18.80	28.10	22.22	23.04	1	49	1	42.92	23	—6	22	2.00	5.5
Riley .....	9.90	20.84	12.58	14.44	1	36 <sup>f</sup>	10	34.33 <sup>c</sup>	7	—14	22	5.67	4.8
Upper Alton .....	22.23	31.84	25.52	26.53	1	55	1	47.33	22	2	22	8.00	4.7
Warsaw .....	17.23	27.94	22.52	22.56	19	48	1	40.33	22	—2	22	4.00	5.6
West Salem .....	23.74	36.35	29.26	29.78	2	62	2	52.33	23	—2	22	10.00	5.0
MISSOURI—													
Cape Girardeau (g) .....	28.93	39.22	34.30	34.15	2	61	27	53.50	23	8	22	19.83	6.8
Palmyra (h) .....	23.43	29.30	23.82	25.52	19	51 <sup>i</sup>	1	47.00	22	—3 <sup>i</sup>	22	7.00	5.3
St. Louis .....	24.6	34.8	29.5	29.63	1	55	1	47.33	22	4	22	10.33	5.1
WISCONSIN—													
Appleton .....	9.74	20.35	13.71	14.60	10	36 <sup>j</sup>	10	34.67	23	—12	17	—3.00	5.4
Beloit .....	12.06	26.71	15.32	18.03	1	44	1	38.00	7	—11 <sup>k</sup>	21	—2.00	3.4
Janesville .....	8.97	19.32	12.48	13.59	19	37	10	33.67	7	—20	7	—7.00 <sup>k</sup>	6.1
Kenosha .....	15.26	23.58	18.77	19.20	1	43	1	38.8	15	—6	22	—0.3	4.5
Madison, [Sterling] (l) .....	10.78	19.50	13.22	14.50	10	35	10	33.33	22	—10	20	—1.00	4.9
Manitowoc (m) .....				20.00		46				3			
Milwaukee, [Winkler] .....	12.10	21.10	14.29	15.83	1	40	1	36.00	23	—10	22	—5.33	5.1
Milwaukee, [Pomeroy] .....	13.52	25.97	18.32	19.27	1	41	1	38.33	22	—8	22	—0.33	4.7
New London .....	3.77	20.81	9.19	11.26	11	38	10	34.67	23	—25	17	—9.67	5.1
Norway .....	12.58	20.51	15.58	16.22	1	50	1	36.67	15	—8	22	—5.33	6.1
Platteville .....	7.06	18.64	9.74	11.81	9	36	10	34.00	23	—19	22	—12.00	4.8
Racine, [Durham] .....	12.59	26.11	17.56	18.75	1	40 <sup>n</sup>	1	36.00	22	—6	22	—4.00	5.8
Superior .....	4.39	16.15	9.69	10.08	9	35	9	31.00	17	—21	17	—8.00	6.2
Waukesha .....	10.70	20.22	13.53	14.82	1	39	10	34.67	7	—12 <sup>o</sup>	22	—6.33	5.7
IOWA—													
Bellevue .....	8.42	20.22	12.00	13.55	1	40	1	36.67	23	—16	22	—7.00	5.2
Border Plains .....	7.03	12.87	12.19	10.70	9	37	27	31.33	4	—10	22	—3.33	7.1
Camanche (p) .....	17.90?	20.23?	17.83?	18.65?	1	60?	1	43.33?	22	—4	22	0.00	8.7
Fort Madison (q) .....	16.00	23.54	20.55	20.03	1	46 <sup>r</sup>	1	41.67	15	—3	22	0.67	7.2
Franklin .....	6.10	13.97	10.00	10.02	10	35 <sup>r</sup>	10	33.00	5	—18	22	—8.67	4.1
Mount Vernon (s) .....	7.98	15.60	11.61	11.73	19	40	27	33.33	15	—12.5	22	—5.67	—
Muscatine .....	11.57	20.03	14.27	18.62	9	42	9	35.67	6	—13	22	—4.67	4.8
Pleasant Plain .....	13.45	24.71	15.97	18.04	9	48	27	34.35 <sup>c</sup>	6	—12	22	—1.00	4.8
MINNESOTA—													
Hazlewood .....													5.0
Lake Winnibigoshish .....	—1.73	6.36	2.71	2.45	9	29 <sup>f</sup>	10	19.67	17	—33	16	—19.00	.5
Princeton .....	0.47	14.41	6.87	7.25	10	32	9	28.33	7	—21	20	—6.33	6.3
CALIFORNIA—													
Sacramento .....	39.39	48.16	44.06	43.87	23	54	23	51.00	22	32	19	39.67 <sup>t</sup>	5.2
MEXICO—													
Mirador (u) .....				68.47				81.64				48.42	—
Vera Cruz .....	70.15	75.60	69.63	71.79	1	80 <sup>v</sup>			21 <sup>a</sup>	57			—

<sup>a</sup> Same temperature on the 23d.<sup>b</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.<sup>c</sup> Same temperature on the 1st.<sup>d</sup> Same temperature on the 5th, 19th, and 27th.<sup>e</sup> Observations taken at sunrise and 1 p. m.<sup>f</sup> Same temperature on the 10th.<sup>g</sup> Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 31.40.<sup>h</sup> Observations taken at 9 a. m., 3 p. m., and 9 p. m.<sup>i</sup> Hour not given.<sup>j</sup> Same temperature on the 11th.<sup>k</sup> Same temperature on the 22d.<sup>l</sup> For the first 23 days of the month only.<sup>m</sup> Observations taken at 7 a. m., 1 p. m., and 9 p. m.<sup>n</sup> Same temperature on the 10th and 11th.<sup>o</sup> Same temperature on the 8th.<sup>p</sup> Not reliable.<sup>q</sup> Observations taken at 6 a. m., noon, and 8 p. m.<sup>r</sup> Same temperature on the 19th.<sup>s</sup> Observations taken at 6 a. m., noon, and 9 p. m.<sup>t</sup> Same temperature on the 13th.<sup>u</sup> Observations taken at 7 a. m., 2 p. m., and 8 p. m.<sup>v</sup> Same temperature on the 4th.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WEST INDIES---	°	°	°	°		°		°		°		°	
Port of Spain, Trinidad ----	23.50	25.43	24.32	24.42	17	85	17	81.00	24	71	24	77.10	----
SOUTH AMERICA—													
Catharina Sophia, Sur'm, (a).	75.06	83.23	81.10	79.80	1	88 <i>b</i>	8	82.33	3	71 <i>c</i>	15	72.00	5.1
AZORES—													
Horta, Fayal.....	57.03	59.89	57.52	58.15	3	66	3	63.67	8	51 <i>d</i>	8	52.33	7.4

*a* Observations taken at 6 a. m., 2 p. m., and 6 p. m.  
*b* Same temperature on the 3d.

*c* Same temperature on the 9th and 14th.  
*d* Same temperature on the 9th, 12th, and 27th.



## No. 26.—PSYCHROMETER, JANUARY, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
BRITISH AMERICA—													
Montreal (a).....	.060	.080	.068	17	.186	7	.021	81	77	78	55	52	64
Montreal (b).....	.050	.071	.059	17	.168	7	.008	73	76	78	30	49	52
St. Martin (b).....	.050	.074	.055	30	.150	4	.013	86	77	84	47	50	39
St. Martin (a).....	.059	.087	.064	15	.156	5	.016	87	79	86	79	60	63
Toronto (c).....	.073	.093	.078	17	.169	■	.021	81	76	79	66	65	50
Wolfville.....	.094	.091	.100	17	.187	27	.035	79	69	72	54	40	38
VERMONT—													
Burlington.....	.045	.069	.051	3	.155	5	.000	50	56	53	00	00	00
MASSACHUSETTS—													
Amherst.....	.141	.209	.173	3	.177	4	.039	92	73	92	50	49	68
Nantucket.....	.109	.112	.113	13	.235	25	.022	73	61	75	36	25	35
New Bedford.....	.095	.122	.105	13	.238	■	.035	90	83	91	71	58	64
Newburyport.....	.070	.088	.078	13	.207	9	.003	85	68	83	22	35	52
North Attleborough (a).....	.068	.083	.075	13	.218	9	.000	72	59	72	5	0	6
Princeton.....	.062	.074	.059	3	.149	22	.000	78	71	67	24	44	22
Westfield.....	.068	.074	.088	13	d. 187	■	s. 017	78	55	81	39	28	49
CONNECTICUT—													
Pomfret.....		.093	-----	19	.136	25	.041	-----	72	-----	-----	66	-----
NEW YORK—													
Blackwell's Island.....	.090	.108	.099	19	.170	9	.036	77	73	76	40	47	52
Clinton.....	.076	.094	.078	29	.155	20	.019	79	79	77	45	53	49
New York city.....	.085	.105	.094	13	.201	9	.010	72	70	75	37	39	32
Ovid.....	.072	.085	.077	3	.157	9	.017	81	78	82	48	42	63
Penn Yan.....	-----	.106	-----	17	.150	10	.071	-----	72	-----	-----	42	-----
NEW JERSEY—													
Bloomfield (f).....	.096	.108	.100	13	.210	-----	.016	81	70	80	62	33	21
PENNSYLVANIA—													
Chromedale.....	.090	.104	.102	13	.188	9	.009	85	71	82	28	35	54
Norristown.....	.081	.094	.093	3	.196	9	.033	85	63	80	63	36	44
Philadelphia.....	.096	.108	.105	13	.212	9	.028	83	70	78	54	48	49
MARYLAND—													
Annapolis.....	.085	.098	.092	16	.158	9	.022	78	58	66	49	36	36
Frederick.....	.082	.106	.095	3	.197	9	.005	76	70	79	17	31	54
DISTRICT OF COLUMBIA—													
Washington.....	.090	.119	.103	12	.229	9	.032	93	78	83	58	36	56
VIRGINIA—													
Alexandria.....	.085	.133	.109	3	g. 224	1	.016	87	84	87	61	63	63
NORTH CAROLINA—													
Goldsborough.....	.132	.128	.127	20	.245	22	.036	81	57	69	44	15	36
SOUTH CAROLINA—													
Aiken.....	.117	.157	.136	19	.487	31	.012	71	61	70	27	4	31
All Saints.....	.175	.177	.185	1	.338	26	.087	87	66	82	54	36	45
Camden.....	.125	.163	.145	3	.310	26	.065	87	66	80	42	26	50
Charleston, [Dawson] (h).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
St. John's (c).....	.144	.185	.173	17	.363	13	.003	79	64	79	20	31	1
GEORGIA—													
Savannah.....	.185	.188	.187	20	.425	21	.065	78	59	73	51	26	38
FLORIDA—													
Jacksonville.....	.276	.355	.291	3	.695	24	.123	91	83	89	82	61	49
Warrington (c).....	.380	.530	.449	30	i. 662	16	.251	94	92	93	84	82	76
ALABAMA—													
Auburn.....	.106	.119	.134	3	j. 231	9	.033	62	47	63	24	21	31
MISSISSIPPI—													
Oxford.....	.118	.182	.153	17	.348	23	.060	99	92	97	71	38	65
Port Gibson.....	.112	.153	.143	25	.253	19	.000	62	59	60	14	9	24

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to the Smithsonian tables.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 17th.

e Same amount on the 9th.

f For the last 19 days of the month only.

g Same amount on the 12th.

h Mean force of vapor for the month, .191; computed approximately from the mean dew point.

i Same amount on the 30th.

Same amount on the 2d.

## No. 26.—PSYCHROMETER, JANUARY, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
TEXAS—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Austin .....	.143	.183	.168	24	.449	8	.066	88	61	76	53	23	39
New Wied .....	.170	.233	.197	24	.505	16	.082	84	6	84	71	38	70
TENNESSEE—													
Glenwood .....	.099	.103	.110	26	.194	21	.036	79	59	74	26	19	41
KENTUCKY—													
Springdale .....	.086	.138	.123	18	.323	10	.007	86	89	90	37	56	47
OHIO—													
Cincinnati, [Harper] .....	.131	.217	.236	18	.451	11	.000	63	58	69	00	3	50
Germantown, [Groneweg] ..	.072	.092	.080	27	.168	9	.012	93	73	85	76	52	56
Hillsborough .....	.086	.116	.104	27	<i>a</i> .212	9	.020	98	92	99	75	70	90
Hiram .....	.091	.113	.115	1	.406	16	.003	69	67	68	39	37	2
Perrysburg .....	.071	.098	.084	16	.208	5	.018	90	75	87	60	17	68
MICHIGAN—													
Romeo, [Andrews] ( <i>b</i> ) .....	.067	.097	.078	25	.142	31	.032	82	81	85	10	39	66
INDIANA—													
New Harmony .....	.094	.122	.107	27	.221	5	.026	96	80	90	74	46	53
ILLINOIS—													
Manchester ( <i>b</i> ) .....	.074	.126	.088	31	.263	9	.015	100	92	100	100	61	100
MISSOURI—													
St. Louis .....	.079	.089	.089	31	.190	9	.018	84	63	76	63	34	56
IOWA—													
Dubuque .....	.051	.070	.057	16	.143	5	.015	79	68	77	55	47	32
Muscatine .....	.055	.094	.057	31	.174	9	.000	80	92	84	49	40	0
CALIFORNIA—													
Sacramento .....	.250	.298	.284	30	.405	1	<i>c</i> .155	89	77	85	73	58	69
San Francisco ( <i>b</i> ) .....	.289	.339	.320	23	<i>d</i> .403	26	.190	81	80	88	74	50	70
WEST INDIES—													
Up Park Camp, Jamaica ( <i>b</i> ) ..	.725	.715	-----	-----	.993	-----	.527	70	61	-----	46	42	-----

*a* Same amount on the 18th.*b* For changes in hours of observation, &c., see table of the thermometer for this month.*c* Same amount on the 2d.*d* Same amount on the 22d.



## No. 27.—PSYCHROMETER, FEBRUARY, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.073	.110	.085	11	.255	13	.014	79	78	80	64	45	60
Montreal (b).....	.064	.101	.079	11	.238	13	.011	79	84	85	60	71	50
St. Martin (a).....	.065	.111	.076	11	.214	13	.015	86	81	85	79	68	71
St. Martin (b).....	.057	.096	.074	11	.208	10	c.000	77	81	84	0	0	0
Toronto (d).....	.070	.094	.079	11	.169	13	.018	81	69	76	50	44	55
Wolfville.....	.096	.095	.089	16	.193	28	.019	75	59	63	59	33	16
<b>VERMONT—</b>													
Burlington.....	.057	.081	.061	12	.162	14	.006	66	60	55	20	31	16
<b>MASSACHUSETTS—</b>													
Amherst.....	.081	.107	.097	12	.219	14	.024	91	77	88	63	50	59
Nantucket.....	.103	.104	.113	12	.214	13	.022	67	54	74	35	23	50
New Bedford.....	.100	.114	.107	12	.248	14	.035	87	76	84	58	39	54
Newburyport.....	.077	.084	.088	12	.210	3	.007	77	61	79	33	14	63
North Attleborough.....	.071	.083	.075	12	.212	3	e.000	60	50	61	0	0	34
Princeton.....	.064	.072	.069	11	.188	3	.014	72	62	70	25	24	44
Westfield.....	.074	.081	.098	12	.197	3	.006	75	56	77	16	25	46
Worcester (f).....	.087	.120	.100	23	.196	18	.031	76	70	74	51	35	64
<b>CONNECTICUT—</b>													
Pomfret.....	.089	.119	.106	23	.262	13	.038	96	83	90	67	53	72
<b>NEW YORK—</b>													
Blackwell's Island.....	.105	.119	.116	12	.199	5	.037	82	73	78	59	50	45
Clinton.....	.076	.097	.094	11	.226	13	.017	78	75	78	58	46	55
New York city.....	.094	.118	.104	13	.294	14	.032	75	66	68	30	40	28
Oswego (g).....	.088	.120	.100	29	.188	17	.000	89	82	84	0	46	47
Ovid.....	.065	.077	.072	7	.149	28	.000	70	61	67	47	0	34
Penn Yan (g).....		.127		16	.175	14	.071		69			41	
<b>NEW JERSEY—</b>													
Bloomfield.....	.085	.120	.114	23	.244	3	.028	78	69	83	56	49	57
<b>PENNSYLVANIA—</b>													
Chromedale.....	.098	.106	.106	23	.181	14	.017	81	65	80	42	47	40
Lewisburg (d).....	.073	.083		7	.150	14	.018	82	54		50	32	
Norristown.....	.101	.109	.109	29	.221	21	.018	84	59	76	52	7	45
Philadelphia.....	.106	.110	.122	23	.202	17	.032	81	59	77	49	34	46
<b>MARYLAND—</b>													
Annapolis (d).....	.096	.106	.092	24	.230	4	.019	67	53	60	1	21	13
Frederick.....	.091	.129	.109	20	.254	14	.022	78	63	73	50	31	40
<b>DISTRICT OF COLUMBIA—</b>													
Washington.....	.107	.147	.130	23	.295	4	.034	84	73	80	53	42	38
<b>VIRGINIA—</b>													
Alexandria.....	.119	.157	.137	23	.539	7	.011	90	75	84	13	5	50
<b>NORTH CAROLINA—</b>													
Goldsborough.....	.187	.136	.167	27	.453	11	.009	75	42	60	54	1	10
<b>SOUTH CAROLINA—</b>													
Aiken.....	.154	.189	.215	28	.336	16	.005	60	45	72	2	4	35
All Saints.....	.219	.246	.265	27	.476	5	.063	81	59	84	23	21	53
Camden.....	.155	.223	.201	8	.436	16	.000	77	54	73	0	9	42
Charleston, [Dawson] (h).....													
Edisto Island (d).....	.209	.230	.252	27	.451	17	.030	66	50	73	21	8	31
St. John's (d).....	.199	.237	.244	16	.621	5	.064	77	56	76	54	25	25
<b>GEORGIA—</b>													
Savannah.....	.226	.238	.259	27	.526	4	.059	73	49	66	40	15	41
<b>FLORIDA—</b>													
Jacksonville.....	.322	.462	.371	28	.813	14	.120	87	78	89	36	52	65
Warrington.....	.466	.603	.524	1	i.733	4	.248	98	95	96	87	75	75
<b>ALABAMA—</b>													
Auburn.....	.157	.170	.176	11	.433	17	.014	59	41	52	19	4	23

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to tables of the Smithsonian Institution.

c Same amount on the 8th and 9th.

d For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e Same amount on the 4th.

f For the last 14 days of the month only.

g Incomplete.

h Mean force of vapor, .237; computed approximately from the mean dew point.

i Same amount on the 7th, 25th, and 28th.

## No. 27.—PSYCHROMETER, FEBRUARY, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
MISSISSIPPI—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Oxford .....	.185	.216	.178	27	.420	4	.042	91	70	76	57	30	25
Port Gibson .....	.156	.283	.267	28	.604	4	.012	67	61	67	33	17	10
Texas—													
Austin .....	.213	.233	.247	22	.456	2	.000	91	53	77	67	0	21
New Wied .....	.237	.388	.315	1	.836	3	.082	84	69	86	53	46	74
Tennessee—													
Glenwood .....	.141	.150	.150	26	.453	3	.016	80	58	73	41	32	31
Kentucky—													
Springdale .....	.113	.160	.148	10	.262	3	.000	91	75	85	58	0	61
Ohio—													
Cincinnati, [Harper] .....	.125	.145	.131	23	.298	3	.000	73	62	73	10	0	39
Germantown, [Groneweg] ..	.099	.119	.103	23	.222	3	.009	94	70	88	70	48	62
Hillsborough .....	.119	.146	.136	26	.267	4	.022	98	87	98	74	63	79
Hiram .....	.110	.146	.121	26	.235	3	.011	72	76	77	51	16	46
Perrysburg (a) .....	.092	.103	.102	29	.254	3	.015	84	79	83	54	54	27
Michigan—													
Romeo, [Andrews] (a) .....	.075	.098	.078	11	.183	3	.010	86	79	86	45	57	48
Indiana—													
New Harmony .....	.128	.150	.139	27	.235	4	.018	96	76	94	81	53	65
Illinois—													
Manchester (a) .....	.109	.176	.121	10	.322	3	.015	100	92	100	89	53	89
Missouri—													
Hannibal (a) .....	.097	.135	.094	10	.285	3	.000	62	65	68	0	9	31
St. Louis .....	.113	.126	.124	22	.221	13	.000	82	63	82	0	25	64
Iowa—													
Dubuque .....	.071	.111	.089	22	.215	13	.015	73	79	75	0	30	56
Muscatine .....	.072	.130	.080	10	.231	2	.009	83	88	81	26	60	49
California—													
Sacramento .....	.253	.292	.297	17	.396	29	.102	82	57	75	49	20	29
San Francisco .....	.281	.306	.278	25	.410	21	.180	82	63	79	41	36	50
West Indies—													
Up Park Camp, Jamaica .....	.799	.839	-----	-----	1.023	-----	.696	79	83	-----	69	69	-----
South America—													
Catharina Sophia, Surinam ..	.713	.714	.728	27	.909	25	.491	76	58	72	37	36	54

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.



## No. 28.—PSYCHROMETER, MARCH, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.081	.154	.121	25	.285	15	.020	74	80	83	48	45	55
Montreal (b).....	.082	.144	.112	25	.292	10	.023	79	82	86	65	45	73
St. Martin (a).....	.079	.156	.099	22	.293	12	.030	82	77	82	70	57	69
St. Martin (b).....	.076	.142	.094	22	.285	12	.030	86	79	85	70	46	47
Toronto (c).....	.092	.105	.102	24	.182	9	d. 025	82	64	78	64	45	63
Wolfville.....	.089	.100	.095	21	.234	1	.034	70	51	61	52	18	32
<b>VERMONT—</b>													
Burlington.....	.070	.109	.086	21	.296	14	.000	66	57	65	00	12	37
<b>MASSACHUSETTS—</b>													
Amherst.....	.107	.133	.109	17	.212	9	.039	88	68	80	65	50	60
Nantucket.....	.046	.043	.052	2	.225	10	.014	65	48	73	42	13	47
New Bedford.....	.109	.127	.119	24	.212	10	.032	76	61	73	59	33	50
Newburyport.....	.096	.110	.112	21	.201	11	.034	82	59	77	40	23	59
North Attleborough.....	.092	.099	.090	21	.183	9	.020	66	48	59	39	33	26
Princeton.....	.083	.093	.085	17	.232	10	.022	73	58	69	46	33	34
Westfield.....	.085	.107	.128	21	e. 193	21	.012	75	52	89	45	26	71
Worcester.....	.091	.113	.101	2	.212	15	f. 000	73	61	69	00	00	22
<b>CONNECTICUT—</b>													
Pomfret.....	.108	.135	.108	24	.238	9	.030	89	73	81	63	46	63
<b>NEW YORK—</b>													
Blackwell's Island.....	.127	.143	.142	22	.222	10	.043	80	70	78	63	42	54
Clinton.....	.096	.128	.113	4	.217	9	.023	79	78	83	65	49	63
New York city.....	.106	.129	.111	17	.234	10	.028	70	61	63	44	35	29
Oswego.....	.117	.154	.128	23	.238	16	.052	91	82	90	44	36	66
Ovid.....	.094	.114	.091	24	.285	8	.024	77	68	71	48	37	39
Penn Yan.....		.128		23	.166	9	.055		68			29	
<b>NEW JERSEY—</b>													
Bloomfield.....	.107	.128	.133	4	.216	10	.037	71	57	79	55	28	54
<b>PENNSYLVANIA—</b>													
Chromedale.....	.110	.122	.116	21	.242	9	.039	74	58	69	45	38	33
Lewisburg (c).....	.085	.102	.101	24	.181	12	.018	78	49	63	40	28	27
Norristown.....	.109	.136	.116	24	.289	8	.000	73	59	66	41	35	
Philadelphia.....	.122	.139	.135	20	.246	10	.040	74	57	70	54	37	46
<b>MARYLAND—</b>													
Annapolis (c).....	.114	.115	.139	24	.249	28	.025	60	43	61	9	11	26
Frederick.....	.113	.133	.130	21	.224	15	.007	72	53	70	37	23	2
<b>DISTRICT OF COLUMBIA—</b>													
Washington.....	.128	.125	.139	21	.256	10	.034	77	46	65	40	23	36
<b>VIRGINIA—</b>													
Alexandria.....	.265	.279	.287	4	.340	10	.044	86	63	79	61	22	30
<b>NORTH CAROLINA—</b>													
Goldsborough.....	.194	.165	.183	2	.517	24	.037	72	45	62	31	9	5
<b>SOUTH CAROLINA—</b>													
Aiken.....	.183	.205	.201	5	.429	14	g. 025	61	47	56	9	5	14
All Saints.....	.151	.183	.180	3	.583	28	.086	84	65	82	38	34	48
Camden.....	.208	.239	.214	15	.483	27	.068	72	52	67	38	17	31
Charleston, [Dawson] (h).....													
Edisto Island.....	.285	.323	.298	1	i. 521	29	.126	77	64	81	55	44	47
St. John's (c).....	.248	.297	.276	2	.563	27	.053	81	55	73	48	26	18
<b>GEORGIA—</b>													
Savannah.....	.283	.287	.301	2	.571	28	.062	76	51	73	40	14	25
<b>FLORIDA—</b>													
Jacksonville.....	.404	.515	.409	25	.814	29	.220	94	77	91	77	53	74
Warrington (c).....	.518	.603	.589	31	.900	28	.362	93	92	94	81	78	81
<b>ALABAMA—</b>													
Auburn.....	.211	.226	.213	31	.502	10	.051	63	45	54	19	15	19

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to tables of the Smithsonian Institution.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 10th.

e Same amount on the 22d.

f Same amount on the 28th.

g Same amount on the 27th.

h Mean force of vapor, .300; computed approximately from the mean dew point.

i Same amount on the 2d.

## No. 28.—PSYCHROMETER, MARCH, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	m.	9 p. m.
MISSISSIPPI—	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches</i>						
Columbus (a) .....	.218	.263	.301	30	.510	28	.091	73	56	78	54	23	61
Oxford .....	.223	.216	.217	30	.375	21	.068	88	54	70	56	17	41
TEXAS—													
Austin .....	.301	.299	.359	29	.564	2	.147	90	45	79	52	18	43
New Braunfels .....	.353	.527	.448	24	b.863	3	.143	85	51	84	75	29	40
TENNESSEE—													
Glenwood .....	.159	.137	.159	21	.291	7	.058	73	44	56	42	14	24
Knoxville .....	.165	.163	.160	1	.353	28	.053	74	47	59	44	13	24
KENTUCKY—													
Springdale .....	.134	.172	.164	23	.354	10	.048	84	62	73	54	31	36
OHIO—													
Cincinnati, [Harper] .....	.138	.151	.162	22	.309	10	.070	71	51	80	28	25	51
Germantown, [Groneweg] ..	.106	.141	.112	22	.196	10	.026	78	53	71	37	28	38
Hillsborough .....	.130	.134	.136	23	.216	10	.048	91	64	81	72	36	50
Perryburg .....	.120	.138	.126	20	.262	12	.033	80	64	79	43	12	60
MICHIGAN—													
Romeo, [Andrews] .....	.078	.111	.094	17	.206	9	.020	79	70	78	50	50	50
INDIANA—													
New Harmony .....	.151	.155	.167	21	.335	10	.078	86	56	83	53	31	50
ILLINOIS—													
Manchester (c) .....	.143	.188	.170	23	.311	10	.055	95	71	98	46	18	70
MISSOURI—													
St. Louis .....	.120	.129	.140	19	.245	10	.046	71	49	67	40	23	38
IOWA—													
Dubuque .....	.086	.105	.102	15	.233	3	.000	62	49	68	0	0	42
Muscatope .....	.140	.159	.101	23	.391	14	.000	68	73	73	13	56	42
Poultney .....	.091	.118	.093	20	.254	18	.000	87	69	74	62	-----	16
WISCONSIN—													
Waukesha (c) .....	.094	.104	.090	24	.212	17	.026	82	51	69	46	29	17
CALIFORNIA—													
Sacramento .....	.294	.352	.336	9	.644	1	.165	81	62	73	63	35	37
WEST INDIES—													
Up Park Camp, Jamaica .....	.733	.769	-----	-----	.990	-----	.639	70	65	-----	59	51	-----
SOUTH AMERICA—													
Catharina Sophia, Surinam (c) ..	.751	.757	.778	22	.915	24	.564	82	59	73	62	46	59

a For the last four days of the month only.  
 b Same amount on the 24th.

c For changes in hours of observation, &c., see table of the thermometer for this month.  
 d Same temperature on the 7th and 9th.



## No. 29.—PSYCHROMETER, APRIL, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			Date.	MAXIMUM.		MINIMUM.	MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.		Amt.			7 a. m.	2 p. m.	9 a. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
BRITISH AMERICA—													
Montreal (a) -----	.166	.229	.194	24	.464	12	.071	60	63	74	34	28	34
Montreal (b) -----	.163	.234	.195	24	.509	19	.062	64	64	73	33	27	24
St. Martin (b) -----	.187	.292	.219	9	.464	1	.080	83	74	82	64	55	60
St. Martin (a) -----	.167	.294	.192	27	.408	1	.060	84	70	78	56	47	22
Toronto (c) -----	.191	.223	.195	26	.346	12	.060	83	68	77	46	42	32
Wolfville -----	.157	.164	.157	4	.321	13	.048	69	52	66	36	15	20
VERMONT—													
Burlington -----	.176	.248	.205	9	.430	12	.037	67	55	69	45	29	14
MASSACHUSETTS—													
Amherst -----	.524	.613	.530	28	.450	1	.078	83	55	75	58	32	47
Bridgewater (c) -----	.257	.349	.284	■	.568	1	.084	94	52	93	70	39	76
Nantucket -----	.210	.210	.219	24	.329	13	.072	70	57	78	34	32	53
New Bedford -----	.229	.256	.235	18	.576	1	.065	83	66	85	45	24	33
Newburyport -----	.206	.209	.239	12	.515	1	.069	79	56	80	52	21	42
North Attleborough -----	.204	.209	.209	24	.385	13	.052	72	50	73	29	13	23
Princeton -----	.178	.197	.180	28	.341	1	.050	72	58	70	27	27	33
Westfield -----	.191	.220	.265	28	.436	1	.059	71	49	85	42	16	36
Worcester -----	.204	.240	.218	28	.459	19	.000	75	60	77	35	0	48
CONNECTICUT—													
Pomfret -----	.230	.291	.239	28	.626	1	.082	86	67	83	59	37	53
NEW YORK—													
Blackwell's Island -----	.221	.253	.235	12	.426	7	.025	69	58	66	41	21	5
New York city -----	.222	.270	.242	24	.416	13	.062	72	60	72	32	36	23
Oswego -----	.196	.223	.216	28	.476	1	.071	82	61	82	50	29	36
Ovid -----	.198	.238	.208	27	.430	1	.059	70	60	71	44	15	23
Penn Yan -----		.255		27	.477	13	.098		57			31	
NEW JERSEY—													
Bloomfield -----	.226	.296	.259	29	.512	1	.070	78	60	79	41	29	40
PENNSYLVANIA—													
Chromedale -----	.243	.277	.272	28	.543	10	.017	81	55	79	41	16	45
Easton -----	.249	.270	.268	28	.517	13	.078	84	53	72	53	21	38
Lewisburg -----	.212	.226	.240	28	.436	10	.040	74	49	70	33	■	29
Nazareth -----	.291	.360	.264	28	.572	1	.113	86	67	90	53	33	64
Norristown -----	.242	.285	.266	12	.668	1	.076	71	56	70	37	25	30
Philadelphia -----	.267	.290	.291	28	.519	1	.100	76	52	69	46	26	38
MARYLAND—													
Frederick -----	.243	.268	.274	28	.476	11	.062	69	52	68	39	19	10
DISTRICT OF COLUMBIA—													
Washington -----	.283	.307	.316	29	.516	10	.086	82	52	74	46	14	30
VIRGINIA—													
Alexandria -----	.320	.385	.348	12	.618	1	.123	87	66	81	71	46	53
NORTH CAROLINA—													
Goldsborough -----	.345	.314	.333	16	.639	1	.112	77	42	60	48	14	22
SOUTH CAROLINA—													
Aiken (d) -----	.293	.253	.337	15	.789	21	.005	59	29	51	3	1	26
All Saints -----	.405	.415	.423	27	.658	1	.143	82	54	77	59	40	51
Camden -----	.346	.332	.360	30	.637	21	.101	70	38	63	40	18	27
Charleston, [Dawson] (e) -----													
Edisto Island -----	.445	.449	.457	19	.628	21	.140	80	58	75	53	42	28
St. John's (e) -----	.368	.377	.421	14	.635	1	.143	83	47	75	44	21	50
GEORGIA—													
Savannah -----	.416	.359	.440	30	.626	21	.099	75	40	70	43	15	43
FLORIDA—													
Jacksonville -----	.622	.724	.596	16	1.087	1	.000	89	76	86	52	49	33
Warrington -----	.648	.682	.696	10	.854	5	.473	91	82	89	78	62	75
ALABAMA—													
Auburn -----	.324	.238	.281	16	.530	3	.007	57	23	43	19	1	12

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables of the Smithsonian Institution.

b According to tables used by the observer.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d For the last 25 days of the month only.

e Mean force of vapor for the month, .461; computed approximately from the mean dew point.

## No. 29.—PSYCHROMETER, APRIL, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
MISSISSIPPI—													
Columbus .....	.391	.433	.435	29	.665	4	.157	81	52	72	36	23	38
Oxford .....	.448	.541	.483	29	.884	3	.153	81	64	81	42	42	43
TEXAS—													
Austin .....	.441	.390	.437	26	.682	5	.163	76	37	62	42	14	38
New Braunfels.....	.596	.866	.695	23	1.214	5	.321	89	71	89	84	62	85
TENNESSEE—													
Glenwood .....	.310	.289	.319	29	.587	20	.113	78	42	63	45	16	33
KENTUCKY—													
Springdale .....	.275	.335	.366	16	.850	20	.000	82	47	68	0	21	15
OHIO—													
Cincinnati, [Harper].....	.302	.334	.376	17	.854	21	.081	69	46	73	46	19	49
Cleveland.....	.222	.256	.215	15	.478	1	.049	71	50	69	48	18	20
Dayton .....	.372	.420	.412	30	.604	4	.191	65	64	65	41	36	52
Germantown, [Groneweg]..	.254	.247	.243	27	.466	20	.056	78	43	65	48	25	23
Hillsborough .....	.274	.282	.294	30	.591	20	.103	79	51	68	54	27	36
Perrysburg (a).....	.263	.308	.267	12	.641	4	.090	68	56	74	32	28	43
MICHIGAN—													
Detroit .....	.238	.278	.256	27	.551	10	.056	82	52	79	51	25	16
Romeo, [Andrews] (a) .....	.199	.219	.207	27	.586	10	.040	76	53	71	14	8	36
INDIANA—													
New Albany.....	.265	.339	.309	29	.603	21	.053	59	46	64	27	16	14
New Harmony.....	.295	.360	.335	26	.638	21	.125	77	52	68	51	22	40
Richmond (b).....	.231	.222	.256	15	.492	20	.044	59	33	52	33	12	26
ILLINOIS—													
Manchester (a).....	.315	.427	.321	26	.915	22	.032	86	60	79	63	36	12
Upper Alton (c).....	.491	.658	.478	29	.733	28	.354	94	81	83	87	63	50
MISSOURI—													
St. Louis .....	.245	.247	.261	30	.536	18	.060	60	38	54	33	■	27
WISCONSIN—													
Waukesha .....	.197	.202	.195	26	.452	21	.029	71	49	66	36	7	31
IOWA—													
Dubuque .....	.221	.229	.244	26	.497	20	.000	63	53	67	23	0	45
Muscatine .....	.242	.434	.278	25	.927	19	.099	76	77	75	32	35	53
CALIFORNIA—													
Sacramento .....	.325	.386	.364	27	.543	25	.163	80	66	78	64	28	40
SOUTH AMERICA—													
Catharina Sophia, Surinam (a).....	.798	.823	.808	19	.969	2	.612	86	72	78	77	51	64

a For changes in hours of observation, &c., see table of the thermometer for this month.

b For the last 16 days of the month only.  
c For the last 4 days of the month only.



## No. 30.—PSYCHROMETER, MAY, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a.m.	2 p.m.	9 p.m.	Date.	Amt.	Date.	Amt.	7 a.m.	2 p.m.	9 p.m.	7 a.m.	2 p.m.	9 p.m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches</i>						
Montreal ( <i>a</i> )	.236	.287	.244	19	.553	13	.062	56	54	60	24	26	33
Montreal ( <i>b</i> )	.233	.279	.229	19	.543	3	.090	55	53	58	22	22	18
St. Martin ( <i>a</i> )	.264	.376	.292	24	.638	3	.167 <i>c</i>	80	66	75	61	49	61
St. Martin ( <i>b</i> )	.236	.335	.266	24	.628	8	.106	75	61	71	45	37	50
Toronto ( <i>d</i> )	.242	.264	.263	23	.504	3	.126 <i>e</i>	75	64	75	48	36	41
Wolfville	.228	.245	.233	14	.518	1	.062	74	55	73	35	19	49
VERMONT—													
Burlington	.288	.314	.299	23	.628	4	.073	78	53	75	50	17	43
MASSACHUSETTS—													
Amherst	.293	.317	.309	28	.610	31	.161	81	57	77	54	31	42
Bridgewater ( <i>d</i> )	.332	.308	.298	17	.589	22	.143	80	60	77	35	21	35
Nantucket	.282	.311	.293	24	.612	30	.162	73	67	82	42	38	45
New Bedford	.281	.313	.290	23	.520	22	.143	79	65	78	40	20	31
Newburyport	.260	.249	.271	16	.486	31	.129	79	59	80	57	20	43
North Attleborough	.269	.249	.267	17	.513	22	.084	72	48	73	39	13	37
Pincton	.244	.250	.251	24	.493	30	.071	72	56	75	20	15	40
Westfield	.265	.279	.322	24	.605	4	.092	76	53	84	41	20	44
Williamstown	.248	.328	.308	24	.566	25	.163	72	65	80	11	45	52
Worcester	.279	.324	.308	18	.628	12	.026	80	68	80	32	3	19
CONNECTICUT—													
Pomfret	.326	.371	.322	24	.733	5	.177	87	72	89	60	37	57
Wallingford	.275	.299	.282	17	.624	4	.097	77	55	77	35	19	54
NEW YORK—													
Blackwell's Island	.308	.321	.306	16	.563	30	.143	73	62	71	33	27	34
New York city	.308	.299	.292	16	.622	25	.109	61	50	62	33	17	31
Oswego	.279	.330	.295	18	.596 <i>f</i>	12	.107	83	72	82	48	42	31
Ovid	.252	.266	.254	18	.487	5	.121	69	54	65	36	28	32
Penn Yan		.316		19	.556	30	.104		56			32	
Pompey Hill	.698	.702	.644					75	64	70	56	38	44
Spencertown	.276	.330	.290	28	.671	4	.130 <i>g</i>	73	62	82	49	36	61
NEW JERSEY—													
Bloomfield	.309	.364	.312	24	.611	6	.117	80	57	73	45	26	32
PENNSYLVANIA—													
Chromedale	.317	.310	.319	28	.560	4	.121	74	52	76	41	18	41
Easton	.303	.323	.314	16	.563	4	.138	79	54	73	40	24	40
Lewisburg	.290	.280	.291	18	.484	4	.076	68	46	64	36	17	39
Nazareth	.296	.411	.306	19	.677	21	.126	74	64	81	44	29	25
Norristown	.310	.324	.308	24	.798	13	.120	76	54	67	51	19	28
Philadelphia	.339	.312	.356	24	.566	21	.149	63	49	63	48	19	44
MARYLAND—													
Frederick	.312	.357	.348	16	.573	12	.095	62	56	70	32	30	17
DISTRICT OF COLUMBIA—													
Washington	.373	.366	.382	24	.637	30	.147	77	52	72	49	22	37
VIRGINIA—													
Alexandria	.426	.440	.418	27	.669	30	.254	84	60	78	58	37	23
NORTH CAROLINA—													
Goldsborough	.517	.558	.495		1.026	30	.182	85	64	82	44	23	41
SOUTH CAROLINA—													
Aiken	.484	.523	.531	24	.772	7	.280	79	64	78	52	37	60
All Saints	.555	.550	.598	24	.800	10	.250	83	62	81	56	28	54
Camden	.464	.493	.488	24	.772	11	.226	75	54	72	44	26	43
Charleston, [Dawson] ( <i>h</i> )													
Edisto Island ( <i>d</i> )	.580	.600	.608	26	.800	10	.325	80	65	81	61	40	46
St. John's ( <i>d</i> )	.529	.542	.572	25	.773	10	.296	90	60	84	73	35	58
GEORGIA—													
Savannah	.581	.549	.578	25	.785	10	.217	78	53	74	51	20	43

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

*a* According to tables used by the observer.*b* According to tables of the Smithsonian Institution.*c* Same amount on the 4th.*d* For changes in hours of observation, &c., see table of the thermometer for this month.*e* Same amount on the 6th.*f* Same amount on the 19th.*g* Same amount on the 5th.*h* Mean force of vapor for the month .651, computed approximately from the mean dew point.

## No. 30.—PSYCHROMETER, MAY, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
FLORIDA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
Jacksonville.....	.746	.840	.750	7	1.030	10	.549	91	80	92	84	68	79
Warrington.....	.805	.846	.838	30	1.114 <sup>a</sup>	10	.503	93	89	90	82	56	66
ALABAMA—													
Auburn.....	.442	.366	.411	5	.653	26	.149	64	37	57	31	11	32
Greensborough (b).....	.583	.506	.558	27	.717	28	.438	74	45	54	64	40	51
MISSISSIPPI—													
Columbus.....	.522	.551	.543	6	.802	11	.267	82	54	78	61	29	54
Oxford.....	.599	.656	.563	22	1.203	8	.335	76	71	85	52	51	72
TEXAS—													
Austin.....	.480	.462	.504	22	.827	1	.268	79	45	63	58	26	41
New Braunfels.....	.702	.957	.772	28	1.314 <sup>c</sup>	8	.362	90	74	90	81	65	83
TENNESSEE—													
Glenwood.....	.427	.444	.467	25	.704	30	.230	89	58	82	62	30	49
KENTUCKY—													
Springdale.....	.345	.485	.478	21	.918	■	.054	■	56	76	56	31	10
OHIO—													
Cincinnati, [Harper].....	.383	.425	.419	23	.800	11	.023	68	48	69	44	20	45
Cleveland.....	.294	.380	.321	15	.877	21	.137	72	64	78	■	21	48
Dayton, [Fisher].....	.446	.443	.473	24	.651	4	.219	74	63	71	49	42	31
Gallipolis.....	.375	.446	.419	24	.762	5	.156	72	55	59	48	24	49
Germantown, [Groneweg] ..	.334	.359	.360	27	.630	4	.111	81	49	76	47	22	34
Hillsborough.....	.382	.416	.386	24	.616	5	.190	84	63	76	58	30	43
Perrysburg (b).....	.324	.396	.352	23	1.189	■	.139	73	63	79	37	33	51
MICHIGAN—													
Detroit (d).....	.285	.334	.248	2	.491	4	.139	81	76	69	58	45	56
Romeo, [Andrews] (b).....	.251	.290	.248	15	.531	3	.095	68	55	67	24	19	37
INDIANA—													
New Albany.....	.414	.458	.408	27	.619	30	.190	79	58	79	50	30	55
New Harmony.....	.433	.462	.462	24	.707	31	.230	81	54	78	51	38	56
Richmond.....	.304	.313	.320	22	.793	4	.092	67	44	■	34	17	27
ILLINOIS—													
Manchester (b).....	.425	.527	.455	20	.887 <sup>e</sup>	18	.110	86	67	87	61	43	26
Upper Alton.....	.456	.612	.459	21	.877	30	.285	87	79	87	65	50	81
MISSOURI—													
St. Louis.....	.379	.369	.418	24	.704	8	.163	70	45	■	50	24	51
WISCONSIN—													
Waukesha.....	.258	.252	.245	20	.608	12	.084	65	46	60	35	16	24
IOWA—													
Dubuque.....	.297	.318	.319	24	.638	4	.120	64	48	61	18	24	21
Muscatine.....	.322	.492	.388	19	1.605	13	.000	75	64	77	0	18	51
CALIFORNIA—													
Sacramento.....	.386	.455	.408	27	.615	25	.216	77	62	77	65	35	29
SOUTH AMERICA—													
Catharina Sophia, Sur' m (b) ..	.811	.840	.839	5	.969	28	.597	87	74	81	78	59	72

<sup>a</sup> Same amount on the 28th.<sup>b</sup> For changes in hours of observation, &c., see table of the thermometer for this month.<sup>c</sup> Same amount on the 29th.<sup>d</sup> For the first five days of the month only.<sup>e</sup> Same amount on the 23d.



## No. 31.—PSYCHROMETER, JUNE, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.446	.513	.464	18	.824	5	.197	73	64	74	47	36	52
Montreal (b).....	.436	.490	.450	18	.816	3	.176	71	61	72	44	25	46
St. Martin (a).....	.458	.571	.485	21	.804	1	.251	83	65	81	66	44	67
St. Martin (b).....	.448	.544	.479	25	.838	23	.209	81	62	79	54	41	65
Toronto (c).....	.409	.471	.418	22	.767	1	.307	86	71	84	63	45	56
MAINE—													
Gardiner.....	.553	.633	-----	29	1.023	5	.268	87	72	-----	58	42	-----
VERMONT—													
Burlington.....	.465	.530	.486	11	.904	2	.210	81	56	76	62	25	51
MASSACHUSETTS—													
Amherst.....	.513	.559	.525	30	.841	1	.282	84	61	81	67	39	38
Bridgewater (c).....	.513	.564	.533	29	1.110	6	.306	83	68	79	57	42	45
Nantucket.....	.442	.433	.434	21	.712	14	.191	77	62	84	54	26	68
New Bedford.....	.496	.541	.507	29	.836	1	.288	85	70	89	57	45	68
Newburyport.....	.440	.456	.467	29	.799	1	.195	80	58	81	40	31	58
North Attleborough.....	.473	.530	.492	30	.940	1	.220	75	59	83	42	37	64
Princeton.....	.437	.459	.461	29	.775	1	.169	82	61	82	57	34	55
Westfield.....	.458	.487	.557	29	d. 774	1	.252	81	54	86	58	34	66
Williamstown.....	.461	.509	.516	29	.821	1	.231	88	66	85	70	38	66
Worcester.....	.487	.532	.523	21	1.126	1	.245	81	64	79	60	31	48
CONNECTICUT—													
Pomfret.....	.541	.644	.565	29	.949	1	.311	91	77	93	75	53	74
Wallingford.....	.503	.594	.527	30	1.325	1	.257	87	63	86	66	47	74
NEW YORK—													
Blackwell's Island.....	.517	.535	.540	26	.839	1	.282	77	64	75	53	36	50
New York city.....	.406	.537	.530	26	.788	1	.304	71	58	73	48	35	50
Oswego.....	.463	.495	.469	21	.868	24	.219	80	65	83	51	31	64
Ovid.....	.432	.457	.455	30	.731	1	.243	70	54	74	47	37	41
Penn Yan.....	-----	.458	-----	28	.697	15	.205	-----	49	-----	-----	28	-----
Pompey Hill.....	.448	.482	.417	-----	-----	-----	-----	77	64	74	59	42	32
Spencertown.....	.488	.610	.524	30	1.149	1	.243	79	72	88	56	48	74
NEW JERSEY—													
Bloomfield.....	.521	.673	.568	21	1.386	1	.191	85	66	85	41	39	54
Burlington.....	.542	.461	.516	23	1.081	2	.204	73	45	67	42	24	47
PENNSYLVANIA—													
Easton.....	.530	.535	.541	21	.937	27	.236	83	51	76	63	19	48
Lima.....	.576	.578	.562	26	.842	5	.340	81	61	84	66	32	49
Lewisburg.....	.507	.502	.524	22	.751	1	.275	73	48	74	54	26	43
Nazareth.....	.545	.736	.531	26	1.019	16	.296	78	66	81	49	44	45
Norristown.....	.542	.519	.519	26	.799	16	.278	84	54	72	70	25	46
MARYLAND—													
Frederick.....	.545	.573	.608	28	.838	1	.242	67	54	76	48	32	57
DISTRICT OF COLUMBIA—													
Washington.....	.621	.625	.661	26	.950	14	.353	84	57	79	68	34	48
VIRGINIA—													
Alexandria.....	.675	.716	.697	30	1.119	15	.388	84	64	86	71	44	65
Berryville (e).....	.697	.891	.707	21	1.427	1	.403	94	88	92	78	69	74
SOUTH CAROLINA—													
Aiken.....	.664	.631	.643	23	.829	21	.358	78	54	71	56	28	43
All Saints.....	.818	.866	.822	23	1.074	16	.599	85	78	85	74	59	65
Camden.....	.710	.689	.729	29	.928	4	.416	80	56	78	62	31	50
Charleston, [Dawson] (f).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Edisto Island (c).....	.807	.859	.839	27	1.017 <sup>g</sup>	15	.530	86	77	84	74	40	68
St. Johns's (c).....	.699	.817	.766	28	1.060	2	.491	91	69	86	84	52	74
GEORGIA—													
Savannah.....	.761	.756	.775	26	.972	15	.474	79	56	79	64	35	68

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to tables of the Smithsonian Institution.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 26th.

e Incomplete.

f Mean force of vapor for the month, .870; computed approximately from the mean dew point.

g Same amount on the 26th and 28th.

## No. 31.—PSYCHROMETER, JUNE, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>FLORIDA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Jacksonville .....	.906	.975	.904	13	1.174	17	.626	90	79	91	79	64	74
Warrington .....	.983	1.028	.999	26	1.242	16	.704	93	90	90	73	77	83
<b>ALABAMA—</b>													
Auburn .....	.609	.595	.594	29	.814	15	.340	71	48	67	40	31	50
Greensborough .....	.707	.727	.758	27	.915	15	.457	78	63	70	69	46	51
<b>MISSISSIPPI—</b>													
Columbus .....	.692	.764	.758	28	.993	15	.390	87	61	84	77	55	63
Oxford .....	.747	.756	.755	26	1.215	14	.455	77	69	85	49	39	66
<b>TEXAS—</b>													
Austin .....	.627	.533	.538	18	.732	10	.362	78	39	50	56	24	32
New Braunfels .....	.960	1.333	1.041	25	1.671	24	.762	89	77	90	59	57	62
<b>TENNESSEE—</b>													
Glenwood .....	.619	.629	.679	30	.907	14	.283	90	55	85	78	33	56
Walnut Grove (a) .....	.688	.774	.676	22	.860	20	.551	79	51	76	75	46	54
<b>KENTUCKY—</b>													
Springdale .....	.509	.693	.700	11	1.487	14	.248	93	51	77	86	32	47
<b>OHIO—</b>													
Cincinnati, [Harper] .....	.582	.590	.586	24	.958	14	.278	69	51	66	44	29	49
Cleveland .....	.529	.555	.529	24	.850	1	.229	76	61	80	44	37	65
Dayton .....	.610	.617	.705	23	.909	12	.337	75	61	75	47	37	53
Germantown, [Groneweg] .....	.561	.547	.578	28	.826	14	.277	82	51	82	62	32	68
Germantown, [Binkead] .....	.514	.533	.555	25	.900	1	.232	81	46	77	56	25	52
Hillsborough .....	.594	.636	.576	30	.923	13	.330	88	63	81	71	43	33
Perrysburg (a) .....	.628	.664	.618	21	1.325	14	.349	77	62	81	59	44	66
<b>MICHIGAN—</b>													
Detroit (b) .....	.550	.651	.568	28	1.215	16	.242	75	68	78	54	43	48
Romeo, [Andrews] (a) .....	.506	.566	.499	24	.959	14	.272	82	64	85	63	42	63
<b>INDIANA—</b>													
New Albany .....	.629	.649	.639	23	.932	14	.340	80	51	80	59	40	61
New Harmony .....	.619	.709	.704	30	1.033	12	.370	78	58	80	66	41	49
<b>ILLINOIS—</b>													
Manchester (a) .....	.657	.796	.674	24	1.133	14	.334	84	65	90	72	41	79
Peoria .....	.571	.541	.617	27	.911	3	.146	74	44	72	58	20	56
Upper Alton .....	.704	.836	.707	22	1.188	13	.391	87	74	83	50	58	61
Warsaw (c) .....								34		13	0		0
<b>MISSOURI—</b>													
St. Louis .....	.573	.548	.583	29	.836	12	.187	70	43	66	48	17	48
<b>IOWA—</b>													
Dubuque .....	.483	.480	.485	27	.805	12	.090	57	42	58	35		33
Muscatine .....	.557	.715	.593	27	1.070	12	.215	81	59	83	59	23	47
<b>CALIFORNIA—</b>													
Sacramento .....	.458	.517	.483	13	.792	23	.198	71	56	72	55	17	38
<b>SOUTH AMERICA—</b>													
Catharina Sophia, Surinam (a) .....	.785	.862	.842	3	.976		.651	89	74	82	66	62	72
Colonia Tovar, Venezuela (a) .....	.400	.437	.408	14	.542	29	.242	86	75	87	48	49	55

a For changes in hours of observation, &c., see table of the thermometer for this month.

b For eleven days only, 15th to 19th, and 24th to 30th.

c By Dalton's hygrometer.



## No. 32.—PSYCHROMETER, JULY, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.535	.567	.539	15	.910	1	.304 <sup>b</sup>	74	63	73	64	41	48
Montreal (c).....	.538	.536	.521	27	.897	6	.234	76	53	69	59	32	41
St. Martin (a).....	.571	.708	.580	26	.986 <sup>d</sup>	2	.302	83	65	84	39	46	64
St. Martin (c).....	.547	.724	.591	17	1.107	2	.275	83	66	84	66	46	59
Toronto (e).....	.472	.510	.485	17	.734	7	.301	79	56	76	59	35	55
MAINE—													
Gardiner.....	.680	.812	-----	28	1.382	1	.358	93	77	-----	72	46	-----
VERMONT—													
Burlington.....	.531	.565	.581	17	.859	24	.256	79	51	77	57	17	62
MASSACHUSETTS—													
Amherst.....	.579	.571	.582	18	.923	1	.250	86	55	81	54	28	46
Bridgewater (e).....	.706	.893	.754	29	1.193	0	.440	81	69	86	59	42	57
Lawrence (f).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
New Bedford.....	.585	.636	.586	22	.900	1	.278	83	65	84	53	29	49
Newburyport.....	.518	.538	.527	13	.778	1	.279	78	54	78	48	27	47
North Attleborough.....	.556	.551	.560	16	.843	1	.295	74	54	81	47	30	36
Princeton.....	.477	.516	.516	13	.764	1	.254 <sup>b</sup>	75	57	76	44	30	46
Westfield.....	.539	.532	.618	17	.878	2	.290	81	51	82	53	31	68
Williamstown.....	.509	.568	.535	13	.835	1	.294	86	60	82	60	37	47
Worcester.....	.574	.690	.594	26	1.332	4	.362	80	70	74	59	40	47
CONNECTICUT—													
Pomfret.....	.564	.688	.624	27	.983 <sup>g</sup>	1	.371	87	73	91	69	47	73
Wallingford.....	.558	.611	.581	13	.877	1	.291	83	56	82	48	30	58
NEW YORK—													
Blackwell's Island.....	.558	.579	.601	20	.958	1	.316	69	57	69	45	30	27
Clinton.....	.513	.560	.496	13	1.019	1	.243	66	53	61	49	34	43
New York city.....	.555	.540	.587	13	.814	1	.259	64	48	66	41	26	44
Oswego.....	.533	.579	.561	27	1.023	1	.321	76	65	81	56	36	57
Ovid.....	.474	.502	.467	30	.901	1	.190	65	50	63	46	25	41
Penn Yan.....	-----	.554	-----	12	.797	20	.361	-----	53	-----	-----	33	-----
Plainville.....	.625	.748	.595	17	1.080	20	.416	79	63	82	65	42	61
Pompey Hill.....	.481	.512	.474	-----	-----	-----	-----	71	60	71	57	36	46
Spencertown.....	.613	.837	.630	26	1.283	5	.383	86	82	92	71	68	83
NEW JERSEY—													
Bloomfield.....	.586	.621	.574	14	.908	4	.331	81	50	74	61	27	27
PENNSYLVANIA—													
Chromedale.....	.607	.583	.626	15	.871	1	.287	80	50	82	43	28	63
Easton.....	.542	.493	.547	13	.854	20	.264	76	42	69	45	18	34
Lewisburg.....	.542	.541	.553	30	.769	20	.290	71	46	68	48	19	37
Nazareth.....	.585	.835	.587	30	1.229	11	.411	70	64	67	50	41	51
Norristown.....	.543	.514	.544	15	.813	5	.234	72	45	64	38	16	28
Philadelphia.....	.585	.547	.607	13	.909	20	.315	67	44	63	42	26	31
MARYLAND—													
Frederick.....	.574	.540	.614	17	.819	25	.331	60	45	68	39	24	39
DISTRICT OF COLUMBIA—													
Washington.....	.662	.617	.687	30	.971	1	.256	74	49	72	56	23	51
VIRGINIA—													
Alexandria.....	.731	.743	.749	15	1.007	20	.368	81	61	81	54	43	52
Berryville (h).....	.803	.971	.938	18	1.480	2	.691	93	83	92	77	26	91
SOUTH CAROLINA—													
Aiken.....	.764	.766	.771	16	.918	20	.497	83	62	80	59	46	65
All Saints.....	.855	.899	.871	1	1.074 <sup>d</sup>	21	.612	84	75	82	69	51	62
Camden.....	.774	.717	.777	14	.983	20	.456	82	53	81	56	31	56
Charleston, [Dawson] (i).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
St. John's (e).....	.761	.844	.820	30	1.151	20	.570	91	71	86	85	47	68

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b Same amount on the 4th.

c According to tables of the Smithsonian Institution.

d Same amount on the 29th.

e For changes in hours of observation, &amp;c., see table of the thermometer for this month.

f Mean force of vapor for the month .639, computed approximately from the mean dew point.

g Same amount on the 13th.

h Month incomplete.

i Mean force of vapor for the month .917, computed approximately from the mean dew point.

## No. 32.—PSYCHROMETER, JULY, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches	Inches	Inches		Inches		Inches						
GEORGIA—													
Savannah.....	.829	.807	.806	7	1.003	21	.563	83	59	80	70	38	58
FLORIDA—													
Jacksonville.....	.943	1.017	.923	11	1.149	23	.758	88	80	91	68	64	72
Warrington.....	1.084	1.112	1.092	16	1.324	7	.931	97	91	93	91	76	76
ALABAMA—													
Auburn.....	.658	.580	.606	12	.813	20	.313	69	41	62	45	20	35
Greensborough (a).....	.737	.737	.767	4	.942	21	.470	76	60	66	61	40	52
MISSISSIPPI—													
Columbus.....	.741	.715	.767	5	.964	21	.405	84	49	77	75	29	59
TEXAS—													
Austin.....	.669	.522	.570	1	.772	31	.461	77	34	49	58	26	37
New Braunfels.....	1.015	1.440	1.130	11	1.764	25	.658	91	75	92	87	50	88
TENNESSEE—													
Glenwood.....	.683	.646	.717	1	.962	21	.328	89	55	84	71	28	65
Walnut Grove.....	.668	.722	.684	8	.969b	20	.356	76	54	71	38	34	57
KENTUCKY—													
Springdale.....	.571	.854	.738	24	1.400	21	.321	92	59	75	81	28	41
OHIO—													
Cincinnati, [Harper].....	.636	.676	.675	15	1.201	23	.296	65	50	56	48	22	47
Cleveland.....	.550	.580	.555	29	.863	21	.396	77	55	73	54	27	59
Dayton.....	.653	.680	.724	26	.931	19	.396	76	61	72	51	41	49
Germantown, [Groneveg].....	.605	.584	.640	3	.833	23	.314	80	47	83	57	22	54
Germantown, [Binkerd].....	.601	.590	.607	28	.945	24	.154	81	45	77	56	11	23
Hillsborough.....	.633	.651	.625	3	.882	24	.344	88	57	79	67	26	49
Perrysburg (a).....	.665	.719	.654	17	1.480	7	.402c	77	61	78	45	39	61
Savannah (d).....	.467	.541	.508	25	.988	16	.000e	61	44	79	0	0	0
MICHIGAN—													
Detroit.....	.617	.674	.618	16	1.010	6	.356	79	65	83	55	39	52
Romeo, [Andrews] (a).....	.550	.565	.544	16	.921	20	.326	79	54	81	49	28	38
INDIANA—													
New Harmony.....	.712	.776	.780	29	1.418	19	.363	77	57	79	43	37	57
Richmond.....	.485	.417	.473	27	.801	24	.220	59	34	64	40	14	33
ILLINOIS—													
Manchester (a).....	.700	.883	.765	15	1.243f	22	.425	84	68	92	39	48	64
Upper Alton.....	.681	.946	.715	17	1.327	24	.430	91	72	77	43	46	51
Warsaw (g).....								41	6	16	6	0	2
MISSOURI—													
St. Louis.....	.648	.636	.683	29	.868	23	.357	68	46	65	51	20	31
WISCONSIN—													
Madison.....	.510	.508	.555	15	.873	31	.123	62	46	67	18	21	46
Waukesha.....	.469	.519	.476	28	.704	5	.140	64	45	67	47	22	28
IOWA—													
Muscatine.....	.625	.933	.695	15	1.535	21	.389	89	77	89	42	55	48
CALIFORNIA—													
Sacramento.....	.495	.490	.547	9	.789	15	.157	69	48	68	43	16	38
SOUTH AMERICA—													
Catharina Sophia, Sur'm (a).....	.801	.871	.837	21	.936	5	.666	80	74	79	77	62	67
Colonia Tovar, Venezuela.....	.409	.465	.403	6	.523c	2	.268	90	81	89	58	62	56

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 9th.

c Same amount on the 20th.

d For the last 16 days of the month only.

e Same amount on the 17th.

f Same amount on the 16th.

g By Dalton's hygrometer.



## No. 33.—PSYCHROMETER, AUGUST, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.482	.535	.509	11	.870	16	.230	86	76	86	63	47	63
Montreal (b).....	.469	.517	.478	11	.856	25	.274	84	74	83	46	38	38
St. Martin (a).....	.489	.583	.487	11	.796	12	.230	90	73	90	76	45	78
St. Martin (b).....	.470	.580	.485	19	.787	25	.252	87	75	90	42	33	68
Toronto (c).....	.401	.450	.402	5	.614	25	.236	85	62	77	68	38	58
MAINE—													
Gardiner.....	.600	.673	-----	25	1.324	26	.356	97	83	-----	84	59	-----
VERMONT—													
Burlington.....	.459	.490	.469	18	.870	17	.195	80	59	80	57	23	62
MASSACHUSETTS—													
Amherst.....	.552	.567	.541	2	.794	25	.288	94	66	91	85	40	65
Bridgewater (r).....	.622	.751	.641	12	.963	26	.331	85	78	88	53	58	71
Lawrence (d).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Nantucket.....	.577	.587	.588	24	.785	26	.352	81	68	89	66	50	72
New Bedford.....	.563	.566	.579	1	.816	26	.264	88	67	90	71	45	73
Newburyport.....	.504	.512	.503	1	.740	26	.231	89	69	87	62	36	72
North Attleborough.....	.528	.536	.548	1	.756	31	.322	73	63	89	62	43	79
Princeton.....	.477	.520	.471	10	.750	26	.207	89	74	85	64	49	34
Westfield.....	.501	.498	.549	1	.738	26	.290	89	61	91	67	42	83
Williamstown (c).....	.491	.519	.481	4	.673	28	.242	91	76	90	55	44	54
Worcester.....	.537	.598	.523	3	.819	27	.233	88	75	80	61	41	44
CONNECTICUT—													
Pomfret.....	.537	.593	.546	1	.859	26	.285	94	80	96	83	56	84
Wallingford.....	.534	.550	.538	29	.884	25	.308	93	65	90	82	39	74
NEW YORK—													
Blackwell's Island.....	.502	.497	.518	3	.813	26	.242	70	57	67	43	40	49
New York city.....	.537	.532	.547	2	.744	25	.256	73	58	73	54	28	48
Oswego.....	.491	.512	.510	5	.708	25	.308	83	71	86	65	48	62
Penn Yan.....	-----	.455	-----	1	f.604	25	.285	-----	57	-----	38	-----	-----
Plainville.....	.542	.642	.512	2	.956	25	.388	89	78	91	69	56	70
Spencertown.....	.475	.603	.479	1	1.051	27	.226	89	79	87	75	52	59
NEW JERSEY—													
Bloomfield.....	.521	.602	.548	14	1.010	22	.242	84	66	86	48	39	65
PENNSYLVANIA—													
Chromedale.....	.545	.573	.563	3	.805	26	.309	87	64	88	69	47	58
Easton.....	.504	.490	.524	3	.765	22	.242	84	53	80	45	28	52
Lewisburg.....	.475	.439	.450	3	.714	27	.207	82	50	71	38	29	40
Nazareth.....	.508	.651	.500	3	.996	26	.150	75	70	79	22	45	48
Norristown.....	.528	.536	.548	27	.785	25	.296	73	63	89	62	43	79
Philadelphia.....	.526	.544	.530	19	.772	26	.269	75	57	72	62	41	52
MARYLAND—													
Frederick.....	.516	.550	.557	2	.765	26	.283	74	58	77	54	37	57
DISTRICT OF COLUMBIA—													
Washington.....	.559	.575	.622	8	.908	26	.329	81	55	79	61	39	56
VIRGINIA—													
Alexandria.....	.632	.661	.641	11	.922	26	.378	85	67	87	64	50	72
Berryville (g).....	.794	.814	.866	5	1.010	8	.555	95	85	91	80	62	62
NORTH CAROLINA—													
Goldsborough.....	.673	.654	.677	1	.895	21	.383	82	56	84	62	36	62
SOUTH CAROLINA—													
Aiken (h).....	.733	.766	.722	11	.887	6	.537	81	60	77	71	39	64
All Saints.....	.796	.820	.834	24	1.038	21	.516	85	72	82	70	51	72
Camden.....	.675	.666	.690	12	.843	21	.396	78	56	77	40	36	54
Charleston, [Dawson] (i).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Edisto Island (c).....	.801	.845	.806	19	1.003	21	.524	83	74	77	66	51	62
St. John's (c).....	.712	.808	.786	14	.983	21	.502	88	71	85	77	49	73

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to tables of the Smithsonian Institution.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Mean force of vapor for the month, .576; computed approximately from the mean dew point.

e Same amount on the 2d.

f Same amount on the 7th.

g But few observations during the month.

h For the first 13 days of the month only.

i Mean force of vapor for the month, .869; computed approximately from the mean dew point.

## No. 33.—PSYCHROMETER, AUGUST, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
GEORGIA—													
Savannah.....	.763	.763	.771	29	.923	20	.496	79	52	75	55	34	59
FLORIDA—													
Jacksonville.....	.921	.978	.923	19	1.310	14	.745	88	78	89	70	60	75
Warrington.....	1.067	1.092	1.091	25	1.296	10	.870	96	91	93	91	80	83
ALABAMA—													
Auburn.....	.637	.560	.598	24	.897	25	.283	71	45	63	45	20	41
Greensborough (a).....	.716	.706	.751	16	.873	20	.243	74	59	69	45	22	55
MISSISSIPPI—													
Columbus.....	.676	.668	.692	23	.909	6	.335	82	49	72	65	30	36
TEXAS—													
Austin.....	.637	.496	.568	28	.717	11	.407	69	29	44	59	21	34
New Braunfels.....	1.001	1.717	1.241	6	1.940	30	.785	91	80	92	87	74	88
TENNESSEE—													
Glenwood.....	.569	.532	.584	18	.800	■	.287	87	49	78	62	22	54
Walnut Grove (a).....	.605	.718	.655	10	.887	10	.416	88	71	87	57	50	67
KENTUCKY—													
Springdale.....	.467	.633	.622	27	.909	31	.264	94	58	75	69	27	43
OHIO—													
Cincinnati, [Harper].....	.521	.545	.522	4	.891	31	.256	66	51	67	45	27	44
Cleveland.....	.453	.479	.468	7	.722	29	.177	80	58	77	61	26	57
Dayton, [Fisher].....	.535	.520	.568	2	.877	26	.150	77	59	59	37	20	28
Germantown, [Groneweg].....	.481	.479	.496	1	.751	31	.226	86	47	80	78	24	50
Germantown, [Binkerd].....	.460	.533	.488	22	.977	16	.257	82	53	76	69	25	43
Hillsborough.....	.549	.569	.530	7	1.038	31	.308	93	65	82	31	31	59
Perrysburg (a).....	.498	.591	.528	2	1.074	30	.272	84	66	76	■	41	63
Savannah.....	.505	.519	.489	2	1.174	29	.234	86	55	94	43	26	56
MICHIGAN—													
Detroit (c).....	.518	.601	.552	1	1.203	14	.163	80	66	85	26	38	53
Romeo, [Andrews] (a).....	.441	.416	.424	1	.778	30	.106	79	49	80	27	21	58
INDIANA—													
New Harmony.....	.588	.625	.636	23	.936	26	.244	84	60	81	66	45	39
Richmond.....	.433	.444	.346	2	.641	30	.067	74	38	60	51	■	35
ILLINOIS—													
Manchester (a).....	.559	.700	.564	1	1.983	31	.278	92	70	88	80	29	23
Peoria.....	.502	.467	.542	1	.894	25	.193	82	44	76	65	23	48
Upper Alton.....	.584	.676	.598	1	1.188	30	.348	90	70	87	78	37	63
Warsaw (c).....								43	9	20	17	■	■
MISSOURI—													
St. Louis.....	.530	.554	.570	18	.816	31	.283	73	55	71	49	33	37
WISCONSIN—													
Madison.....	.418	.368	.412	18	.678	29	.166	61	37	62	47	18	44
Waukesha.....	.376	.402	.385	18	.617	30	.110	67	44	68	45	13	42
IOWA—													
Muscatine.....	.459	.673	.509	1	1.427	30	.225	92	64	88	84	38	68
CALIFORNIA—													
Sacramento.....	.443	.520	.458	10	.886	8	.194	73	62	71	49	13	46
MEXICO—													
Vera Cruz (a).....	.825	.874	.895	20	.958	19	.773	81	72	79	73	63	67
SOUTH AMERICA—													
Catharina Sophia, Surinam.....	.802	.861	.834	18	.936	8	.584	86	68	75	78	59	50
Colonia Tovar, Venezuela.....	.398	.467	.407	24	f.549	21	.216	83	80	89	46	53	55

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 7th and 11th.

c For the first 18 days of the month only.

d Same amount on the 2d.

e By Dalton's hygrometer.

f Same amount on the 25th.



## No. 34.—PSYCHROMETER, SEPTEMBER, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.358	.422	.407	10	.692	14	.195	71	72	83	52	58	62
Montreal (b).....	.348	.411	.405	10	.695	14	.196	82	69	82	52	54	57
St. Martin (a).....	.355	.507	.402	6	.834	1	.260	88	71	87	49	54	76
St. Martin (b).....	.339	.457	.375	10	.973	7	.199	88	66	85	48	27	68
Toronto (c).....	.322	.366	.351	10	.683	22	.193	85	61	81	61	39	55
Wolfville.....	.392	.411	.394	10	.691	25	.196	87	63	86	48	37	66
<b>MAINE—</b>													
Gardiner.....	.525	.596	-----	4	1.282	28	.335	98	86	-----	87	64	-----
<b>VERMONT—</b>													
Burlington.....	.380	.402	.426	11	.826	28	.235	88	57	85	70	37	75
<b>MASSACHUSETTS—</b>													
Amherst.....	.422	.488	.475	18	1.922	25	.678	94	69	91	76	42	78
Bridgewater (c).....	.484	.542	.521	20	.853	25	.265	92	73	85	74	45	57
Lawrence (d).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Nantucket.....	.481	.468	.496	18	.683	25	.230	79	63	85	49	39	51
New Bedford.....	.476	.515	.514	11	.706	25	.266	89	70	93	72	48	83
Newburyport.....	.404	.461	.456	11	.731	25	.229	86	66	89	68	44	72
North Attleborough.....	.426	.443	.456	11	.793	25	.207	85	58	89	73	36	72
Princeton.....	.587	.401	.401	11	.701	24	.223	85	65	82	67	42	56
Westfield.....	.393	.437	.463	11	.776	25	.192	88	57	88	70	30	53
Williamstown.....	.387	.444	.429	10	.715	24	.250	90	75	89	77	57	66
Worcester.....	.435	.498	.477	11	.782	28	.176	82	71	82	41	29	62
<b>CONNECTICUT—</b>													
Pom ret.....	.442	.527	.481	11	.799	25	.265	95	77	95	78	33	80
Wallingford.....	.423	.496	.480	11	.863	25	.235	92	64	91	73	41	78
<b>NEW YORK—</b>													
Blackwell's Island.....	.430	.462	.445	11	.704	23	.269	71	60	67	49	43	40
Fordham.....	.429	.509	.490	5	.886	20	.163	80	60	81	26	37	30
McGrawville.....	.373	.419	.437	6	.798	20	.174	81	69	77	49	35	46
New York city.....	.435	.477	.471	11	.752	24	.240	73	57	71	56	36	53
Oswego.....	.381	.442	.423	10	.927	3	.203	81	68	85	63	41	39
Ovid.....	.336	.333	.341	7	.637	19	.150	74	46	65	41	20	37
Penn Yan.....	-----	.411	-----	7	.648	27	.236	-----	53	-----	-----	27	-----
Plainville.....	.460	.553	.428	10	.915	23	.269	86	68	88	66	56	75
Spencertown.....	.386	.520	.448	18	.863	25	.191	88	72	85	78	55	66
<b>NEW JERSEY—</b>													
Bloomfield.....	.415	.545	.479	10	1.023	25	.225	90	61	87	75	36	38
<b>PENNSYLVANIA—</b>													
Chromedale.....	.414	.502	.470	10	.811	24	.250	88	64	90	55	39	78
Easton.....	.409	.447	.447	11	.758	23	.124	88	50	79	58	21	58
Lewisburg.....	.352	.334	.372	10	.752	23	.148	80	39	67	52	22	40
Morrisville.....	.465	.502	.465	20	.733	24	.297	99	67	89	94	39	76
Nazareth.....	.392	.565	.377	8	.923	24	.186	82	67	80	63	33	65
Norristown.....	.420	.456	.471	13	.785	25	.209	83	60	83	57	36	64
Philadelphia.....	.402	.480	.457	8	.789	23	.176	75	55	76	44	29	53
<b>MARYLAND—</b>													
Frederick.....	.416	.461	.477	11	.795	25	.222	82	53	77	46	36	42
<b>DISTRICT OF COLUMBIA.</b>													
Washington.....	.486	.502	.530	10	.850	24	.222	86	54	79	49	27	53
<b>VIRGINIA—</b>													
Alexandria.....	.551	.589	.573	8	.970	25	.257	92	63	90	72	49	71
Berryville (f).....	.470	.654	-----	19	1.030	25	.311	94	80	-----	81	49	-----
<b>NORTH CAROLINA—</b>													
Goldsborough.....	.601	.549	.577	10	1.030	24	.194	86	57	87	41	34	69
<b>SOUTH CAROLINA—</b>													
All Saints.....	.614	.614	.643	13	.870	24	.231	84	62	75	63	36	54
Camden.....	.543	.562	.573	10	.785	24	.251	87	56	82	76	36	68

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to tables of the Smithsonian Institution.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Mean force of vapor for the month, .483; computed approximately from the mean dew point.

e Same amount on the 24th and 25th.

f For the last half of the month only.

## No. 34.—PSYCHROMETER, SEPTEMBER, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>SOUTH CAROLINA—Continued.</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Charleston, [Dawson] (a).....	.429	.477	.470	9	.758	25	.123	69	48	62	38	16	18
Columbia.....	.638	.672	.647	13	.843	24	b. 308	83	66	76	73	49	58
Edisto Island.....	.505	.607	.575	14	.873	25	.241	87	65	82	79	49	67
<b>GEORGIA—</b>													
Savannah.....	.587	.558	.598	13	.830	24	.194	81	49	75	51	27	52
<b>FLORIDA—</b>													
Jacksonville.....	.769	.841	.762	8	1.003d	24	.394	91	77	91	82	68	82
Warrington (c).....	.905	.964	.924	2	1.189	24	e. 510	94	87	89	84	77	76
<b>ALABAMA—</b>													
Auburn.....	.434	.411	.423	12	.705	30	.022	59	37	52	5	18	31
Carlowville.....	.576	.565	.635	4	.904	24	.255	71	52	68	51	36	49
<b>MISSISSIPPI—</b>													
Columbus.....	.537	.537	.566	5	.911	23	.161	83	54	78	60	29	42
Port Gibson.....	.504	.740	.549	18	1.108	25	.182	74	63	63	44	49	42
Natchez.....	.690	.782	.747	11	1.016	30	.229	80	76	81	65	44	63
<b>TEXAS—</b>													
Austin.....	.566	.510	.611	19	f. 772	30	.191	79	41	75	51	27	56
New Braunfels.....	.730	1.296	.883	3	2.009	24	.407	91	84	90	86	75	80
<b>TENNESSEE—</b>													
Glenwood.....	.453	.430	.480	5	.842	23	.141	87	48	79	74	29	52
Knoxville.....	.453	.487	.491	11	.905	23	.167	85	58	80	52	27	49
<b>KENTUCKY—</b>													
Springdale.....	.394	.479	.499	8	.870	24	.154	92	53	73	66	35	48
<b>OHIO—</b>													
Cincinnati, [Harper].....	.449	.516	.485	9	.816	21	.125	76	56	74	29	22	48
Cleveland.....	.380	.400	.384	5	.883	19	.194	76	56	71	48	24	39
Dayton, [Fisher].....	.499	.514	.552	16	.927	13	.270	77	63	74	64	44	32
Germantown, [Groneweg].....	.408	.396	.423	5	.777	30	.162	86	50	82	69	29	45
Hillsborough.....	.437	.445	.430	9	.854	23	.201	91	57	79	73	31	51
Perrysburg (c).....	.391	.554	.431	4	.983	23	.126	81	68	77	49	41	47
Portsmouth.....	.435	.564	.496	16	1.135	28	.155	76	63	78	34	34	57
Savannah.....	.433	.474	.425	5	.868	20	.189	92	59	93	73	33	66
West Bedford.....	.373	.408	.405	7	.718	23	g. 165	88	57	88	70	30	53
<b>MICHIGAN—</b>													
Detroit.....	.388	.402	.423	7	.799	22	.194	84	66	82	65	46	49
Romeo, [Stone] (c).....	.362	.375	.352	9	.726	1	.150	82	55	78	66	22	46
<b>INDIANA—</b>													
New Harmony.....	.480	.534	.530	5	.901	23	.199	87	59	84	68	37	64
Richmond (c).....	.500	.536	.459	1	.884	3	.227	80	50	67	64	19	47
<b>ILLINOIS—</b>													
Manchester (c).....	.431	.581	.484	15	.935	24	.144	91	64	93	63	48	74
Peoria.....	.375	.408	.454	5	.950	18	.154	76	42	74	62	20	50
Warsaw.....								29	10	5	0	0	5
<b>MISSOURI—</b>													
St. Louis.....	.437	.458	.485	9	.829	23	.142	79	50	74	51	29	49
<b>WISCONSIN—</b>													
Appleton.....	.283	.287	.308	17	.677	15	.097	74	48	73	30	11	48
Waukesha.....	.293	.327	.318	5	.735	24	.115	63	44	64	30	28	38
<b>IOWA—</b>													
Muscatine.....	.357	.483	.425	10	h. 882	30	.108	88	55	83	74	32	64
<b>CALIFORNIA—</b>													
Sacramento.....	.404	.419	.432	24	.733	4	.113	71	45	63	26	12	12
<b>MEXICO—</b>													
Vera Cruz.....	.808	.849	.848	23	.964	24	.669	82	76	79	70	67	65
<b>SOUTH AMERICA—</b>													
Catharina Sophia, Surinam (c).....	.810	.980	.902	24	1.189	5	i. 745	90	73	80	78	59	68
Colonia Tovar, Venezuela.....	.411	.461	.424	18	.570	30	.308	87	79	91	70	59	70

a Mean force of vapor for the month, .665; computed approximately from the mean dew point.

b Same amount on the 30th.

c For changes in hours of observation, &c., see table of the thermometer for this month.

d Same amount on the 18th.

e Same amount on the 25th.

f Same amount on the 20th.

g Same amount on the 24th.

h Same amount on the 15th.

i Same amount on the 8th.



## No. 35.—PSYCHROMETER, OCTOBER, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 a. m.	7 a. m.	9 p. m.	2 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches</i>						
BRITISH AMERICA—													
Montreal (a) .....	.239	.268	.240	6	.533	14	.109	84	67	67	50	42	43
Montreal (b) .....	.242	.263	.240	6	.529	14	.096	84	66	76	58	39	45
St. Martin (a) .....	.239	.342	.275	9	c. 617	24	.106	87	73	85	70	54	75
St. Martin (b) .....	.223	.321	.241	9	.596	24	.100	86	72	83	61	50	51
Toronto (d) .....	.222	.242	.225	22	.418	14	.106	85	63	77	56	40	50
Wolfville .....	.273	.260	.278	1	.489	24	.066	85	62	82	57	30	45
VERMONT—													
Burlington .....	.240	.250	.260	6	.476	24	.096	83	53	77	58	36	35
MASSACHUSETTS—													
Amherst .....	.246	.304	.267	6	.648	15	.094	91	58	79	54	40	47
Bridgewater (d) .....	.299	.363	.325	16	.992	26	.030	80	50	75	55	■	36
Lawrence (e) .....													
Nantucket .....	.333	.339	.327	3	.543	24	.126	77	64	75	51	36	37
New Bedford .....	.295	.326	.304	10	.577	14	.103	83	64	80	46	39	45
Newburyport .....	.267	.285	.268	9	.482	23	.136	82	55	78	62	34	62
North Attleborough .....	.261	.263	.269	6	.547	25	.059	79	47	76	51	16	36
Princeton .....	.232	.246	.235	6	.473	15	.026	71	54	70	6	20	37
Westfield .....	.228	.259	.296	11	.581	25	.075	86	47	86	56	19	57
Williamstown .....	.230	.307	.266	8	.624	16	.000	83	71	90	■	43	63
Worcester .....	.277	.366	.274	10	.646	25	.064	75	68	71	37	42	43
CONNECTICUT—													
Pomfret .....	.270	.324	.279	6	.621	24	.103	86	69	82	28	40	61
Wallingford .....	.260	.299	.273	6	.601	23	.025	88	52	80	50	23	48
NEW YORK—													
Blackwell's Island .....	.251	.306	.281	6	.530	29	.087	63	58	64	30	31	35
Fordham .....	.275	.293	.287	6	.591	30	.000	78	51	72	41	0	25
McGrawville .....	.227	.277	.264	5	.477	14	f. 115	80	70	75	66	39	37
New York city .....	.278	.320	.287	13	.549	15	.094	74	57	65	41	29	33
Oswego .....	.285	.296	.272	5	.554	25	.000	87	65	81	18	0	38
Ovid .....	.219	.229	.227	22	.426	15	.064	74	52	66	39	23	39
Penn Yan .....		.265		5	c. 496	15	.114		53			31	
Spencertown .....	.214	.286	.258	6	.551	19	.043	83	64	84	12	32	15
NEW JERSEY—													
Bloomfield .....	.292	.303	.288	9	.514	14	.118	85	52	78	41	33	48
PENNSYLVANIA—													
Chromedale .....	.256	.305	.275	■	.593	31	.069	83	56	80	50	31	36
Easton .....	.250	.281	.276	6	.529	31	.087	84	48	75	47	25	46
Lewisburg .....	.211	.249	.244	5	.481	24	.091	81	47	74	49	26	41
Morrisville .....	.325	.348	.393	6	.596	15	.123	90	59	89	52	35	66
Nazareth .....	.252	.358	.245	6	.691	31	.123	84	68	79	59	47	61
Norristown .....	.258	.337	.290	8	.658	25	.120	80	63	77	56	41	50
Philadelphia .....	.267	.302	.284	6	.639	24	.071	75	51	69	46	27	40
MARYLAND—													
Frederick .....	.260	.297	.298	■	.559	16	.052	82	54	76	51	18	52
DISTRICT OF COLUMBIA—													
Washington .....	.293	.330	.357	5	.639	31	.102	85	52	80	43	30	45
VIRGINIA—													
Alexandria .....	.338	.394	.399	11	.727	24	.163	93	64	91	62	18	73
Berryville (d) .....	.336	.546	.471	9	.772	24	.231	94	74	88	83	42	72
NORTH CAROLINA—													
Goldsborough .....	.383	.379	.404	27	.623	31	.109	85	53	85	61	25	48
Murfreesborough .....	.376	.391	.409	4	.608	31	.126	89	61	83	59	34	48
SOUTH CAROLINA—													
All Saints .....	.430	.515	.504	12	g. 758	1	.189	86	70	84	69	33	66
Camden .....	.342	.443	.400	14	.758	31	.193	89	59	87	65	26	63
Charleston, [Dawson] (h) .....													

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to tables of the Smithsonian Institution.

c Same amount on the 10th.

d For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e Mean force of vapor for the month, .374; computed approximately from the mean dew point.

f Same amount on the 25th.

g Same amount on the 14th.

h Mean force of vapor for the month, .487; computed approximately from the mean dew point.

## No. 35.—PSYCHROMETER, OCTOBER, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>SOUTH CAROLINA—Continued.</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Columbia	.268	.364	.313	27	.509	31	.118	64	41	57	40	18	21
Edisto Island	.496	.594	.542	14	.827	2	.136	86	78	84	59	51	21
St. John's (a)	.391	.493	.438	14	.695	31	.218	88	70	82	71	51	68
<b>GEORGIA—</b>													
Savannah	.431	.427	.478	14	.665	31	.126	83	51	78	50	21	48
<b>FLORIDA—</b>													
Jacksonville	.584	.692	.596	7	.918	31	.334	90	80	91	26	45	45
Warrington (a)	.683	.792	.742	12	.983	1	.403	92	87	91	79	66	67
<b>ALABAMA—</b>													
Auburn	.322	.323	.322	10	.551	31	.078	65	38	51	46	19	30
Carlowville	.471	.498	.540	6	.886	16	.127	74	57	71	52	18	19
Greensborough	.366	.388	.349	27	.604	31	.038	63	48	53	36	7	■
<b>MISSISSIPPI—</b>													
Columbus	.384	.409	.427	23	.698	31	.160	85	49	75	62	33	41
Natchez (b)	.396	.664	.569	2	c .868	2	.060	40	96	89	19	77	29
Port Gibson	.382	.561	.457	24	.829	16	.061	68	64	67	25	36	13
<b>TEXAS—</b>													
Austin	.458	.457	.522	11	d .733	1	.032	90	46	84	60	3	53
New Braunfels	.528	.793	.647	5	1.296	17	.186	89	80	88	78	69	74
<b>TENNESSEE—</b>													
Glenwood	.348	.397	.361	24	.900	31	.120	84	52	69	63	22	38
Knoxville	.331	.335	.354	26	.566	31	.111	86	52	79	67	22	42
<b>KENTUCKY—</b>													
Springdale	.292	.396	.379	3	.812	28	.090	92	56	72	66	20	34
<b>OHIO—</b>													
Cincinnati, [Harper]	.313	.484	.359	7	.773	30	.125	80	60	75	63	30	54
Cleveland	.255	.284	.280	22	.553	16	.093	78	51	75	51	29	54
Dayton, [Fisher]	.425	.462	.426	6	.708	4	.203	81	72	72	32	54	62
Germantown, [Groneweg]	.270	.330	.291	7	.605	31	.095	84	52	77	60	23	36
Hillsborough	.310	.340	.311	3	.626	28	.097	90	55	74	62	25	48
Perrysburg (a)	.289	.376	.314	8	.717	1	.100	87	66	78	62	39	53
Portsmouth	.297	.431	.364	11	.800	31	.139	81	64	75	41	40	34
Savannah	.289	.328	.314	22	.626	30	.129	94	60	93	69	27	74
West Bedford	.279	.337	.293	22	.693	30	.101	75	60	73	37	24	44
<b>MICHIGAN—</b>													
Detroit	.299	.358	.308	9	.604	14	.131	86	72	83	55	49	58
Romeo, [Andrews] (a)	.241	.263	.254	22	.525	27	.056	84	53	76	53	15	51
<b>INDIANA—</b>													
New Harmony	.337	.416	.381	3	.846	31	.129	85	56	78	63	22	53
<b>ILLINOIS—</b>													
Manchester (a)	.339	.502	.389	22	.819	31	.108	93	69	87	61	46	64
Peoria	.299	.355	.339	6	.719	31	.092	79	49	70	44	30	36
<b>MISSOURI—</b>													
St. Louis	.354	.399	.358	12	e .648	31	.117	80	52	69	34	26	33
<b>WISCONSIN—</b>													
Appleton	.234	.264	.257	4	.549	31	.073	71	52	70	45	30	32
Waukesha	.196	.255	.220	22	.537	31	.022	59	41	58	25	26	27
<b>IOWA—</b>													
Muscatine	.290	.426	.346	22	.931	31	.067	85	68	84	53	32	51
<b>CALIFORNIA—</b>													
Sacramento	.294	.330	.329	7	.452	21	.142	77	55	70	58	27	38
<b>MEXICO—</b>													
Vera Cruz	.766	.820	.798	7	.962	17	.466	80	74	77	57	58	61
<b>WEST INDIES—</b>													
Port of Spain, Trinidad	.846	.860	.857	24	.963	10	.743	87	72	83	83	55	74
<b>SOUTH AMERICA—</b>													
Catharina Sophia, Surinam	.810	.897	.855	24	.537	11	.255	90	69	75	79	60	65
Colonia Tovar, Venezuela	.408	.461	.418	19	.983	9	.745	87	78	92	53	49	75

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Observations taken mostly in the first half of the month.

c Same amount on the 6th.

d Same amount on the 20th, 4th, and 5th.

e Same amount on the 23d.



## No. 36.—PSYCHROMETER, NOVEMBER, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches	Inches.		Inches.		Inches						
<b>BRITISH AMERICA—</b>													
Montreal (a)-----	.158	.196	.161	4	.427	30	.064	80	85	80	45	51	54
Montreal (b)-----	.150	.184	.160	4	.420	6	c. 059	83	86	87	55	55	64
St. Martin (a)-----	.152	.200	.163	8	.421	29	.071	83	81	83	60	68	67
St. Martin (b)-----	.139	.177	.158	4	.412	11	.000	84	77	87	63	0	73
Toronto (d)-----	.186	.174	.178	4	.353	5	.090	85	68	80	60	49	55
Wolfville-----	.203	.191	.192	5	.564	29	.069	86	71	85	64	43	54
<b>VERMONT--</b>													
Burlington-----	.159	.147	.164	4	.460	10	.003	78	52	75	59	1	15
<b>MASSACHUSETTS—</b>													
Amherst-----	.170	.197	.191	4	.600	10	.084	87	68	79	62	37	53
Bridgewater (d)-----	.177	.216	.223	4	.544	23	.055	86	66	78	57	43	39
Lawrence (e)-----	.220	.226	.224	4	.549	16	.056	74	62	73	59	37	15
Nantucket-----	.196	.210	.222	4	.559	6	.040	81	61	79	52	27	21
New Bedford-----	.159	.190	.219	4	.540	20	.061	80	63	84	51	20	46
Newburyport-----	.172	.184	.184	4	.564	11	.056	76	52	71	45	19	40
North Attleborough-----	.147	.168	.161	4	.538	11	.051	77	61	73	52	29	28
Princeton-----	.152	.178	.186	4	.551	12	.056	78	52	78	45	17	43
Westfield-----	.152	.202	.175	4	.570	14	.000	71	60	68	18	0	10
Worcester-----	.183	.218	.195	4	.596	11	.084	89	69	82	71	46	58
<b>CONNECTICUT--</b>													
Pomfret-----	.175	.194	.188	4	.576	15	.042	82	53	75	46	28	27
Wallingford-----	.135	.195	.159	4	.516	10	.029	53	54	57	20	32	14
<b>NEW YORK—</b>													
Blackwell's Island-----	.201	.216	.202	4	.610	5	.222	71	52	65	51	27	42
New York city-----	.231	.233	.230	2	.378	6	.092	67	66	73	70	32	51
Oswego (f)-----	.159	.171	.172	4	.391	6	.083	72	65	75	49	40	42
Ovid-----	.185	.185	.185	4	.468	19	.088	61	61	61	36	36	36
Penn Yan-----	.179	.176	.175	4	.532	5	.083	73	54	69	45	28	41
Troy (d)-----	.190	.217	.198	4	.663	5	.071	80	56	73	46	27	40
<b>NEW JERSEY--</b>													
Bloomfield-----	.149	.182	.188	25	.298	30	.076	71	63	80	45	28	64
<b>PENNSYLVANIA—</b>													
Berwick (g)-----	.176	.208	.202	4	.624	9	.043	82	55	77	54	29	44
Chromedale-----	.179	.182	.189	4	.571	5	.084	81	49	73	56	25	45
Easton-----	.149	.147	.158	4	.526	5	.075	74	51	67	49	23	30
Lewisburg-----	.254	.254	.254	4	.658	17	.134	62	62	62	37	37	37
Morrisville-----	.184	.248	.195	4	.583	20	h. 123	93	75	89	64	54	70
Nazareth-----	.199	.203	.191	3	.604	19	.025	79	54	69	58	9	33
Norristown-----	.184	.213	.201	4	.635	15	.090	75	51	71	48	0	52
Philadelphia-----	.188	.215	.196	4	.600	5	.104	81	61	75	61	45	43
<b>MARYLAND—</b>													
Frederick-----	.214	.238	.274	4	.626	5	.085	86	58	76	51	24	45
<b>DISTRICT OF COLUMBIA—</b>													
Washington-----	.244	.302	.265	4	.774	10	.123	95	72	87	69	42	61
<b>VIRGINIA—</b>													
Alexandria-----	.301	.302	.324	3	.774	17	.088	82	53	81	43	18	42
<b>NORTH CAROLINA—</b>													
Goldsborough-----	.277	.325	.306	3	.812	10	.016	80	63	77	4	26	49
Murfreesborough-----	.382	.444	.407	3	.870	18	.136	89	70	86	62	34	34
<b>SOUTH CAROLINA—</b>													
All Saints-----	.306	.379	.314	3	.813	18	.123	90	61	47	56	31	51
Camden-----	.399	.411	.385	24	j. 693	13	.000	77	62	80	0	32	60
Charleston, [Dawson] (i)-----	.372	.429	.412	3	.812	16	.136	85	67	82	73	39	63
Edisto Island-----	.366	.418	.408	3	.800	18	.119	79	57	76	51	24	45
St. John's (d)-----													
<b>GEORGIA—</b>													
Savannah-----													

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to tables of the Smithsonian Institution.

c Same amount on the 10th and 15th.

d For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e Mean force of vapor for the month, .300; computed approximately from the mean dew point.

f For the first nine days of the month only.

g For the last 19 days of the month only.

h Same amount on the 17th and 28th.

i Mean force of vapor for the month, .391; computed approximately from the mean dew point.

j Same amount on the 29th.

## No. 36.—PSYCHROMETER, NOVEMBER, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
FLORIDA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Jacksonville.....	.497	.642	.535	3	.877	18	.262	92	84	93	84	50	85
Warrington.....	.590	.701	.632	25	.963	10	.375	93	85	89	82	63	73
ALABAMA—													
Auburn.....	.280	.312	.280	28	.693	17	.095	65	52	58	32	18	28
Carlowville.....	.339	.380	.385	25	.785	■	.066	82	82	77	58	23	51
Greensborough.....	.288	.309	.331	25	.684	17	.105	67	60	66	37	25	36
MISSISSIPPI—													
Columbus.....	.281	.293	.303	25	.647	9	.115	83	55	76	63	27	41
Port Gibson.....	.312	.403	.387	3	.759	15	.131	79	65	79	55	33	62
TEXAS—													
Austin.....	.275	.290	.316	3	.621	9	.068	87	44	79	62	15	38
New Braunfels.....	.321	.528	.374	7	.969	■	.130	86	76	87	78	65	78
TENNESSEE—													
Glenwood.....	.200	.233	.239	25	.545	9	.083	80	55	72	41	24	36
Walnut Grove.....	.193	.299	.216	3	.518	1	.000	87	66	88	■	52	55
KENTUCKY—													
Springdale.....	.175	.232	.230	3	.543	■	.091	85	63	75	31	34	15
OHIO—													
Cincinnati, [Harper].....	.183	.267	.205	3	.536	18	.082	77	62	72	54	32	54
Cleveland.....	.168	.190	.186	3	.452	■	.089	74	63	73	49	34	47
Germanstown, [Groneweg].....	.163	.210	.283	3	.503	10	.085	84	61	79	50	33	40
Hillsborough.....	.201	.236	.215	3	.549	■	.105	92	70	84	53	44	50
Perrysburg (b).....	.177	.228	.203	3	.446	19	.098	81	73	81	51	48	43
Savannah.....	.171	.245	.196	1	.543	10	.068	92	86	94	60	43	63
West Bedford.....	.188	.221	.210	■	.452	1	.000	77	71	77	48	41	■
MICHIGAN—													
Detroit (e).....	.204	.225	.230	3	.407	5	.111	82	74	86	67	47	74
Romeo.....	.165	.175	.176	3	.416	9	.079	81	71	83	61	41	52
INDIANA—													
New Harmony.....	.198	.220	.206	■	.583	24	.071	89	60	78	52	15	45
Richmond.....	.165	.194	.189	■	.514	6	.000?	77	58	72	54	■	40
ILLINOIS—													
Chicago (b).....	.163	.180	.170	21	.335	19	.116	78	70	77	53	53	59
Manchester (b).....	.185	.257	.188	2	.500	8	.075	97	82	97	79	58	70
Peoria.....	.168	.199	.192	2	.500	8	.049	84	66	85	35	31	57
Upper Alton (f).....	.303	.237	.261	3	.456	4	.155	92	83	81	79	71	71
MISSOURI—													
St. Louis.....	.181	.194	.184	2	.500	8	.095	83	60	75	53	33	33
WISCONSIN—													
Appleton.....	.123	.138	.137	21	.248	19	.051	70	61	72	44	39	45
Madison.....	.138	.143	.135	3	.278	8	.008	80	62	71	49	7	43
Waukesha.....	.105	.108	.099	21	.251	18	.006	52	43	48	24	2	18
IOWA—													
Muscatine.....	.143	.191	.155	1	.336	18	.022	83	79	85	27	37	58
CALIFORNIA—													
Sacramento.....	.231	.280	.282	18	.439	2	.126	77	61	79	27	14	40
MEXICO—													
Vera Cruz.....	.658	.701	.701	27	.845	5	.442	76	73	77	55	51	58
WEST INDIES—													
Port of Spain, Trinidad.....	.824	.886	.860	16	.969	5	.745	87	82	86	80	67	75
SOUTH AMERICA—													
Catharina Sophia, Sur'm (b).....	.792	.884	.871	10	1.003	18	.658	91	74	79	55	63	72
Colonia Tovar, Venezuela.....	.394	.483	.381	16	.570	30	.176	89	86	88	71	65	32
AZORES—													
Horta, Fayal.....	.480	.490	.483	14	.600	6	.315	87	78	88	74	61	76

a Same amount on the 8th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 19th.

d Same amount on the 4th.

e For the first 16 days of the month only.

f Four observations only during the month.

g Same amount on the 21st.



## No. 37.—PSYCHROMETER, DECEMBER, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.078	.095	.092	20	.214	18	.016	79	75	84	51	45	54
Montreal (b).....	.067	.085	.084	20	.196	18	.008	79	79	84	64	37	30
St Martin (a).....	.070	.097	.085	12	.227	19	.004	85	81	86	66	60	70
St. Martin (b).....	.058	.086	.071	20	.197	18	.005	81	84	87	23	63	61
Toronto (c).....	.112	.117	.107	11	.232	18	.022	86	79	83	71	62	70
Wolfville.....	.125	.229	.123	24	.316	18	.031	88	77	84	55	40	50
VERMONT—													
Burlington.....	.069	.077	.079	20	.222	18	.000	67	49	63	0	0	0
Norwich (d).....								27	27	27	24	24	23
MASSACHUSETTS—													
Amherst.....	.093	.113	.116	11	.305	19	.031	87	78	85	46	54	68
Bridgewater (c).....	.105	.144	.127	20	.326	18	.012	84	42	81	59	27	46
Lawrence (e).....													
Nantucket.....	.122	.135	.132	14	.316	18	.011	66	62	71	21	36	8
New Bedford.....	.126	.146	.139	11	.329	8	.057	82	73	80	59	51	57
Newburyport.....	.094	.109	.119	20	.322	18	.012	81	68	83	43	25	52
North Attleborough.....	.094	.100	.112	11	.316	18	.024	72	61	71	42	33	50
Princeton.....	.077	.091	.092	20	.316	18	f.000	71	69	74	0	38	28
Westfield.....	.084	.095	.113	14	.194	19	.024	74	63	82	56	32	51
Worcester.....	.085	.105	.112	11	.300	27	.001	61	60	67	5	0	13
CONNECTICUT—													
Pomfret.....	.104	.130	.121	20	.361	18	.035	89	82	86	62	56	70
Wallingford.....	.092	.126	.115	11	.361	18	f.027	80	67	76	42	37	41
NEW YORK—													
Blackwell's Island.....	.115	.145	.131	14	.362	18	.042	73	69	75	35	36	37
Fordham.....	.141	.153	.165	11	.418	21	.000	90	80	95	37	12	70
New York city.....	.136	.156	.147	14	.398	18	.040	76	71	80	54	39	44
Troy.....	.183	.125	.125	20	.309	25	.049	73	66	72	46	39	56
NEW JERSEY—													
Bloomfield (g).....	.107	.159	.141	14	.375	18	.036	71	68	74	47	41	38
PENNSYLVANIA—													
Berwick.....	.105	.137	.117	20	.298	18	.020	70	68	68	32	43	14
Chromedale.....	.119	.137	.127	11	.370	18	.040	77	59	76	44	32	49
Easton.....	.118	.133	.131	14	.352	19	.038	80	64	83	58	34	56
Lewisburg.....	.096	.107	.100	11	.314	18	.033	71	55	66	43	29	44
Morrisville (h).....		.183		14	.433	6	.091		68			40	
Nazareth (e).....	.110	.142	.119	14	.300	18	.045	84	75	82	76	64	62
Norristown.....	.116	.110	.121	11	.309	15	.040	77	52	68	37	21	42
Philadelphia.....	.112	.132	.122	14	.382	18	.025	73	59	71	37	34	45
MARYLAND—													
Frederick.....	.122	.135	.124	11	.311	18	.036	75	63	71	46	31	49
DISTRICT OF COLUMBIA—													
Washington.....	.131	.139	.138	11	.388	23	.039	82	57	75	51	23	43
VIRGINIA—													
Alexandria (i).....	.173	.227	.185	11	.419	8	j.093	84	77	81	63	54	60
Montrose.....	.129	.169	.157	11	.449	1	k.000	81	66	83	12	0	46
NORTH CAROLINA—													
Goldsborough.....	.221	.171	.203	3	.611	23	.050	88	53	76	75	25	42
Murfreesborough.....	.189	.206	.195	11	.570	21	.065	83	62	73	44	36	32
SOUTH CAROLINA—													
All Saints.....	.266	.287	.280	2	.666	23	.042	88	64	83	69	21	46
Camden.....	.188	.230	.202	2	.583	6	.035	84	62	75	51	33	19
Charleston, [Dawson] (l).....													
Edisto Island (c).....	.298	.324	.295	2	.626	9	.113	84	65	83	54	34	49
St. John's (e).....	.228	.264	.249	2	.639	23	.094	83	62	79	63	39	48

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to tables of the Smithsonian Institution.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Dalton's hygroscope used.

e Mean force of vapor for the month, .300; computed approximately from the mean dew point.

f Same amount on the 19th.

g For the first 24 days of the month only.

h Observations interrupted from the 16th to the 28th.

i For the first 16 days of the month only.

j Same amount on the 10th.

k Same amount on the 2d.

l Mean force of vapor for the month, .262; computed approximately from the mean dew point.

## No. 37.—PSYCHROMETER, DECEMBER, 1856.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
GEORGIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Savannah .....	.256	.262	.266	29	.577	23	.030	77	51	70	32	18	26
FLORIDA—													
Jacksonville .....	.345	.477	.368	1	a. 772	1	.002	92	84	88	85	69	0
Warrington .....	.424	.571	.495	2	.870	23	.195	91	83	91	78	62	86
ALABAMA—													
Auburn .....	.178	.196	.196	2	.483	18	.043	64	49	59	28	16	28
Carlowville .....	.221	.287	.275	1	.685	24	.075	80	66	79	45	40	40
Greensborough .....	.194	.240	.225	2	.624	23	.040	65	60	65	35	40	37
MISSISSIPPI—													
Columbus .....	.184	.210	.213	2	.605	22	.070	78	57	74	53	32	37
Port Gibson .....	.252	.335	.308	1	.745	7	b. 123	80	70	80	70	39	46
TEXAS—													
Austin .....	.231	.226	.240	13	.559	21	.042	86	43	71	51	10	23
New Braunfels .....	.257	.398	.303	26	.813	6	c. 123	79	68	84	77	32	77
TENNESSEE—													
Glenwood .....	.169	.171	.181	2	.564	22	.056	83	60	79	46	29	34
KENTUCKY—													
Springdale .....	.104	.150	.155	2	.516	16	d. 000	67	71	77	0	34	46
OHIO—													
Cincinnati, [Harper] .....	.116	.157	.123	19	.282	22	.034	79	73	67	58	41	31
Germantown, [Groneweg] ..	.107	.115	.128	2	.405	22	.034	70	69	85	41	40	59
Hillsborough .....	.131	.158	.147	2	.518	22	.040	97	88	94	73	61	71
Perrysburg (e) .....	.108	.141	.116	11	.309	22	.043	89	84	84	76	67	50
Savannah .....	.111	.139	.117	28	.216	22	.035	97	92	97	66	55	59
West Bedford .....	.097	.113	.099	2	.361	15	.025	73	71	70	27	19	29
MICHIGAN—													
Copper Falls Mines .....								45	38	42	22	0	2
Romeo .....	.098	.105	.099	14	.216	18	.038	91	77	90	66	53	72
INDIANA—													
New Harmony .....	.135	.175	.172	2	.570	23	.048	89	73	90	62	49	56
Richmond .....	.104	.107	.124	2	.257	22	.034	79	61	73	43	28	49
ILLINOIS—													
Chicago .....	.088	.097	.093	11	.229	22	.026	83	78	82	69	60	59
Manchester (e) .....	.117	.152	.134	19	.335	22	.042	99	86	99	80	68	79
Peoria .....	.099	.121	.107	27	.275	22	.025	83	71	70	49	32	51
MISSOURI—													
St. Louis .....	.133	.173	.146	11	.403	21	.045	91	82	86	65	46	54
WISCONSIN—													
Appleton .....	.060	.080	.072	11	.170	26	.006	62	60	68	12	26	43
Madison, [Sterling] (e) .....	.074	.086	.086	19	.196	14	.006	61	62	57	12	28	12
Waukesha .....	.063	.078	.068	19	.183	7	f. 013	52	65	67	42	36	34
IOWA—													
Muscatine .....	.077	.107	.081	19	.235	21	.009	82	85	81	26	49	21
CALIFORNIA—													
Sacramento .....	.198	.230	.229	24	.388	5	.139	82	80	80	70	32	58
MEXICO—													
Vera Cruz .....	.657	.641	.668	1	.836	6	.482	80	75	81	76	68	56
WEST INDIES—													
Port of Spain, Trinidad ....	.807	.835	.818	5	.940	23	.673	88	77	84	79	50	74
SOUTH AMERICA—													
Catharina Sophia, Surinam (e)	.806	.861	.847	10	.950	3	g. 720	92	75	80	86	56	72
AZORES—													
Horta, Fayal .....	.408	.421	.405	1	.593	9	.282	85	79	83	72	65	63

a Same amount on the 2d.  
b Same amount on the 21st.  
c Same amount on the 14th.  
d Same amount on the 23d.

e For changes in hours of observation, &c., see table of the thermometer for this month.  
f Same amount on the 8th.  
g Same amount on the 7th and 14th.



## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal.....	19	13	0	2	1	15	15	28	0	93	0	7	0	0	0	11	36	3	57	
Red River Settlement.....	27	0	0	0	30	19	8	7	1	92	8	0	0	0	6	15	3	13	45	
St. Martin.....	0	25	0	1	0	46	3	16	2	93	—	—	—	—	—	—	—	—	—	
Toronto (a).....	10	11	2	3	0	37	—	21	7	93	—	—	—	—	—	—	—	—	—	
Wolfville.....	2	3	10	1	0	9	16	34	14	89	1	2	10	0	0	10	16	26	65	
MAINE—																				
Carmel.....	2	8	2	1	0	4	9	37	14	77	0	7	1	2	0	5	6	3	24	
Fryeburg.....	4	17	1	2	3	16	7	12	0	62	2	1	0	0	0	4	3	17	27	
Gardiner.....	1	24	1	6	0	19	5	28	9	93	1	0	0	0	0	12	2	—	21	
Perry.....	4	14	1	2	0	8	8	56	0	93	2	12	1	0	3	8	8	16	50	
Portland.....	25	13	0	1	0	7	25	22	0	93	5	3	0	3	0	2	7	14	34	
Steuben.....	6	34	0	1	0	18	2	29	3	93	3	4	2	0	0	10	21	8	48	
Windham.....	2	22	0	7	2	8	1	22	29	93	0	2	0	2	1	1	0	0	6	
NEW HAMPSHIRE—																				
Concord.....	2	13	0	0	0	10	0	68	0	93	—	—	—	—	—	—	—	—	—	
Londonderry.....	2	7	0	1	0	1	4	45	33	93	1	1	0	0	0	2	2	5	11	
Manchester.....	5	12	0	1	4	3	37	30	0	92	5	13	0	0	2	3	32	1	56	
Stratford.....	33	0	12	0	11	0	94	0	0	150	—	—	—	—	—	—	—	—	—	
VERMONT—																				
Brandon.....	31	0	3	1	20	8	4	8	16	91	2	0	0	1	0	3	8	13	27	
Burlington.....	28	10	2	1	40	4	3	5	0	93	—	—	—	—	—	—	—	—	—	
Craftsbury.....	8	8	4	7	24	11	14	17	0	93	5	6	2	0	10	10	17	12	63	
MASSACHUSETTS—																				
Amherst.....	7	3	2	16	0	6	1	54	3	92	0	1	0	0	0	1	2	10	14	
Boston (a).....	1	2	0	0	0	7	2	15	4	31	—	—	—	—	—	—	—	—	—	
Mendon.....	0	18	1	0	0	36	2	36	0	93	2	16	1	0	0	37	3	34	93	
Nantucket.....	4	9	3	1	0	6	8	54	8	93	—	—	—	—	—	—	—	—	—	
New Bedford.....	4	13	2	0	1	11	13	49	0	93	1	0	1	0	0	1	5	1	0	
Newburyport.....	11	5	1	0	1	9	29	33	0	89	—	—	—	—	—	—	—	—	—	
North Attleborough.....	24	0	1	0	5	11	24	28	0	93	15	1	1	0	1	6	19	17	60	
Princeton.....	2	17	7	1	0	0	47	19	0	93	2	1	0	0	0	0	17	7	27	
Richmond.....	0	17	0	5	1	6	0	64	0	93	1	15	0	3	0	10	0	37	66	
Southwick.....	0	17	0	0	0	6	1	11	8	43	0	0	0	0	0	2	1	4	7	
Springfield.....	11	7	0	0	3	5	0	25	42	93	6	3	0	0	0	2	0	15	26	
Westfield.....	10	5	8	4	2	4	22	33	0	88	—	—	—	—	—	—	—	—	—	
Williamstown.....	1	1	10	7	0	12	24	24	12	91	0	0	0	0	0	1	8	12	21	
Worcester.....	24	8	0	2	4	12	21	22	0	93	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Acquidneset.....	5	9	0	2	0	3	3	19	0	41	—	—	—	—	—	—	—	—	—	
Providence (a).....	5	11	0	0	2	7	9	58	1	93	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
New London.....	17	6	1	1	1	17	10	40	0	93	—	—	—	—	—	—	—	—	—	
Pomfret.....	6	15	1	0	0	10	9	52	0	93	5	11	1	0	1	12	4	22	56	
Saybrook.....	18	13	3	0	0	0	25	31	2	92	0	2	1	0	1	1	11	17	33	
NEW YORK—																				
Angelica.....	0	1	0	12	2	38	24	16	0	93	0	0	0	1	0	36	31	2	70	
Baldwinsville.....	4	3	10	7	1	0	6	61	0	92	1	0	0	0	0	0	17	52	70	
Beverly.....	3	26	0	0	0	31	2	25	0	87	0	7	0	7	1	21	5	14	55	
Blackwell's Island.....	31	13	1	1	0	7	15	25	0	93	22	9	1	1	0	3	13	24	73	
Canton.....	0	17	0	0	3	39	8	15	8	90	0	14	0	0	1	31	6	9	61	
Clinton.....	4	0	14	0	0	4	67	3	0	92	—	—	—	—	—	—	—	—	—	
Fishkill Landing.....	5	36	0	2	0	32	2	5	5	87	—	—	—	—	—	—	—	—	—	
Flatbush.....	8	15	5	1	0	2	28	34	0	93	0	3	0	2	1	4	10	11	31	
Geneva.....	1	4	5	0	18	21	18	12	14	93	0	0	1	0	1	0	12	2	16	
Homer.....	13	1	5	10	16	8	19	20	0	92	—	—	—	—	—	—	—	—	—	
Liberty.....	14	3	6	9	1	2	32	26	0	93	—	—	—	—	—	—	—	—	—	
Lodi.....	3	1	1	15	2	13	23	31	4	93	1	0	0	0	0	1	13	6	21	
Morrisania.....	16	9	3	0	0	12	24	29	0	93	—	—	—	—	—	—	—	—	—	
New York city.....	4	19	0	0	0	3	19	48	0	93	1	9	0	0	0	4	39	14	67	
Ogdensburg.....	3	4	2	1	2	10	2	7	0	31	—	—	—	—	—	—	—	—	—	

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
New York—Continued.																				
Oswego.....	12	5	4	7	14	20	24	0	1	93										
Ovid.....	8	4	4	8	7	10	37	15	0	93	7	2	4	8	5	13	27	23	89	
Penn Yan (a).....	10	15	0	1	15	35	14	3	0	93										
Plattsburg.....	49	3	0	0	22	7	3	0	0	93	47	3	0	0	22	2	1	2	77	
Rochester, [Harkness].....	4	0	4	5	1	19	20	4	36	93										
Rochester, [Pratt].....	8	0	0	2	39	21	2	0	0	93	4	2	0	0	1	0	8	2	17	
Sag Harbor.....	2	17	0	2	2	25	0	37	0	93	0	5	0	3	1	22	13	12	56	
Smithville.....	10	13	0	4	8	17	29	6	0	95	0	0	0	0	3	26	33	2	82	
Spencertown.....	18	6	0	3	1	20	4	41	0	93	7	0	0	2	0	8	13	21	51	
Wampsville.....	0	0	16	11	1	5	60	0	0	93	0	0	16	10	3	3	56	0	88	
Watertown.....	3	58	0	0	1	27	0	1	0	93	2	37	0	0	1	27	1	2	70	
New Jersey—																				
Bloomfield.....	2	15	0	0	0	17	14	39	0	87										
Burlington.....	0	12	0	0	0	8	40	5	11	93	0	2	3	0	0	0	0	0	5	
Lambertville.....	1	15	1	0	0	0	3	55	0	84										
Newark (a).....	8	9	0	0	0	7	16	21	1	62										
Pennsylvania—																				
Bedford.....	0	0	0	4	0	15	0	56	0	75	0	0	0	0	0	10	0	35	49	
Berwick.....	0	1	9	3	1	0	56	1	5	76										
Cannonsburg.....	0	0	7	0	0	0	18	2	4	31										
Carlisle.....	0	10	0	1	0	11	13	42	15	92	1	0	0	0	0	0	6	21	31	
Chromedale.....	10	19	0	0	1	0	3	40	19	92	1	2	0	0	0	0	24	10	37	
Easton.....	4	3	0	2	0	1	6	15	13	44	0	0	0	0	0	0	2	1	3	
Gettysburg.....	6	17	1	2	1	14	13	32	7	93	0	0	0	0	0	4	21	18	43	
Harrisburg (a).....	1	7	3	1	0	0	6	55	0	73	0	0	0	0	0	0	1	23	24	
Meadville.....	1	0	0	5	5	17	4	15	46	93	4	0	0	0	0	11	10	13	32	
Morrisville.....	2	17	0	0	1	0	25	35	7	93	6	9	0	1	0	3	28	13	60	
Moss Grove.....	7	1	10	0	7	29	30	5	2	91	1	0	0	0	0	10	53	0	70	
Nazareth.....	13	17	0	2	0	11	25	25	0	93	5	1	0	0	0	3	13	9	31	
Norristown.....	1	6	8	1	0	4	34	29	0	83	0	0	4	0	0	6	41	0	57	
Philadelphia.....	4	14	0	1	1	0	38	26	0	93	0	0	0	0	0	0	4	3	7	
Pittsburg.....	0	1	0	0	0	3	0	0	0	4										
Pocopson.....	7	11	0	0	1	7	45	17	0	91	1	0	0	0	0	0	3	0	4	
Randolph.....	0	0	2	11	2	6	8	5	5	39	0	0	0	0	0	1	4	2	7	
Troy Hill.....	4	12	11	4	2	19	23	8	0	83										
West Haverford.....	2	9	3	1	0	5	4	22	16	62	2	1	0	0	0	1	2	13	19	
Delaware—																				
Newark.....	9	4	0	0	0	0	9	17	0	39										
Maryland—																				
Annapolis.....	2	20	0	3	0	9	10	40	8	92	0	0	0	0	0	0	2	3	5	
Bladensburg (a).....	2	11	0	0	0	5	0	19	0	37										
Chestertown.....	1	8	5	2	1	5	14	23	0	59	0	0	0	0	0	3	7	1	11	
Frederick.....	11	10	2	1	3	8	30	18	0	92	1	0	0	0	0	2	17	13	33	
Sykesville.....	5	4	4	7	3	8	51	11	0	93	1	3	8	1	3	0	50	2	68	
District of Columbia—																				
Washington.....	2	10	2	1	0	7	20	37	14	93										
Virginia—																				
Alexandria.....	9	13	3	2	9	11	9	37	0	93										
Berryville (a).....	4	3	3	3	4	7	25	27	23	99	1	0	0	0	1	11	27	6	46	
Buffalo.....	15	0	0	4	9	12	0	3	0	43	0	0	0	0	1	0	15	0	16	
Crichton's Store (a).....	31	0	1	0	8	17	11	3	6	77	16	0	0	0	0	23	11	0	50	
Garysville (a).....	0	5	0	1	2	21	7	10	0	52										
Huntersville.....	0	0	3	4	3	13	49	3	0	75	1	0	1	7	3	9	32	4	57	
Kanawha (a).....	0	1	0	0	0	8	0	27	26	62										
Lewisburg.....	1	0	0	0	0	0	0	1	0	4	1	0	0	0	0	0	13	1	15	
Trout Run Valley.....	8	5	1	1	0	8	0	7	0	39	14	27	1	0	3	0	1	5	51	
Winchester.....	0	0	0	0	0	0	15	10	68	0	0	0	0	0	0	0	6	3	9	
North Carolina—																				
Chapel Hill.....	14	5	0	0	1	10	33	30	0	93	3	1	0	0	0	26	5	3	38	
Goldsborough.....	18	15	0	1	6	25	10	13	3	91	9	10	0	0	0	8	4	1	32	

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NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
SOUTH CAROLINA—																				
All Saints .....	23	10	3	3	3	27	19	5	0	93	7	3	0	0	0	16	18	4	48	
Camden .....	12	20	0	0	1	1	14	37	1	93	2	8	0	0	0	10	21	10	51	
Charleston, [Johnson] ..	5	9	0	2	0	1	1	18	0	36										
Charleston, [Dawson] (a) ..	2	20	0	4	1	8	5	21	0	64										
St. John's .....	1	19	1	1	0	10	0	0	30	62										
GEORGIA—																				
Savannah .....	18	9	2	2	9	2	27	24	0	93	0	0	0	0	0	4	0	0	4	
Sparta .....	0	22	1	3	1	8	15	41	0	91	1	6	1	0	0	2	15	14	39	
Thomaston .....	0	7	0	1	0	0	0	24	0	32										
Whitemarsh Island .....	13	18	0	1	3	1	10	24	23	93	2	5	0	1	1	5	13	9	36	
Zebulon .....	2	6	11	0	0	0	12	9	0	40										
FLORIDA—																				
Atsena .....	22	27	2	3	4	2	5	22	6	93	6	17	1	2	2	3	3	21	55	
Jacksonville .....	7	16	0	4	4	7	10	45	0	93	3	13	0	4	0	16	18	7	61	
Salt Ponds .....	23	16	7	7	2	2	0	5	0	62										
Warrington (a) .....	9	38	2	1	1	2	7	23	3	86	2	10	1	0	0	13	4	8	38	
ALABAMA—																				
Auburn .....	6	10	8	11	1	10	17	30	0	93	0	13	6	6	0	0	13	14	58	
Greene Springs (a) .....	8	2	7	2	1	2	4	10	0	36	3	0	3	4	0	0	1	6	17	
MISSISSIPPI—																				
Oxford .....	11	13	9	8	2	19	6	24	1	93	0	0	1	3	1	18	14	7	44	
Port Gibson .....	7	0	0	0	0	0	0	0	0	7										
LOUISIANA—																				
New Orleans (a) .....	0	63	0	4	0	5	0	21	0	93										
TEXAS—																				
Austin .....	27	13	0	14	1	10	4	24	0	93	9	2	1	8	1	24	10	13	68	
New Wied .....	36	6	9	3	10	2	0	4	22	92	0	0	0	0	1	0	1	0	2	
Pin Oak (a) .....	10	7	0	6	2	2	0	4	0	31										
Washington .....	24	0	0	0	7	0	0	0	0	31										
TENNESSEE—																				
Glenwood .....	34	7	1	4	6	7	6	19	9	93	5	0	1	0	0	6	11	21	44	
KENTUCKY—																				
Danville .....	6	9	6	1	3	24	26	18	0	93	1	0	1	1	0	13	19	6	41	
Millersburg .....	9	0	15	1	5	5	19	18	0	72										
Paris .....	4	15	0	6	1	21	36	10	0	93	1	0	1	0	2	3	10	1	18	
Springdale .....	5	5	3	4	4	23	11	9	29	93										
Ballardsville .....	10	0	0	1	4	26	27	25	0	93										
OHIO—																				
Bellefontaine .....	5	13	4	8	5	25	25	6	0	91	5	6	0	2	3	26	19	12	73	
Cheviot (a) .....	0	11	0	8	0	39	3	11	21	93										
Cincinnati, [Harper] .....	13	2	0	0	0	30	35	7	0	93										
Cincinnati, [Telegraph] (a) ..	2	2	2	0	0	5	3	6	11	31										
Cleveland .....	8	8	3	6	27	20	8	13	0	93	4	0	0	1	0	9	16	8	38	
College Hill .....	9	7	1	2	1	5	20	32	16	93	1	1	0	0	1	1	1	4	9	
Dayton, [Cooper F. Sem.] ..	0	5	1	0	0	12	2	4	7	31										
Gallipolis .....	10	2	2	1	3	7	3	7	0	35										
Germantown, [Groneweg] ..	12	11	0	25	4	29	0	10	0	91	4	9	0	6	1	37	0	11	68	
Granville (a) .....	0	5	0	0	0	10	18	0	32	65	1	0	0	0	0	2	5	0	2	
Hillsborough .....	2	13	0	5	1	29	1	11	0	62	0	0	0	0	0	3	0	0	3	
Hiram .....	6	7	4	8	7	29	11	8	13	93	2	3	2	8	5	24	9	8	61	
Oberlin .....	1	8	1	13	8	28	18	11	0	88	4	0	1	0	3	4	22	7	41	
Portsmouth (a) .....	7	16	13	12	15	17	7	6	0	93	0	4	34	15	0	0	0	0	53	
Savannah .....	7	7	0	11	0	16	0	52	0	93	4	9	0	9	0	12	0	31	65	
Unionville .....	6	10	4	3	4	44	7	4	11	93	4	0	2	1	3	43	17	15	85	
Urbana .....	1	7	2	4	3	26	10	12	3	68	2	4	0	0	0	5	21	8	40	
MICHIGAN—																				
Ann Arbor, [Winchell] ..	0	0	0	0	0	8	0	0	0	8										
Ann Arbor, [Woodruff] ..	5	14	1	5	3	27	14	11	12	92	2	6	0	0	0	9	24	14	55	
Battle Creek .....	2	6	15	7	5	17	27	5	8	93	4	6	3	1	0	12	45	8	79	

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MICHIGAN—Continued.																			
Grand Rapids .....	1	23	1	3	0	25	16	5	19	0	4	0	0	0	0	0	4	1	9
Monroe, [Whelpley] .....	16	13	3	1	1	13	11	35	0	93	16	11	3	2	1	13	11	34	91
Romeo (a) .....	10	10	3	4	2	28	13	19	2	91	8	4	1	5	1	7	10	4	40
St. James .....	2	4	2	3	7	22	18	22	8	88	1	0	1	2	0	8	18	3	33
Saugatuck .....	6	11	16	9	2	9	32	8	0	93	11	11	5	0	1	24	64	8	125
INDIANA—																			
New Harmony .....	5	1	8	6	7	8	10	17	0	62									
ILLINOIS—																			
Athens .....	2	10	2	7	5	23	12	24	0	85	0	1	0	0	0	9	3	11	24
Augusta .....	4	6	8	5	5	15	29	21	0	93	2	0	2	1	1	2	3	1	12
Brighton (a) .....	3	11	0	3	3	16	4	22	0	62									
Manchester (a) .....	9	8	0	1	4	12	43	16	0	93	1	0	0	0	1	8	13	5	28
Ottawa (a) .....	8	13	3	2	2	10	30	13	2	83	0	0	0	0	0	0	0	1	1
Peoria .....	2	2	1	3	4	8	6	5	0	31									
Upper Alton .....	6	18	0	0	2	12	29	29	0	96									
MISSOURI—																			
St. Louis .....	2	8	6	12	2	21	28	14	0	93									
WISCONSIN—																			
Appleton .....	3	15	0	0	0	48	6	21	0	93									
Beloit .....	10	3	2	3	7	11	12	45	0	93	0	0	0	0	0	1	0	3	4
Janesville .....	17	11	0	2	8	16	20	12	7	93									
Kenosha .....	5	5	7	0	1	9	38	17	8	90									
Milwaukee, [Winkler] .....										93	6	8	4	0	0	20	27	28	93
Platteville .....	15	0	4	3	7	8	32	15	0	93	14	2	4	1	1	8	13	10	60
Racine, [Seymour] .....	3	3	2	1	1	5	13	3	0	31									
Superior .....	9	8	0	1	4	33	9	10	0	74	0	8	0	1	4	31	0	11	73
IOWA—																			
Dubuque .....	25	5	0	1	0	4	8	19	20	91	1	2	1	1	1	2	1	3	12
Fort Madison (a) .....	3	14	0	7	5	19	1	44	0	93	0	0	6	1	0	10	19	4	48
Muscataine .....	0	11	0	16	1	21	2	42	0	93	0	0	0	0	0	3	2	0	5
Pella .....	5	7	0	6	16	5	29	25	0	93									
Pleasant Plain .....	50	7	15	6	20	17	48	23	0	186									
Poultney .....	5	13	0	6	5	19	17	15	10	90	0	0	0	0	0	1	1	4	5
Quasqueton .....	2	7	0	10	2	9	5	39	2	76									
MINNESOTA TERRITORY—																			
Hazlewood .....	10	0	0	1	13	7	14	45	0	90	2	0	0	1	4	0	12	2	21
CALIFORNIA—																			
Sacramento .....	14	19	3	16	1	4	0	36	0	93	4	2	1	12	1	5	4	10	39
Stockton, (a) .....	0	0	0	10	3	6	0	19	0	38									
San Francisco (a) .....	3	0	0	6	4	2	6	1	14	36	2	0	0	5	4	0	0	2	28
MEXICO—																			
Mexico city (a) .....	1	0	6	6	0	16	11	1	5	52	1	0	0	1	2	1	1	0	0
WEST INDIES—																			
Up Park Camp, Jamaica.	8	5	0	33	1	2	0	0	0	54									

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BRITISH AMERICA—																				
Montreal .....	3	4	0	13	6	14	20	27	0	87	1	0	0	0	1	11	40	8	61	
Red River Settlement .....	16	0	0	1	22	9	21	14	0	83	4	0	0	0	4	8	18	25	59	
St. John's (a) .....	0	2	0	0	10	13	6	11	0	42	—	—	—	—	—	—	—	—	—	
St. Martin .....	0	10	0	8	4	43	8	14	0	87	—	—	—	—	—	—	—	—	—	
Toronto (a) .....	3	6	1	2	0	36	8	29	0	87	—	—	—	—	—	—	—	—	—	
Wolfville .....	0	1	4	5	1	8	38	22	8	87	1	1	3	5	1	8	30	17	66	
MAINE—																				
Carmel .....	0	4	0	9	0	2	14	42	12	83	0	4	0	5	0	8	17	36	36	
Fryeburg .....	4	2	4	3	1	5	9	28	0	56	2	0	0	0	0	3	5	24	34	
Gardiner .....	1	16	0	3	1	12	7	41	5	86	1	0	0	0	0	5	5	13	24	
Perry .....	0	1	0	8	5	11	7	55	0	87	6	1	0	2	10	7	5	10	41	
Portland .....	5	11	0	1	3	6	33	28	0	87	2	0	0	0	0	4	12	5	23	
Steuben .....	0	17	1	0	1	18	14	32	4	87	2	3	0	0	0	10	13	12	40	
Windham .....	2	7	0	4	1	7	7	45	14	87	0	0	0	0	0	1	0	1	2	
NEW HAMPSHIRE—																				
Concord .....	9	5	0	3	0	13	0	57	0	87	—	—	—	—	—	—	—	—	—	
Londonderry .....	0	0	1	1	2	2	2	41	38	87	—	—	—	—	—	—	—	—	—	
Stratford .....	0	1	2	0	2	8	14	8	0	35	0	0	0	0	0	0	1	17	27	
VERMONT—																				
Brandon .....	15	0	4	3	25	0	13	13	14	87	0	0	0	0	0	2	8	19	29	
Burlington .....	16	5	1	6	18	6	29	6	0	87	0	0	0	0	0	2	5	0	7	
Craftsbury .....	4	2	1	3	23	9	10	35	0	87	1	0	0	0	0	0	15	13	29	
MASSACHUSETTS—																				
Amherst .....	1	1	0	19	2	8	3	50	0	84	0	0	0	0	0	4	2	21	27	
Boston .....	0	2	2	4	0	33	60	73	0	174	—	—	—	—	—	—	—	—	—	
Mendon .....	1	0	0	0	0	39	3	44	0	87	1	1	0	0	0	38	3	44	87	
Nantucket .....	4	2	1	1	4	8	13	52	2	87	—	—	—	—	—	—	—	—	—	
New Bedford .....	2	2	0	1	5	14	10	51	1	86	0	1	0	0	0	1	7	4	13	
Newburyport .....	5	3	2	2	9	4	34	18	0	77	0	0	0	0	0	6	1	0	7	
North Attleborough .....	6	0	0	2	10	6	36	27	0	87	1	0	0	2	6	7	17	19	52	
Princeton .....	0	5	1	3	1	8	38	31	0	87	0	1	0	3	1	2	20	16	43	
Richmond .....	0	3	0	8	0	26	0	48	0	85	0	1	0	6	0	24	0	33	64	
Southwick .....	2	2	0	0	1	4	3	17	0	29	0	0	0	0	0	1	5	0	12	
Springfield .....	1	1	0	1	0	5	0	43	36	87	1	0	0	1	0	4	1	25	32	
Westfield .....	0	2	4	11	2	6	43	16	0	84	—	—	—	—	—	—	—	—	—	
Williamstown .....	0	1	3	6	2	12	36	23	4	87	0	0	0	0	0	5	14	23	42	
Worcester .....	10	0	0	0	4	11	47	15	0	87	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Acquidnetset (a) .....	0	8	0	1	3	4	5	22	0	41	—	—	—	—	—	—	—	—	—	
Providence (a) .....	4	3	0	1	5	15	0	49	2	85	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
New London .....	5	1	0	1	0	22	16	42	0	87	0	0	1	2	0	0	0	0	3	
Norwich (a) .....	0	0	0	3	2	4	14	26	13	62	0	0	0	0	0	0	1	1	2	
Pomfret .....	4	2	1	2	6	12	3	57	0	87	3	1	1	2	4	13	5	28	57	
Saybrook .....	10	1	3	2	2	6	28	25	8	85	1	0	1	0	1	1	20	13	37	
NEW YORK—																				
Angelica .....	2	6	4	6	0	22	37	7	0	84	0	0	0	1	1	21	23	1	47	
Baldwinsville .....	1	0	7	4	0	6	19	48	0	85	0	0	0	0	0	2	22	48	72	
Beverly .....	3	8	0	10	2	25	6	23	1	78	0	3	0	3	1	22	12	10	51	
Blackwell's Island .....	12	4	0	2	5	21	22	21	0	87	10	2	0	1	4	19	20	19	75	
Canton .....	3	4	0	3	0	65	1	11	0	87	3	2	0	1	0	48	2	8	64	
Clinton .....	0	0	1	1	10	6	69	0	0	87	—	—	—	—	—	—	—	—	—	
Fishkill Landing .....	3	16	0	10	8	22	5	21	2	87	0	0	1	0	1	0	0	0	2	
Flatbush .....	6	5	0	2	3	11	34	26	0	87	0	0	0	0	1	4	16	16	37	
Geneva .....	1	0	2	1	24	15	32	2	9	86	0	0	0	0	0	6	24	6	36	
Homer .....	7	1	1	9	21	0	31	17	0	87	—	—	—	—	—	—	—	—	—	
Liberty .....	2	1	3	4	6	5	20	46	0	87	1	3	5	9	0	0	0	1	19	
Lodi .....	2	2	1	10	6	12	34	16	4	87	0	0	0	0	0	1	20	4	25	
Madrid (a) .....	0	6	1	0	0	14	17	14	4	56	0	2	0	0	0	12	9	10	33	
Morrisania .....	12	3	1	1	8	12	30	20	0	87	—	—	—	—	—	—	—	—	—	

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NEW YORK—Continued.																			
New York city.....	2	6	3	1	0	3	32	40	0	87	0	0	4	0	0	3	38	12	57
Ogdensburg.....	3	0	1	1	3	12	7	2	0	29	—	—	—	—	—	—	—	—	—
Oswego.....	7	3	2	3	18	17	29	0	8	87	—	—	—	—	—	—	—	—	—
Ovid.....	3	2	3	1	17	11	41	9	0	87	3	1	2	1	14	0	36	9	75
Penn Yan (a).....	0	4	0	0	15	40	19	9	0	87	—	—	—	—	—	—	—	—	—
Plattsburg.....	18	0	0	0	28	10	6	25	0	87	13	0	0	0	25	4	3	18	63
Rochester, [Harkness].....	1	0	0	1	2	9	31	8	35	87	—	—	—	—	—	—	—	—	—
Rochester, [Pratt].....	2	1	1	1	9	45	21	7	0	87	0	0	0	0	0	2	12	6	20
Sag Harbor.....	4	2	0	4	7	18	30	22	0	87	0	0	0	0	1	20	30	7	58
Smithville.....	1	5	1	1	30	14	30	5	0	87	7	0	0	0	0	11	50	0	74
Spencertown.....	5	2	0	0	14	13	0	47	0	87	0	0	0	0	0	5	11	45	61
Wampsville.....	0	1	4	1	12	6	63	0	0	87	0	1	4	1	11	0	59	1	83
Watertown.....	0	32	0	0	0	53	0	2	0	87	0	24	0	0	0	47	0	0	71
NEW JERSEY—																			
Bloomfield.....	4	6	0	0	2	50	5	20	0	87	—	—	—	—	—	—	—	—	—
Burlington.....	1	6	3	1	2	12	47	4	11	87	0	1	3	0	0	3	4	0	11
Lambertville.....	0	6	0	5	3	13	4	42	0	73	—	—	—	—	—	—	—	—	—
Newark (a).....	4	0	0	0	1	24	12	14	0	58	—	—	—	—	—	—	—	—	—
PENNSYLVANIA—																			
Bedford.....	0	0	0	3	2	23	3	44	0	75	0	0	0	3	2	23	3	28	59
Cannonsburg.....	1	0	8	0	0	4	18	2	0	33	—	—	—	—	—	—	—	—	—
Carlisle.....	0	8	2	2	0	15	16	29	14	86	0	0	1	0	0	11	12	10	34
Chromedale.....	2	9	1	7	3	6	5	35	19	87	0	0	0	0	1	6	21	15	43
Easton.....	2	3	3	3	0	1	37	25	10	84	0	1	0	0	0	2	16	7	26
Gettysburg.....	7	8	2	1	4	14	27	16	8	87	0	0	0	0	0	2	31	13	46
Harrisburg.....	0	0	0	19	0	0	8	43	0	80	0	0	0	3	4	0	3	14	24
Lewisburg (a).....	3	2	4	7	1	15	15	29	11	87	0	0	0	0	0	8	21	19	48
Meadville.....	0	0	0	1	18	14	4	15	34	86	0	0	0	0	1	10	26	7	44
Morrisville.....	2	9	1	0	0	13	25	31	6	87	1	2	1	0	0	8	24	15	51
Moss Grove.....	0	1	5	1	13	17	29	18	0	84	0	1	1	0	0	7	45	11	65
Nazareth.....	5	5	1	0	0	18	42	16	0	87	3	0	0	0	1	2	11	15	32
Norristown.....	0	3	0	2	2	0	48	12	0	75	0	0	8	0	0	4	43	0	55
North Whitehall.....	0	0	0	0	0	0	3	6	0	0	—	—	—	—	—	—	—	—	—
Philadelphia.....	2	0	1	3	0	30	27	18	0	87	0	0	0	0	0	4	9	2	15
Pocopson.....	1	3	0	1	3	17	33	23	0	81	0	0	0	0	0	3	4	2	0
Troy Hill.....	8	10	3	2	11	13	20	13	0	80	—	—	—	—	—	—	—	—	—
West Haverford.....	1	0	2	1	3	11	9	13	18	58	2	0	0	0	0	2	13	13	30
DELAWARE—																			
Newark.....	10	3	1	0	0	6	21	9	0	50	—	—	—	—	—	—	—	—	—
MARYLAND—																			
Annapolis (a).....	3	5	3	14	2	7	9	39	4	86	0	0	0	0	0	1	3	4	0
Bladensburg (a).....	0	3	2	1	1	6	2	20	0	35	—	—	—	—	—	—	—	—	—
Chestertown.....	0	2	2	0	1	6	6	18	41	76	1	0	0	0	0	2	4	1	8
Frederick.....	2	14	2	2	4	20	16	18	7	85	0	0	0	0	1	4	30	5	40
Sykesville.....	1	4	0	7	1	29	37	8	0	87	0	0	3	2	0	3	56	0	64
DISTRICT OF COLUMBIA—																			
Washington.....	0	7	6	2	1	25	25	15	0	87	—	—	—	—	—	—	—	—	—
VIRGINIA—																			
Alexandria.....	10	15	0	1	15	12	6	28	0	87	—	—	—	—	—	—	—	—	—
Buffalo.....	5	1	0	0	4	21	2	8	46	87	1	0	0	0	0	9	23	1	34
Berryville (a).....	3	0	1	8	0	4	15	16	0	47	0	0	0	0	3	6	11	0	20
Orrington's Store (a).....	22	2	1	2	16	20	11	13	0	87	0	0	0	0	0	38	14	0	52
Garysville.....	2	6	4	2	0	12	10	8	4	48	—	—	—	—	—	—	—	—	—
Huntersville.....	0	2	7	7	3	11	54	3	0	87	1	5	3	5	4	17	35	2	72
Kanawha (a).....	0	0	0	0	0	4	0	14	11	29	—	—	—	—	—	—	—	—	—
Lewisburg.....	0	0	0	0	0	2	3	0	0	5	0	0	0	0	0	0	16	2	18
Trout Run Valley.....	15	17	4	6	7	9	17	12	0	87	5	23	2	5	4	3	3	0	45
Winchester.....	0	0	6	0	0	3	24	16	48	87	0	0	0	0	0	0	2	0	2
NORTH CAROLINA—																			
Chapel Hill.....	5	2	5	4	8	11	34	18	0	87	1	0	0	0	5	25	12	2	45

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NORTH CAROLINA—Cont'd.																				
Goldsborough .....	13	7	0	8	4	26	6	10	4	78	3	3	0	0	2	17	8	6	39	
SOUTH CAROLINA—																				
All Saints .....	9	4	1	5	16	31	16	5	0	87	2	3	0	0	3	24	14	0	46	
Camden .....	4	10	1	3	2	23	15	28	1	87	0	4	0	0	1	11	31	9	56	
Charleston, [Johnson] ..	1	9	1	0	3	4	4	7	0	29										
Charleston, [Dawson] (a) ..	3	13	4	3	0	20	4	11	0	58										
Edisto Island (a) .....	11	2	7	1	4	9	11	17	1	63	3	0	0	0	1	2	1	1	16	
St. John's .....	0	13	0	3	0	10	3	27	0	56										
GEORGIA—																				
Savannah .....	10	3	7	6	10	10	22	19	0	87	0	0	0	0	1	4	11	0	16	
Sparta, [Pendleton] .....	4	9	2	6	2	13	14	36	0	86	0	3	0	1	0	9	17	6	36	
Thomaston .....	1	5	2	4	0	8	0	22	0	42										
Whitemarsh Island .....	2	9	2	0	10	8	19	17	13	80	0	2	0	0	1	9	12	5	29	
Zebulon .....	0	5	25	1	0	11	13	4	0	59										
FLORIDA—																				
Atsena .....	12	11	3	10	5	15	18	12	1	87	2	3	0	3	4	16	13	7	48	
Gainesville .....	4	13	3	6	3	18	18	21	1	87	2	0	0	1	0	1	3	0	7	
Jacksonville .....	5	9	8	5	3	20	13	23	0	86	0	0	0	1	1	34	20	1	57	
Salt Ponds .....	24	1	6	11	3	0	4	7	2	58										
Warrington .....	4	28	3	3	0	7	10	22	2	79	1	7	0	0	0	24	8	4	50	
ALABAMA—																				
Auburn .....	8	7	5	11	5	9	24	18	0	87	2	4	3	6	5	8	15	5	48	
Greene Springs .....	12	0	0	3	4	0	18	5	0	42	5	0	0	6	5	0	29	7	52	
MISSISSIPPI—																				
Columbus .....	1	1	0	0	0	1	1	1	0	5										
Oxford .....	7	5	9	14	6	14	8	21	0	84	5	1	3	0	4	11	21	3	48	
Port Gibson .....	13	0	3	4	2	6	9	2	0	39										
LOUISIANA—																				
New Orleans (a) .....	0	40	0	10	0	23	0	14	0	87										
TEXAS—																				
Austin .....	26	4	5	5	10	17	4	16	0	87	9	8	2	7	4	15	16	15	76	
New Wied .....	29	3	4	3	15	3	9	12	8	86	4	0	0	0	2	3	6	1	16	
Pin Oak (a) .....	6	0	1	7	7	1	2	5	0	29										
Washington .....	15	0	0	0	13	0	1	0	0	29										
TENNESSEE—																				
Glenwood .....	10	3	0	4	6	20	11	24	9	87	2	1	0	2	3	6	26	13	53	
KENTUCKY—																				
Billardsville .....	9	3	1	3	7	25	29	10	0	87	0	0	1	1	0	2	1	2	7	
Danville .....	3	5	2	6	2	20	35	14	0	87	3	1	0	1	2	12	26	11	56	
Millersburg .....	8	1	7	5	5	5	17	25	0	77										
Paris .....	0	6	0	6	3	37	20	14	0	86	1	1	0	0	4	6	23	0	40	
Springdale .....	3	6	4	0	6	28	13	10	17	87										
OHIO—																				
Bellefontaine .....	2	3	3	6	3	28	20	13	2	80	2	2	0	4	0	33	26	11	78	
Cheviot .....	5	2	8	7	5	24	29	7	0	87	0	1	0	0	0	0	0	0	1	
Cincinnati, [Harper] .....	5	0	0	0	9	22	45	6	0	87	0	0	0	0	0	0	0	1	1	
Cincinnati, [Telegraph] ..	12	30	3	24	6	39	57	3	0	174										
Cincinnati, [Lea] .....	13	7	0	10	8	41	30	17	43	174										
Cleveland .....	9	4	0	5	30	10	14	8	1	81	1	0	0	0	0	3	37	8	49	
College Hill .....	5	6	0	5	2	16	26	19	87		1	3	0	0	0	0	5	2	11	
Dayton .....	5	5	0	2	0	20	17	9	0	58										
Gallipolis .....	6	2	2	6	11	7	3	10	0	41										
Germantown, [Groneweg] ..	7	6	4	24	10	21	0	3	1	76	1	1	4	11	1	22	1	9	50	
Granville .....	1	3	1	0	0	21	24	0	29	79	0	1	0	0	0	5	8	0	14	
Hillsborough .....	1	9	0	5	2	23	2	11	0	58	0	0	0	0	0	3	3	4	10	
Hiram .....	3	1	0	0	19	33	4	14	13	87	1	1	0	0	9	32	9	10	62	
Oberlin .....	1	6	2	11	11	19	12	18	0	83	0	0	0	0	0	4	27	6	37	
Portsmouth .....	3	37	18	15	4	2	1	7	0	87	0	4	36	10	1	1	1	1	54	
Savannah .....	3	2	0	15	2	27	4	34	0	87	2	2	0	13	2	16	4	22	61	
Unionville .....	0	3	1	5	8	41	15	10	4	87	0	0	0	0	0	33	29	11	73	

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## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Urbana .....	1	2	1	2	3	34	6	15	0	64	2	0	1	0	1	5	27	16	52	
MICHIGAN—																				
Ann Arbor, [Winchell] ..	6	4	0	5	10	18	17	13	12	85	0	0	0	1	1	13	47	10	72	
Ann Arbor, [Woodruff] ..	1	6	1	7	1	26	21	12	12	87	0	0	0	1	1	6	25	15	48	
Battle Creek .....	1	2	7	5	8	17	30	12	5	87	0	0	0	0	1	6	50	11	68	
Cooper .....	3	0	3	3	9	2	47	5	14	86	0	0	3	3	3	1	32	2	44	
Grand Rapids .....	6	8	0	2	0	27	13	13	17	86	0	0	0	0	0	1	4	3	8	
Monroe, [Whelpley] .....	4	6	0	4	10	18	7	37	0	86	3	3	0	1	10	0	4	33	63	
Romeo (a) .....	2	5	0	1	8	47	9	12	3	87	1	0	0	0	0	2	13	5	21	
St. James .....	0	0	5	1	3	18	31	17	8	83	0	0	0	0	1	13	13	10	37	
Saugatuck .....	4	4	15	3	4	13	28	16	0	87	2	1	0	1	2	16	54	28	104	
INDIANA—																				
New Harmony .....	2	1	6	7	6	7	12	18	0	59	0	0	0	0	0	0	2	0	2	
ILLINOIS—																				
Athens .....	3	4	2	19	4	14	13	19	0	78	0	0	0	0	0	2	13	12	27	
Augusta .....	2	13	2	9	7	16	25	13	0	87	1	1	0	1	0	1	3	0	7	
Manchester (a) .....	13	5	1	2	11	14	27	14	0	87	1	1	0	0	5	1	18	3	29	
Ottawa (a) .....	4	12	1	2	2	12	24	16	6	79	0	1	0	0	1	3	1	4	10	
Upper Alton .....	0	19	10	5	0	10	19	26	0	89										
West Salem .....	7	4	4	4	12	5	12	18	0	72	1	0	0	0	0	9	24	5	39	
MISSOURI—																				
Hannibal (a) .....	4	25	0	5	3	37	0	13	0	87	0	5	0	9	0	0	0	0	16	
St. Louis .....	1	7	3	17	7	18	20	14	0	87										
WISCONSIN—																				
Appleton .....	0	7	0	0	0	55	2	23	0	87										
Beloit .....	0	1	6	11	9	14	18	19	0	87	1	0	0	0	0	0	1	2	4	
Janesville .....	5	6	0	4	19	11	31	0	5	87										
Kenosha .....	0	5	2	1	1	16	16	12	33	86										
Milwaukee, [Winkler] ..	3	7	6	0	0	25	20	26	0	87										
Platteville .....	2	3	8	13	9	6	34	12	0	87	2	3	5	0	4	4	20	8	55	
Racine, [Seymour] .....	4	2	1	0	8	1	11	2	0	29										
Superior .....	19	9	0	6	3	7	22	21	0	87	22	8	0	0	3	8	21	19	87	
IOWA—																				
Dubuque .....	0	2	5	2	11	3	0	19	27	81	0	1	0	1	0	1	1	10	14	
Fort Madison (a) .....	4	14	0	18	0	8	0	28	0	87	3	1	3	0	1	0	0	23	46	
Muscatine .....	0	16	0	6	1	26	4	34	0	87	0	1	0	0	0	3	0	5	9	
Pella .....	6	5	0	0	22	0	18	30	0	87										
Pleasant Plain (a) .....	17	5	5	18	9	17	29	13	0	113										
Poultney .....	5	7	2	5	7	18	15	15	6	80	0	0	0	0	0	1	1	4	0	
Quasqueton (a) .....	2	5	3	8	1	13	4	30	0	66	0	0	0	0	0	1	0	1	5	
MINNESOTA—																				
Hazlewood .....	4	0	0	5	8	15	13	42	0	87	0	0	0	0	0	1	13	3	26	
CALIFORNIA—																				
Sacramento .....	23	3	0	12	5	4	4	30	0	87	0	1	0	8	1	8	1	10	20	
San Francisco .....	9	1	0	0	2	0	26	13	36	87	0	1	1	1	7	7	15	5	46	
Stockton .....	1	2	0	8	1	11	0	10	0	33										
MEXICO—																				
Mexico city .....	3	0	3	24	24	13	9	3	2	87	2	0	5	2	0	0	0	0	0	
WEST INDIES—																				
Up Park Camp, Jamaica (a)	2	3	3	46	0	0	0	4	0	58										
SOUTH AMERICA—																				
Cathar's Sophia, Sur'm(a)	0	74	0	4	0	0	0	0	0	87	9	42	24	14	1	0	1	0	91	

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	9	12	0	2	11	22	16	26	0	93	0	2	0	0	1	2	53	12	70	
Red River Settlement .....	19	0	1	3	34	7	10	13	2	89	8	0	0	3	9	16	1	19	56	
St. John's (a) .....	8	11	2	2	8	16	10	15	0	72	—	—	—	—	—	—	—	—	—	
St. Martin .....	0	11	1	6	0	36	9	30	0	93	—	—	—	—	—	—	—	—	—	
Stanbridge .....	1	8	0	7	12	10	39	3	13	93	—	—	—	—	—	—	—	—	—	
Toronto (a) .....	2	7	1	4	2	22	7	45	3	93	—	—	—	—	—	—	—	—	—	
Wolfville .....	0	3	4	3	0	3	34	34	8	89	2	1	6	2	0	2	27	18	58	
MAINE—																				
Carmel .....	0	2	1	0	0	12	11	41	18	85	0	2	0	0	0	9	6	15	32	
Cornish (a) .....	11	4	1	2	0	0	2	16	0	36	0	1	0	0	0	0	0	0	1	
Fryeburg .....	5	4	0	4	2	8	10	26	0	59	1	4	0	0	0	5	8	29	47	
Gardiner .....	—	—	—	—	—	—	—	—	—	—	2	2	0	2	2	6	3	15	32	
Perry .....	0	4	2	5	0	14	3	65	0	93	1	2	2	1	0	2	7	21	36	
Portland .....	10	6	5	4	5	3	27	32	0	92	6	3	0	0	4	3	9	11	36	
Steuben .....	5	17	0	2	1	17	4	44	0	90	6	6	0	1	1	9	18	12	53	
NEW HAMPSHIRE—																				
Barnstead .....	0	2	0	2	1	6	15	67	0	93	2	9	16	27	0	0	0	1	55	
Concord .....	2	4	0	11	0	18	3	55	0	93	—	—	—	—	—	—	—	—	—	
Londonderry .....	0	0	1	1	0	2	0	43	45	92	—	—	—	—	—	—	—	—	—	
Manchester .....	10	0	1	4	4	6	20	47	0	92	4	0	3	3	3	5	27	12	57	
Stratford (a) .....	2	5	5	1	2	3	16	26	0	60	4	2	1	0	0	6	16	24	53	
VERMONT—																				
Brandon .....	24	1	2	7	19	2	24	12	2	93	3	1	0	0	0	1	10	23	38	
Burlington .....	16	8	3	7	28	0	25	6	0	93	2	0	0	0	0	0	4	0	6	
Craftsbury .....	1	11	2	4	9	14	14	38	0	93	0	7	0	0	1	5	18	16	47	
Norwich .....	1	0	0	2	1	0	3	8	4	19	0	0	0	0	0	0	2	5	7	
Shelburn .....	23	2	0	4	28	1	9	26	0	93	11	0	16	10	6	0	0	2	45	
MASSACHUSETTS—																				
Amherst .....	1	1	0	18	0	6	3	59	1	89	0	2	0	0	0	2	6	29	39	
Boston .....	0	1	0	2	1	4	8	12	3	31	—	—	—	—	—	—	—	—	—	
Cambridge (a) .....	7	1	2	2	1	15	34	13	9	84	—	—	—	—	—	—	—	—	—	
Mendon .....	1	5	4	1	3	36	7	36	0	93	0	5	4	1	2	33	8	40	93	
Nantucket .....	7	6	3	3	4	11	13	45	1	93	—	—	—	—	—	—	—	—	—	
New Bedford .....	2	11	0	6	2	9	14	48	1	93	1	4	0	0	0	1	5	14	25	
Newburyport .....	10	2	3	4	5	4	29	32	0	89	0	0	0	0	0	1	0	0	1	
North Attleborough .....	7	5	3	1	10	12	30	25	0	93	2	1	7	0	7	4	19	12	52	
Princeton .....	2	8	5	2	0	2	45	29	0	93	1	6	1	2	0	1	25	14	50	
Richmond .....	0	9	0	7	2	14	0	60	0	92	1	5	1	6	3	10	0	40	66	
Southwick (a) .....	3	10	0	0	4	8	9	25	1	60	2	3	0	0	0	6	13	5	29	
Springfield .....	5	3	0	0	0	8	3	50	0	69	4	2	0	0	0	3	3	35	47	
Taunton .....	8	4	3	1	1	13	21	42	0	93	4	5	2	1	1	11	10	13	47	
Westfield .....	5	8	5	4	4	8	46	10	0	90	—	—	—	—	—	—	—	—	—	
Williamstown (a) .....	1	0	3	6	2	6	30	34	0	82	2	0	0	0	0	1	12	21	36	
Worcester .....	17	1	1	1	3	8	49	13	0	93	4	1	1	0	0	0	2	4	12	
RHODE ISLAND—																				
Aquidnet (a) .....	2	1	0	0	4	5	10	13	0	35	—	—	—	—	—	—	—	—	—	
Providence (a) .....	2	8	3	4	3	10	12	50	1	93	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Georgetown .....	21	24	3	5	5	11	11	13	0	93	2	13	19	8	2	2	0	1	47	
New London .....	5	10	2	2	2	15	25	32	0	93	0	0	1	0	1	0	0	0	7	
Norwich .....	3	6	0	4	3	19	26	10	18	89	—	—	—	—	—	—	—	—	—	
Pomfret .....	2	11	1	2	6	8	2	61	0	93	1	9	1	2	2	6	8	26	55	
Saybrook .....	10	6	2	3	1	14	28	23	0	87	3	0	3	0	1	0	12	14	33	
NEW YORK—																				
Angelica .....	4	2	2	2	0	39	41	3	0	93	1	0	0	0	0	29	27	0	57	
Baldwinsville .....	3	3	1	4	1	3	15	58	0	88	0	1	0	0	0	0	17	43	61	
Beverly .....	11	8	0	7	3	31	5	25	2	92	4	2	0	5	5	13	20	11	60	
Blackwell's Island .....	20	9	3	1	5	14	25	16	0	93	17	7	1	1	4	14	23	14	81	
Canton .....	3	12	0	0	1	48	8	9	0	81	1	10	0	0	2	26	5	8	52	
Clinton .....	0	0	8	0	3	6	76	0	0	93	—	—	—	—	—	—	—	—	—	

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Elm	3	6	2	3	10	40	17	12	0	93	2	1	0	0	0	14	38	5	60	
Fishkill Landing	2	24	0	10	0	28	4	19	0	93	2	4	3	1	1	0	20	11	42	
Flatbush	0	0	6	2	3	6	36	28	0	93	2	2	0	0	1	6	16	13	40	
Geneva	1	2	2	4	11	13	42	11	7	93	0	0	0	0	0	2	32	8	42	
Liberty	5	8	5	7	0	1	21	49	2	93	0	0	1	0	0	0	0	3	6	
Lodi	3	0	0	10	8	5	37	26	4	93	1	0	0	0	0	1	23	10	35	
Madrid (a)	0	7	0	0	0	21	4	14	4	50	0	0	0	0	0	25	3	4	32	
Mexico	8	0	6	15	6	13	25	20	0	93	0	3	0	0	1	1	30	5	40	
Morrisania	6	8	2	3	4	14	30	26	0	93										
New York city	1	8	1	0	0	10	26	47	0	93	0	2	2	0	0	4	34	21	63	
North Salem	1	4	3	11	12	12	14	36	0	93										
Ogdensburg	3	2	1	0	0	14	2	9	0	31										
Oswego	6	1	5	0	3	17	36	0	0	79										
Ovid	2	3	2	3	9	12	47	14	1	93	6	0	0	4	5	0	33	28	85	
Penn Yan (a)	1	1	1	2	2	32	46	8	0	93										
Plattsburgh	24	2	0	4	17	5	10	30	0	92	12	0	1	0	16	4	17	23	76	
Rochester, [Harkness]	4	2	1	0	4	3	45	14	20	93										
Rochester, [Pratt]	2	1	2	3	3	31	32	14	0	88	1	0	0	0	0	1	18	10	30	
Sag Harbor	4	8	5	1	8	12	26	28	0	92	1	3	2	0	3	7	29	7	52	
Smithville	2	7	3	5	14	20	35	7	0	93	3	0	0	0	5	12	40	15	77	
Spencertown	12	0	0	1	4	15	14	47	0	93	2	0	0	1	0	3	19	40	65	
Wampsville	0	0	5	4	0	4	70	2	0	93	0	0	6	5	6	5	64	1	87	
Watertown	0	18	1	0	0	57	9	0	0	93	0	14	0	4	0	45	2	1	66	
NEW JERSEY—																				
Bloomfield	0	11	0	8	1	56	10	7	0	93	1	0	0	1	0	0	1	3	12	
Burlington	4	12	2	0	2	13	44	12	4	93	0	8	0	0	1	2	14	0	28	
Lambertville	2	8	1	5	3	12	3	49	0	83										
Newark (a)	5	5	2	0	2	16	14	19	0	63										
PENNSYLVANIA—																				
Bedford	0	0	0	4	0	12	7	52	0	75	0	0	0	5	0	11	0	29	53	
Cannonsburg	0	1	2	0	0	0	28	0	0	31										
Carlisle	0	5	0	2	1	22	9	35	19	93	0	0	0	0	0	8	7	17	32	
Chromedale	6	11	0	5	2	3	6	43	8	86	0	1	1	1	0	3	21	20	49	
Easton	0	3	0	3	1	2	25	27	15	76	0	1	0	0	0	0	22	5	28	
Gettysburg	10	12	1	2	2	21	17	24	3	92	1	1	0	0	0	4	37	19	62	
Harrisburg	2	2	2	11	7	0	10	51	0	85	0	0	1	4	1	0	10	12	28	
Lewisburg	3	12	4	4	8	0	35	14	7	93	2	1	0	0	0	3	26	15	47	
Meadville	1	0	1	0	9	14	11	19	34	93	0	0	1	1	2	18	20	6	48	
Morrisville	2	7	2	3	1	18	20	34	0	87	1	5	1	1	0	19	15	20	62	
Moss Grove	1	0	4	4	9	11	32	19	4	89	1	1	5	2	0	10	44	5	68	
Nazareth	0	4	3	3	4	10	34	27	0	93	12	0	0	0	0	3	12	9	36	
Norristown	2	6	6	0	1	0	44	19	0	78	0	2	3	0	0	3	38	6	52	
North Whitehall	2	0	0	0	0	0	3	8	0	13										
Philadelphia	3	6	2	1	1	16	41	23	0	93	0	2	0	0	0	0	12	2	19	
Pocopson	3	1	3	2	0	16	49	17	0	91	1	0	0	0	0	1	19	4	25	
West Haverford	1	1	1	1	1	9	12	22	2	50	2	2	0	1	0	3	18	11	37	
DELAWARE—																				
Newark (a)	0	0	3	1	0	0	8	9	0	21										
MARYLAND—																				
Annapolis, [Zumbrook] (a)	0	8	3	11	0	0	14	45	1	90	1	0	0	0	1	2	7	1	12	
Bladensburg (a)	0	8	3	1	1	6	3	25	0	47										
Frederick	10	6	1	0	4	11	23	29	9	93	1	0	0	0	1	2	35	8	47	
Sykesville	6	7	1	13	1	10	28	27	0	93	1	2	1	0	0	1	58	3	66	
DISTRICT OF COLUMBIA—																				
Washington	0	8	3	4	0	5	0	39	0	59	0	0	0	0	0	2	0	0	2	
VIRGINIA—																				
Alexandria	1	6	0	4	10	14	8	44	0	93										
Berryville	3	6	11	0	1	10	16	28	0	77	0	1	1	0	5	8	16	4	35	
Buffalo	7	0	0	0	1	25	4	31	12	80	1	0	0	0	0	4	22	9	36	
Crichton's Store (a)	20	6	4	3	15	27	8	8	1	92	1	2	0	0	0	36	26	0	65	

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Garysville (a) .....	4	3	2	2	10	12	16	7	0	58	—	—	—	—	—	—	—	—	—	
Kanawha (a) .....	0	0	0	0	2	10	9	10	0	31	—	—	—	—	—	—	—	—	—	
Lewisburg .....	0	0	0	0	0	0	8	3	0	11	1	0	0	0	0	0	31	3	35	
Trout Run Valley .....	25	21	2	2	0	10	10	23	0	93	6	29	2	2	0	0	0	0	39	
Winchester .....	0	0	3	1	0	5	39	5	40	93	0	0	0	0	0	0	3	0	3	
NORTH CAROLINA—																				
Chapel Hill .....	15	7	1	4	6	9	31	14	0	87	1	4	0	0	1	26	11	2	45	
Goldsborough .....	6	15	2	3	14	25	11	4	6	86	3	10	1	0	3	21	12	1	51	
SOUTH CAROLINA—																				
All Saints .....	13	8	1	11	6	34	15	5	0	93	5	3	0	3	0	25	19	4	59	
Camden .....	3	18	0	4	1	15	25	25	1	92	0	10	0	0	1	7	20	13	51	
Charleston, [Johnson] .....	0	6	2	0	2	1	7	13	0	31	—	—	—	—	—	—	—	—	—	
Charleston, [Dawson] (a) .....	2	13	1	8	0	26	3	9	0	62	—	—	—	—	—	—	—	—	—	
Edisto Island .....	7	21	1	4	6	15	12	15	4	85	3	3	0	0	1	14	15	2	38	
St. John's .....	0	13	1	7	1	22	0	18	0	62	—	—	—	—	—	—	—	—	—	
GEORGIA—																				
Savannah .....	7	4	9	10	6	9	22	26	0	93	0	0	0	0	0	5	8	1	16	
Sparta .....	2	11	6	6	0	22	8	37	0	92	0	5	0	1	0	0	18	10	40	
Thomaston .....	15	9	3	8	2	16	4	36	0	93	0	0	0	0	0	1	0	0	1	
Whitemarsh Island .....	2	12	3	6	0	6	13	22	4	77	0	4	0	1	1	5	17	11	39	
Zebulon .....	0	0	12	0	0	0	7	0	0	19	—	—	—	—	—	—	—	—	—	
FLORIDA—																				
Atsena .....	9	17	3	4	9	10	18	14	9	93	5	2	3	0	0	18	10	4	42	
Gainesville (a) .....	5	13	6	2	0	26	14	26	0	92	3	8	2	3	0	22	13	11	62	
Jacksonville .....	1	20	4	6	2	24	4	30	2	93	3	2	8	0	0	23	29	2	67	
Salt Ponds .....	17	6	6	8	9	3	0	11	2	62	—	—	—	—	—	—	—	—	—	
Warrington (a) .....	2	15	3	6	1	16	7	14	2	66	2	13	6	7	2	6	3	5	44	
ALABAMA—																				
Auburn .....	4	11	9	5	7	14	19	21	0	90	1	6	5	6	3	15	21	7	64	
MISSISSIPPI—																				
Columbus .....	9	17	4	5	2	11	9	32	0	89	1	1	0	0	0	5	20	15	42	
Oxford .....	11	17	8	4	11	9	8	25	0	93	2	4	0	0	1	13	22	9	51	
LOUISIANA—																				
New Orleans (a) .....	0	47	0	16	0	12	0	18	0	93	—	—	—	—	—	—	—	—	—	
TEXAS—																				
Austin .....	20	18	1	13	14	14	5	8	0	93	16	13	0	8	14	22	6	9	88	
New Braunfels .....	21	9	9	7	15	5	6	8	0	80	1	0	0	0	2	5	0	2	10	
Pin Oak (a) .....	6	0	1	9	6	1	2	0	0	31	—	—	—	—	—	—	—	—	—	
Washington .....	8	0	0	0	23	0	0	0	0	31	—	—	—	—	—	—	—	—	—	
TENNESSEE—																				
Glenwood .....	34	11	4	0	2	12	6	21	3	93	5	4	2	0	0	2	23	20	56	
Knoxville .....	11	15	6	2	9	22	15	8	0	88	—	—	—	—	—	—	—	—	—	
KENTUCKY—																				
Ballardsville .....	10	6	1	3	7	23	16	27	0	93	0	0	0	0	0	10	4	5	19	
Danville .....	5	11	0	0	1	16	19	40	0	93	1	1	2	0	0	5	28	25	62	
Paris .....	2	15	0	2	0	23	14	36	0	92	1	0	1	1	1	6	30	1	41	
Springdale .....	8	11	2	2	1	20	7	25	0	76	—	—	—	—	—	—	—	—	—	
OHIO—																				
Bellefontaine .....	3	7	2	6	6	19	23	14	0	80	1	3	1	0	1	29	21	17	73	
Cheviot .....	11	5	10	1	3	17	28	12	0	87	0	1	0	0	0	1	0	0	2	
Cincinnati, [Harper] .....	3	14	1	8	0	19	26	21	0	92	0	0	0	0	0	0	1	0	1	
Cincinnati, [Telegraph] .....	2	6	0	1	0	9	3	9	1	31	—	—	—	—	—	—	—	—	—	
Cleveland .....	12	3	1	9	9	12	14	22	1	83	0	0	0	0	0	2	32	7	41	
College Hill .....	6	15	0	4	0	4	20	35	9	93	3	4	0	0	1	3	8	11	30	
Dayton, [C. F. Sem.] .....	4	13	2	0	0	19	9	15	0	62	—	—	—	—	—	—	—	—	—	
Franklin (a) .....	0	2	0	0	1	19	5	4	0	31	—	—	—	—	—	—	—	—	—	
Gallipolis .....	13	8	4	1	8	8	14	22	0	78	—	—	—	—	—	—	—	—	—	
Germantown, [Groneweg] .....	23	17	1	9	1	24	0	11	1	87	1	7	0	4	0	21	5	14	52	
Granville .....	3	9	1	0	0	14	30	2	25	84	1	1	0	0	0	7	23	1	33	
Hillsborough .....	0	24	0	2	1	25	5	36	0	93	0	2	0	0	1	11	4	16	34	

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calms or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued—																				
Hiram	15	3	1	0	7	24	19	23	1	93	1	1	1	0	0	8	28	16	55	
Jefferson	0	4	2	0	5	35	11	30	0	93	1	2	2	3	1	22	9	29	69	
Oberlin	7	5	1	2	7	17	22	20	0	90	0	1	0	0	0	0	41	6	48	
Portsmouth (a)	6	21	17	25	10	7	4	3	0	93	0	0	37	7	0	0	0	0	44	
Savannah	11	4	0	1	0	12	3	61	0	92	11	1	0	0	0	14	10	13	49	
Unionville	4	10	1	1	3	24	30	13	7	93	2	1	0	1	1	13	49	5	72	
Urbana	2	10	1	2	3	17	10	20	0	65	2	0	0	0	0	3	35	14	54	
Zanesville, [Holston]	5	2	0	0	1	28	17	40	0	93										
MICHIGAN—																				
Ann Arbor, [Woodruff]	6	7	1	0	2	20	15	21	18	90	1	4	0	0	0	10	24	19	58	
Ann Arbor, [Winchell]	8	5	0	1	6	5	38	16	14	93	0	5	0	0	0	9	26	24	64	
Battle Creek	6	8	5	2	2	11	34	16	9	93	1	0	0	0	1	1	49	12	64	
Cooper	8	1	3	0	2	1	52	0	26	93	3	1	3	0	1	1	25	0	34	
Detroit	13	12	7	1	3	18	31	8	0	93	7	2	0	0	0	10	30	9	58	
Grand Rapids, [Currier]	2	10	2	4	4	29	11	7	24	93	0	0	0	0	0	7	5	2	14	
Monroe	3	10	4	0	3	8	12	53	0	93	2	6	3	2	0	10	5	60	88	
Romeo (a)	7	10	3	0	7	17	27	20	1	92	2	1	0	0	0	3	20	7	33	
St. James	0	3	7	3	2	26	21	24	5	91	0	0	2	0	0	8	16	11	37	
Sauzattuck	0	4	11	3	5	10	30	30	0	93	3	1	0	2	1	13	46	26	92	
INDIANA—																				
New Harmony	17	4	6	2	11	5	11	21	0	77	2	0	0	0	0	0	23	4	29	
Richmond	3	14	1	0	0	15	15	11	34	93										
ILLINOIS—																				
Athens	1	14	3	5	4	10	8	38	0	83	0	1	0	0	0	5	27	24	57	
Augusta	9	10	6	1	12	15	23	14	3	93	3	6	2	0	2	3	22	9	47	
Manchester (a)	11	8	1	0	8	9	24	32	0	93	4	2	0	0	1	2	25	17	51	
Ottawa (a)	9	8	1	4	0	10	19	34	0	85	1	1	0	0	1	6	6	14	29	
Peoria (a)	13	4	7	4	11	4	16	10	0	69										
Upper Alton	0	19	0	5	0	11	12	19	0	66	0	21	0	7	0	10	16	30	84	
West Salem	14	9	4	1	12	0	9	22	16	93	0	0	0	0	0	19	42	10	71	
MISSOURI—																				
Recheport	5	8	5	4	3	0	0	13	0	52										
St. Louis	10	12	5	8	3	14	17	24	0	93										
WISCONSIN—																				
Appleton	0	13	0	0	0	50	3	27	0	93										
Beloit	20	0	0	5	12	20	11	16	0	93	4	0	0	0	2	0	7	1	14	
Janesville	0	12	0	7	6	15	21	16	7	93										
Kenosha	0	8	7	0	0	20	7	14	32	88										
Madison	0	2	4	5	8	4	36	23	0	90										
Milwaukee, [Winkler]	1	20	5	10	1	14	15	27	0	93										
Norway	3	10	10	0	2	20	34	8	6	93	1	7	3	0	1	8	27	12	59	
Platteville	5	8	3	7	5	10	37	18	0	93	3	7	2	1	5	7	30	0	64	
Racine, [Seymour]	10	0	0	0	0	2	15	0	1	31										
Superior	19	3	17	2	11	10	19	12	0	93	18	4	16	2	11	10	20	12	93	
Waukesha	6	6	2	2	3	17	11	19	6	72	0	3	13	7	3	2	2	0	30	
IOWA—																				
Dubuque	7	2	0	0	9	13	36	22	0	89	0	3	0	3	3	7	2	2	26	
Fort Madison (a)	6	14	7	13	0	8	4	41	0	93	3	0	3	0	0	2	30	19	57	
Muscatine	0	6	0	4	2	28	3	50	0	93	0	2	0	0	0	15	2	14	33	
Pella	2	1	3	10	15	2	18	42	0	93										
Pleasant Plain	13	3	8	6	10	7	45	32	0	124										
Ponitney	2	1	5	4	5	20	31	16	0	84	1	0	0	1	1	6	12	5	26	
Quasqueton	6	1	5	0	2	10	7	40	0	80	0	0	0	0	0	0	2	4	6	
MINNESOTA—																				
Hazlewood	12	1	4	1	17	7	13	34	0	89	1	0	5	0	1	0	8	4	19	
CALIFORNIA—																				
Sacramento	13	8	6	20	3	14	0	21	0	93	0	2	0	14	4	15	2	0	43	
Stockton	0	0	0	3	1	7	0	15	0	26										

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MEXICO—																			
Mexico city.....	0	1	3	34	41	14	0	0	0	93	1	5	7	0	0	0	1	0	14
WEST INDIES—																			
Up Park Camp, Jamaica..	3	6	1	50	0	0	0	2	0	62	---	---	---	---	---	---	---	---	---
SOUTH AMERICA—																			
Cath'na Sophia, Sur'am(a)	0	91	0	2	0	0	0	0	0	93	0	43	34	13	2	0	3	0	95

a For deviations from the usual hours of observation, &c., see notes to table of thermometer for this month.

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	14	17	0	11	8	17	14	9	0	90	0	0	0	0	0	13	31	12	62	
Red River Settlement .....	27	9	0	8	31	4	1	5	0	85	5	12	0	11	6	7	3	15	59	
St. John's (a) .....	15	0	1	2	5	17	12	29	0	90	—	—	—	—	—	—	—	—	—	
St. Martin .....	2	26	1	10	3	40	0	6	0	90	—	—	—	—	—	—	—	—	—	
Toronto (a) .....	0	11	5	16	2	16	0	17	17	90	—	—	—	—	—	—	—	—	—	
Wolville .....	0	14	8	3	2	11	18	15	15	86	0	6	10	1	3	8	12	7	47	
MAINE—																				
Carmel .....	0	8	0	0	0	4	5	32	21	70	0	5	0	0	0	3	5	13	26	
Cornish .....	11	12	3	2	5	8	16	30	0	87	4	1	0	0	0	0	0	0	5	
Fryeburg .....	0	12	5	1	3	19	10	9	0	59	0	3	1	1	3	4	0	17	38	
Gardiner .....	4	20	1	9	8	11	10	19	2	84	0	3	0	0	0	4	0	1	8	
Perry .....	0	21	2	7	4	40	2	14	0	90	2	12	1	2	1	13	8	7	46	
Portland .....	7	12	18	1	24	7	11	10	0	90	3	0	1	1	3	2	10	4	24	
Steuben .....	2	20	6	0	0	45	3	12	0	90	9	10	1	1	0	14	5	6	46	
NEW HAMPSHIRE—																				
Barnstead .....	0	10	1	2	0	20	19	38	0	90	2	14	17	11	4	5	0	0	56	
Concord .....	2	10	2	22	0	16	0	34	0	90	—	—	—	—	—	—	—	—	—	
Londonderry .....	0	8	3	6	3	6	8	10	46	90	0	12	1	0	0	1	7	0	27	
Manchester (a) .....	4	6	0	12	3	11	8	15	0	62	0	6	3	8	0	8	16	0	41	
Stratford .....	0	0	10	4	6	10	5	13	0	51	1	0	4	1	3	2	18	13	42	
VERMONT—																				
Brandon .....	16	0	2	4	30	13	9	15	1	90	2	1	1	3	3	3	15	18	46	
Burlington .....	32	0	2	5	43	1	3	4	0	90	1	0	0	0	1	1	2	0	5	
Craftsbury .....	2	17	6	10	25	10	9	11	0	90	7	1	1	4	1	1	21	14	50	
Shelburn .....	23	3	0	1	49	2	0	10	0	88	6	4	17	13	2	2	0	0	44	
MASSACHUSETTS—																				
Amherst .....	2	6	1	24	3	11	2	35	0	84	0	8	0	3	1	6	7	14	39	
Boston .....	10	39	16	8	6	32	21	48	0	180	—	—	—	—	—	—	—	—	—	
Bridgewater (a) .....	3	27	3	5	1	28	5	18	0	90	3	28	2	5	2	28	5	17	90	
Cambridge (a) .....	3	11	8	0	2	23	11	13	13	84	—	—	—	—	—	—	—	—	—	
Mendon .....	0	0	6	2	5	46	8	14	0	90	0	10	7	2	5	44	8	14	90	
Nantucket .....	11	12	2	9	7	33	3	9	4	90	—	—	—	—	—	—	—	—	—	
New Bedford .....	3	18	2	0	5	32	3	15	0	87	1	1	0	0	0	2	6	7	17	
Newburyport .....	4	11	10	5	9	7	21	15	0	82	—	—	—	—	—	—	—	—	—	
North Attleborough .....	20	15	1	6	18	8	11	11	0	90	7	8	3	3	10	6	18	5	60	
Princeton .....	4	20	9	6	6	8	28	9	0	90	0	14	6	2	1	5	20	2	50	
Richmond .....	2	16	0	7	3	33	0	29	0	90	1	11	0	4	2	31	0	15	64	
Springfield .....	3	13	1	1	1	13	9	17	32	90	0	12	0	0	0	5	9	13	39	
Westfield .....	5	9	16	9	0	8	25	0	0	90	—	—	—	—	—	—	—	—	—	
Williamstown .....	2	2	8	15	0	14	12	17	1	77	2	2	2	2	0	6	7	5	26	
Worcester .....	21	4	5	1	9	25	10	15	0	90	1	0	0	0	2	0	8	1	12	
RHODE ISLAND—																				
Acquidnet (a) .....	2	7	1	3	9	14	4	13	3	56	0	3	0	2	1	0	1	13	23	
Providence (a) .....	4	24	2	4	7	24	4	20	0	89	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Georgetown .....	9	20	9	9	16	12	10	5	0	90	4	13	11	3	4	0	1	1	43	
New London .....	9	7	1	18	10	28	2	15	0	90	—	—	—	—	—	—	—	—	—	
Norwich .....	0	10	4	22	0	13	18	1	20	88	—	—	—	—	—	—	—	—	—	
Pomfret .....	3	19	0	5	11	21	2	29	0	90	0	11	0	2	7	18	6	13	57	
Saybrook .....	10	7	8	7	9	19	4	6	13	83	1	4	2	0	4	3	6	5	25	
Wallingford (a) .....	10	5	2	4	5	23	3	9	14	75	2	0	1	1	2	3	17	8	42	
NEW YORK—																				
Angelica .....	3	8	2	7	7	22	24	17	0	90	0	0	0	0	1	30	19	2	52	
Baldwinsville .....	4	8	12	0	7	9	12	24	0	82	1	1	0	1	1	1	30	23	58	
Beverly .....	12	12	0	6	11	36	0	12	1	90	3	9	2	2	15	16	9	4	60	
Blackwell's Island .....	14	12	10	8	22	11	5	8	0	90	12	6	4	3	14	8	5	6	58	
Canton .....	3	19	1	3	3	51	2	8	0	90	3	9	0	0	1	40	4	4	61	
Eden .....	5	12	0	6	23	30	9	4	1	90	2	6	0	0	3	19	21	2	53	
Fishkill .....	1	24	1	27	7	12	11	5	2	90	0	2	1	5	2	4	22	1	37	
Flatbush .....	10	8	6	9	20	11	7	19	0	90	1	4	0	1	0	8	13	15	42	

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Geneva	5	3	3	5	23	5	20	8	18	90	0	0	1	0	1	5	29	8	4
Liberty	5	9	13	12	2	12	17	13	4	87	3	1	0	1	2	9	23	3	42
Lodi	16	0	3	11	16	19	6	17	1	89	5	0	11	1	3	0	0	0	20
Mexico	6	0	15	22	0	4	20	5	0	90	0	2	7	0	2	14	24	12	67
Morrisania	5	8	8	8	12	20	18	11	0	90	0	0	0	0	0	0	0	0	0
New York	4	10	4	25	4	17	5	21	0	90	0	2	7	0	2	14	24	12	67
North Salem	8	9	2	10	21	17	4	19	0	90	0	0	0	0	0	0	0	0	0
Ogdensburg	6	6	0	0	3	14	2	3	0	34	0	0	0	0	0	0	0	0	0
Oswego	3	12	5	10	28	2	22	0	8	90	0	0	0	0	0	0	0	0	0
Ovid	11	3	2	5	23	18	14	12	2	90	11	1	0	3	12	23	18	7	75
Penn Yan (a)	3	10	0	0	23	29	22	3	0	90	0	0	0	0	0	0	0	0	0
Rochester, [Harkness]	3	9	3	0	3	0	23	0	49	90	0	0	0	0	0	0	0	0	0
Rochester, [Pratt]	8	10	3	4	15	16	26	8	0	90	2	0	2	0	4	5	20	11	44
Sag Harbor	8	10	6	7	25	13	14	7	0	90	3	6	0	1	5	11	20	0	46
Smithville	2	13	7	4	22	25	17	0	0	90	2	10	3	1	9	16	26	1	68
Spencertown	10	4	1	7	22	17	8	21	0	90	4	1	1	4	4	17	10	22	63
Wampsville	0	4	5	18	19	9	35	0	0	90	0	4	5	15	17	8	28	0	77
Watertown	0	29	0	0	3	51	7	0	0	90	0	27	0	0	2	29	0	0	66
NEW JERSEY—																			
Bloomfield	1	12	2	12	0	25	3	13	0	74	0	0	0	0	3	17	4	15	39
Burlington, [Frost]	7	13	5	3	12	15	15	3	10	83	1	10	2	0	3	5	7	0	28
Lambertville	1	7	2	12	3	25	2	27	0	79	0	0	0	0	0	0	0	0	0
Newark (a)	5	10	0	13	6	10	3	11	2	60	0	0	0	0	0	0	0	0	0
PENNSYLVANIA—																			
Bedford (b)	0	0	0	1	3	20	2	25	0	51	0	0	0	0	3	17	4	15	39
Carlisle	2	10	8	4	2	17	11	14	21	89	1	9	2	5	3	8	16	8	52
Chromedale	8	15	5	13	10	9	3	13	14	90	4	5	0	2	4	6	28	8	57
Easton	5	6	4	5	14	4	11	14	27	90	1	7	0	1	2	6	14	9	40
Gettysburg	15	4	1	0	9	25	13	16	7	90	7	4	0	1	1	5	35	14	67
Harrisburg	3	4	6	16	14	2	8	32	0	85	0	0	0	5	6	0	4	14	31
Lewisburg	2	14	3	7	11	14	12	7	20	90	5	2	0	2	3	5	9	7	33
Meadville	2	0	0	6	16	6	6	20	33	89	2	3	0	3	2	23	14	8	55
Morrisville	5	8	4	6	6	31	16	8	6	90	1	6	0	2	0	21	24	7	61
Moss Grove	4	6	2	4	19	16	23	9	1	84	1	1	0	1	2	21	37	3	66
Nazareth	20	9	7	5	17	16	10	6	0	90	5	0	1	0	1	3	15	4	29
Norristown	1	1	15	8	2	12	26	13	0	78	1	1	6	1	3	10	29	9	60
North Whitehall	1	0	0	1	0	1	0	4	0	7	0	0	0	0	0	0	0	0	0
Philadelphia	3	11	6	7	5	31	8	19	0	90	1	2	0	4	0	4	9	5	25
Pocopen	3	9	4	3	7	26	26	10	0	88	0	3	0	0	2	8	12	4	33
West Haverford	4	10	2	3	6	17	6	9	4	61	2	5	1	0	2	7	15	5	37
DELAWARE—																			
Newark, [Martin]	12	3	1	20	7	14	7	17	0	81	9	2	4	0	5	0	6	0	26
MARYLAND—																			
Bladensburg	6	3	2	2	3	11	2	11	0	40	0	0	0	0	0	0	0	0	0
Frederick	6	17	2	6	7	25	7	14	4	88	6	2	0	2	1	10	21	3	52
Sykesville	5	2	1	20	17	19	13	13	0	90	0	2	3	2	0	3	57	2	69
DISTRICT OF COLUMBIA—																			
Washington	0	7	5	17	3	27	3	23	5	90	0	0	0	0	0	0	0	0	0
VIRGINIA—																			
Alexandria	9	8	5	14	21	14	5	14	0	90	0	0	0	1	9	5	11	5	31
Berryville	3	8	1	9	0	9	4	14	9	57	0	0	0	0	0	10	31	6	47
Buffalo	1	0	0	0	0	36	1	13	9	60	0	0	0	0	0	0	0	0	0
Crichton's Store (b)	28	7	3	7	30	12	2	1	0	90	4	1	0	0	1	20	30	1	57
Kanawha (b)	0	0	0	0	4	4	7	3	12	30	0	0	0	0	0	0	0	0	0
Lewisburg	0	0	0	0	0	0	4	0	0	4	0	0	0	0	4	3	22	1	30
Mount Solon	0	0	0	0	0	0	0	0	0	0	1	1	15	1	1	0	0	0	19
Portsmouth	19	8	4	7	16	16	5	13	1	89	0	4	16	13	8	5	0	2	48
Trout Run Valley	13	10	3	7	39	7	3	4	4	90	0	4	16	13	8	5	0	2	48
Winchester	0	0	0	1	8	2	18	1	59	89	0	0	0	0	0	0	0	0	0

a Observations taken in the morning and evening.

b For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NORTH CAROLINA—																				
Chapel Hill .....	8	13	10	2	11	20	17	11	0	90	1	2	1	0	0	28	10	5	47	
Goldsborough .....	5	19	2	11	24	9	6	0	7	83	0	3	0	0	17	5	3	0	28	
SOUTH CAROLINA—																				
All Saints .....	11	12	8	7	13	28	11	4	0	90	0	3	0	1	3	22	23	7	59	
Camden .....	3	14	3	11	1	23	15	16	4	90	3	1	11	1	4	14	22	10	55	
Charleston, [Johnson] .....	0	16	3	5	2	11	1	3	0	41										
Charleston, [Dawson] (a) .....	5	12	2	12	3	21	0	5	0	60										
Edisto Island .....	6	12	4	8	17	12	11	10	5	80	5	2	0	11	0	11	10	4	32	
St. John's .....	0	10	1	20	0	13	0	16	0	60										
GEORGIA—																				
Savannah .....	6	0	15	9	23	8	12	16	11	89	1	0	0	0	2	4	7	2	16	
Sparta .....	3	9	11	15	6	22	8	21	0	89	3	0	1	3	1	13	17	6	44	
Thomaston .....	6	9	3	15	7	7	8	33	0	88										
Whit-marsh Island .....	5	12	5	15	16	13	16	11	12	90	1	3	0	0	2	5	15	11	37	
Zebulon .....	0	0	18	0	0	3	24	17	0	62	0	1	0	0	0	3	6	7	17	
FLORIDA—																				
Atsena .....	2	13	8	11	2	25	11	13	5	85	0	7	2	3	1	11	2	2	28	
Gainsville (b) .....	6	7	9	11	2	27	10	18	0	90										
Jacksonville .....	1	28	1	20	9	23	3	5	0	90	11	13	4	3	11	18	4	1	54	
Salt Ponds .....	14	7	22	6	11	1	3	7	0	60										
Warrington .....	0	19	0	27	4	25	3	12	0	90	0	8	2	1	11	9	0	17	37	
ALABAMA—																				
Auburn .....	5	5	0	30	9	21	14	11	0	90	24	12	2	9	5	0	11	2	54	
Greene Springs (b) .....	3	3	9	7	12	11	11	5	0	57	0	2	1	1	10	5	4	4	27	
MISSISSIPPI—																				
Columbus .....	5	17	3	23	1	15	1	22	0	87	0	1	0	4	11	18	7	10	40	
Oxford .....	3	7	6	23	11	17	3	20	0	90	2	0	1	3	7	7	4	0	24	
TEXAS—																				
Austin .....	11	13	2	32	17	12	4	4	0	90	2	3	11	29	9	14	9	22	88	
New Braunfels .....	10	1	12	10	37	1	4	3	12	100	0	0	11	0	3	2	2	0	7	
Pin Oak (b) .....	11	6	7	5	31	8	19	0	90											
Washington .....	6	0	11	11	24	0	0	11	0	30										
TENNESSEE—																				
Glenwood .....	8	4	1	5	28	15	2	8	19	90	0	1	11	2	5	13	20	8	49	
KENTUCKY—																				
Ballardsville .....	7	12	4	4	29	20	3	11	0	90										
Danville .....	11	11	2	12	4	29	8	9	0	83	5	3	1	2	0	19	23	11	59	
Paris .....	4	10	2	10	8	32	5	19	0	100	5	11	0	11	8	13	16	1	43	
Springdale .....	3	5	5	4	4	34	8	8	19	90										
OHIO—																				
Bellefontaine .....	3	7	4	8	10	25	13	9	0	79	1	1	0	1	5	46	14	8	76	
Cheviot .....	9	6	11	19	6	16	13	10	0	90	0	0	0	0	11	1	11	0	1	
Cincinnati, [Harper] .....	11	13	0	5	1	24	28	13	0	90										
Cincinnati, [Telegraph] .....	29	17	6	23	24	29	28	24	0	180										
Cleveland .....	16	8	0	21	15	9	10	6	2	87	3	2	0	0	5	18	12	2	42	
Dayton, [Fisher] .....	8	14	2	5	3	28	12	17	0	89	7	7	1	3	0	11	6	13	47	
Gallipolis .....	1	7	1	1	26	11	7	1	11	55										
Germantown, [Groneweg] .....	21	15	3	19	3	14	0	3	0	78	5	9	11	11	1	27	1	7	56	
Granville .....	2	9	2	1	2	21	11	2	35	83	1	0	0	11	11	10	9	1	21	
Hillsborough .....	4	21	1	12	4	31	11	17	0	90	3	1	0	11	0	21	4	16	45	
Hiram .....	14	6	2	2	10	30	5	21	0	90	5	0	1	1	3	21	17	4	52	
Jefferson .....	1	12	0	14	6	24	6	27	11	90	1	5	11	4	0	14	8	17	49	
Oberlin .....	13	8	2	6	13	16	11	10	12	89	2	1	0	0	1	13	31	5	53	
Portsmouth (b) .....	0	14	26	9	9	3	11	20	11	87										
Savannah .....	6	2	0	2	0	41	15	24	0	90	4	2	0	2	11	21	16	14	59	
Unionville .....	4	8	6	10	10	18	18	6	9	89	1	1	0	0	0	41	17	11	66	
Urbana .....	2	2	2	14	5	22	7	11	0	65	2	3	0	2	2	20	26	6	61	
Zanesville, [Holston] .....	11	9	2	7	1	20	12	30	0	90										
MICHIGAN—																				
Ann Arbor, [Woodruff] .....	5	8	3	12	3	24	7	11	16	89	11	5	2	1	0	13	21	9	51	
Ann Arbor, [Winchell] .....	10	2	4	13	17	6	15	12	10	89	4	6	0	1	4	15	24	8	62	

a Observations taken at sunrise and 4 p. m.

b For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MICHIGAN—Continued.																			
Battle Creek .....	4	10	12	4	5	11	20	6	0	81	4	2	0	1	1	0	42	5	63
Cooper .....	0	0	6	1	1	0	40	1	38	87	0	0	7	0	0	0	25	1	33
Detroit .....	6	17	10	0	12	31	13	1	0	90	8	6	1	0	1	15	9	6	46
Grand Rapids, [Currier] ..	1	20	8	5	2	28	4	2	19	89	1	2	0	0	0	10	5	0	18
Monroe .....	0	13	13	21	4	4	0	35	0	90	2	18	9	22	3	5	1	28	88
Newark .....	6	4	23	11	1	15	18	12	0	90	10	1	2	1	6	29	41	11	101
Romeo (a) .....	14	2	8	7	23	11	14	9	0	88	1	1	0	1	3	4	14	5	29
St. James .....	9	2	9	8	15	25	5	9	4	86	1	0	2	1	2	23	5	6	40
INDIANA—																			
New Albany .....	8	5	0	6	7	21	11	30	2	90	8	0	0	3	5	18	8	15	55
New Harmony .....	13	1	6	12	12	10	15	4	1	74	0	0	0	0	3	2	19	2	26
Richmond .....	1	2	0	5	2	24	15	7	32	88	0	0	0	0	0	0	0	1	1
ILLINOIS—																			
Athens .....	1	5	0	19	8	19	20	12	0	84	0	1	0	1	0	0	40	6	54
Augusta .....	2	2	7	19	9	16	27	6	2	90	3	1	2	4	4	7	20	5	46
Manchester (a) .....	6	1	2	3	25	16	21	16	0	90	4	0	0	1	6	16	25	3	55
Marengo (a) .....	4	8	17	5	8	8	19	0	0	69	7	3	5	2	1	0	3	0	21
Ottawa (a) .....	4	10	4	17	12	19	9	7	2	84	2	2	0	0	4	8	6	3	25
Peoria .....	9	3	7	6	37	10	17	2	0	91	---	---	---	---	---	---	---	---	---
Riley .....	3	9	2	4	3	13	2	3	0	39	---	---	---	---	---	---	---	---	---
Upper Alton .....	---	---	---	---	---	---	---	---	---	---	1	9	0	17	11	29	11	13	91
West Salem .....	8	1	6	11	26	6	7	12	13	90	0	0	0	0	1	24	29	1	56
MISSOURI—																			
Rocheport (a) .....	2	2	1	11	6	6	8	4	0	40	---	---	---	---	---	---	---	---	---
St. Louis .....	3	2	9	25	7	17	13	14	0	90	---	---	---	---	---	---	---	---	---
WISCONSIN—																			
Appleton .....	1	20	2	1	5	39	4	15	0	87	0	21	2	1	5	37	5	11	82
Beloit .....	14	8	1	11	20	22	4	9	1	90	2	0	0	1	0	6	5	1	15
Janesville .....	8	13	5	22	10	15	11	2	4	90	---	---	---	---	---	---	---	---	---
Kenosha .....	3	10	15	8	22	10	15	4	0	87	---	---	---	---	---	---	---	---	---
Madison, [Schue] .....	4	4	23	11	24	4	14	1	0	85	---	---	---	---	---	---	---	---	---
Milwaukee, [Winkler] .....	1	19	13	22	3	14	9	9	0	90	---	---	---	---	---	---	---	---	---
Norway .....	7	8	8	3	7	13	31	4	7	88	3	1	7	0	2	4	35	8	60
Platteville .....	8	8	11	24	6	13	6	14	0	90	11	2	2	12	5	19	6	12	69
Racine, [Seymour] .....	1	9	0	5	3	7	0	5	0	30	---	---	---	---	---	---	---	---	---
Superior .....	17	23	20	3	3	7	6	11	0	90	17	23	20	3	3	7	11	11	90
Waukesha .....	4	27	6	7	12	19	8	7	0	90	2	3	5	5	1	6	5	7	34
IOWA—																			
Clinton (a) .....	0	3	5	5	8	10	3	0	5	39	0	0	1	1	0	2	2	0	6
Dubuque .....	2	1	2	4	35	11	26	2	1	84	0	2	1	3	2	2	6	0	16
Fort Madison (a) .....	6	11	2	24	5	18	2	21	1	90	2	1	0	3	4	15	25	11	61
Muscatine .....	0	11	0	26	0	34	1	17	0	89	0	3	0	3	0	24	1	11	42
Pleasant Plain .....	11	4	15	21	17	16	26	10	0	120	---	---	---	---	---	---	---	---	---
Quasqueton (a) .....	1	5	1	16	0	23	1	14	0	61	0	1	0	0	0	3	1	0	5
MINNESOTA—																			
Hazlewood .....	21	2	8	10	16	8	5	17	1	88	2	0	0	2	0	0	0	0	4
Red Wing .....	7	3	23	10	10	2	21	7	1	84	1	0	2	2	0	0	5	5	24
CALIFORNIA—																			
Sacramento .....	14	1	1	17	16	14	11	16	0	90	0	1	3	11	4	15	4	1	39
Stockton .....	0	0	0	3	1	5	3	9	0	21	---	---	---	---	---	---	---	---	---
MEXICO—																			
City of Mexico .....	5	0	0	27	35	22	1	0	0	90	1	1	1	1	2	1	29	1	37
SOUTH AMERICA—																			
Catha's Sophia, Surin'm (a) ..	0	68	12	9	0	1	0	0	0	90	0	44	38	6	0	0	0	0	88

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal	18	22	2	4	13	7	5	22	0	93	7	11	2	0	8	5	13	28	74
Red River Settlement (a)	16	5	3	5	18	14	7	1	2	71	3	5	1	12	5	15	6	15	62
St. John's (a)	0	6	0	0	0	0	0	0	0	6									
St. Martin	0	30	1	10	0	17	3	26	0	93									
Toronto (a)	5	21	7	4	1	12	3	32	0	93									
Wolfville	3	17	8	8	3	5	21	15	12	92	8	10	2	8	4	10	17	6	60
MAINE—																			
Carmel	0	16	0	13	1	0	5	21	10	73	0	0	0	0	0	1	3	14	35
Cornish	20	14	3	0	3	14	3	26	0	92	0	0	0	0	0	0	2	1	3
Fryeburg	4	12	5	6	2	14	8	5	0	60	1	2	2	4	1	6	8	18	42
Gardiner	2	23	1	17	6	5	3	19	17	93	4	1	0	0	1	3	2	9	20
Perry	0	8	8	18	6	28	3	19	0	93	3	7	3	7	3	10	6	19	58
Portland	14	18	13	3	18	5	7	11	0	90	3	0	2	0	2	4	11	5	27
Steuben	3	29	0	5	4	33	3	11	2	90	1	10	0	0	1	19	5	11	47
NEW HAMPSHIRE—																			
Barnstead	1	18	2	0	0	7	7	50	0	91	5	12	16	13	7	5	0	2	61
Concord (a)	3	15	3	24	0	20	1	27	0	93									
Londonderry	4	12	1	8	2	5	2	22	37	93	0	11	1	1	0	3	7	13	36
Manchester	2	10	1	6	4	16	11	33	0	83	3	13	1	5	2	14	22	7	67
Stratford	3	4	11	0	0	12	10	15	0	55	3	7	1	0	1	9	18	16	55
VERMONT—																			
Brandon	34	1	2	2	25	3	3	18	1	89	9	3	1	0	5	7	13	25	63
Burlington	35	5	5	11	29	0	3	3	0	93	0	0	1	0	0	0	1	0	2
Craftsbury	9	17	5	5	17	17	9	13	1	93	4	7	1	0	3	10	17	17	59
Shelburn	29	2	0	4	28	8	5	17	0	93	4	7	10	11	4	2	1	2	41
MASSACHUSETTS—																			
Amherst	4	8	1	27	4	15	3	31	0	03	4	0	1	3	2	15	9	14	58
Boston	0	4	2	2	2	6	1	6	8	31									
Bridgewater (a)	8	22	5	6	9	20	2	21	0	93	8	20	3	5	0	19	2	21	84
Cambridge (a)	7	9	6	2	2	24	10	16	0	85									
Mendon	4	20	0	2	0	34	1	26	0	93	4	19	3	3	4	33	1	26	93
Nantucket	6	11	8	8	3	35	5	14	1	91									
New Bedford	7	18	2	11	2	28	4	21	0	93	5	2	0	0	0	2	5	10	28
Newburyport	8	18	10	2	17	0	14	12	0	83	0	1	0	0	0	0	1	0	2
North Attleborough	16	12	0	8	19	10	7	21	0	93	11	10	0	2	17	5	21	11	77
Princeton	4	16	9	1	5	13	28	17	0	93	2	13	2	1	1	11	27	11	68
Richmond	0	19	0	3	0	26	0	39	0	87	0	16	0	1	0	24	1	35	77
Springfield	17	17	0	1	0	15	1	15	0	66	9	15	0	2	0	13	1	20	60
Westfield	5	9	4	7	10	11	22	21	0	89									
Williamstown (a)	0	7	17	11	2	16	15	22	3	93	1	4	1	6	1	10	8	16	47
Worcester	21	0	2	3	7	20	10	21	0	93	1	0	1	0	0	0	3	2	7
RHODE ISLAND—																			
Providence (a)	5	24	1	8	8	17	4	25	0	92									
CONNECTICUT—																			
Georgetown	5	24	10	10	15	16	10	3	0	93	1	17	17	6	4	10	5	0	60
New London	0	10	3	14	0	31	2	18	0	93									
Norwich	1	20	6	0	3	29	4	12	9	93									
Pomfret	2	18	2	2	16	18	1	34	0	93	2	17	1	1	5	17	7	20	70
Saybrook	12	5	15	8	0	18	10	13	6	93	5	3	4	4	2	8	13	5	44
Wallingford	7	13	5	0	0	25	5	22	8	93	4	12	2	0	0	8	26	12	67
NEW YORK—																			
Angelica	0	2	7	15	4	0	27	29	0	00	1	0	1	9	2	23	18	5	59
Baldwinsville	8	12	13	3	2	0	9	34	0	00	7	3	2	5	0	0	32	14	63
Beverly	7	10	0	9	7	30	0	29	0	92	8	3	4	8	4	19	9	10	65
Blackwell's Island	2	4	21	16	0	10	32	8	0	93	2	4	20	17	0	0	35	9	93
Canton	3	18	3	4	0	31	3	22	5	89	1	11	3	2	0	20	3	13	53
Eden	7	17	3	7	15	16	12	15	0	92	0	2	0	6	1	9	31	5	60
Fishkill	0	26	0	18	2	13	3	18	2	82	0	1	0	2	1	4	18	0	26
Flatbush	9	8	11	9	18	7	8	23	0	93	2	2	2	0	0	3	5	3	17
Geneva	3	2	3	19	14	1	14	23	14	93	4	0	1	1	0	7	18	15	46

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1856.

NAME OF STATION.	SURFACE CURRENT										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK--Continued.																				
Lodi .....	6	3	5	22	6	8	8	29	5	92	1	2	7	9	3	7	19	10	58	
Lowville .....	13	9	2	11	11	13	12	22	0	93	3	1	1	1	3	3	3	6	21	
Mexico .....	7	4	23	9	11	3	11	25	0	93	5	2	4	3	2	2	25	7	50	
Morrisania .....	6	16	16	10	6	9	7	20	0	90	---	---	---	---	---	---	---	---	---	
New York city .....	5	21	5	14	0	6	13	27	0	91	1	9	7	3	0	21	10	7	58	
North Salem .....	10	5	3	13	27	11	2	22	0	93	---	---	---	---	---	---	---	---	---	
Ogdensburg .....	8	8	2	0	0	9	2	9	1	39	---	---	---	---	---	---	---	---	---	
Oswego .....	5	8	12	5	14	8	35	1	5	93	---	---	---	---	---	---	---	---	---	
Ovid .....	3	9	4	14	11	8	18	26	0	93	2	3	3	9	10	8	23	21	79	
Penn Yan (a) .....	8	14	2	0	11	20	26	12	0	93	---	---	---	---	---	---	---	---	---	
Pompey Hill .....	11	7	2	10	19	10	10	24	0	93	---	---	---	---	---	---	---	---	---	
Rochester, [Harkness] .....	12	1	7	0	7	0	17	8	41	93	---	---	---	---	---	---	---	---	---	
Rochester, [Pratt] .....	11	11	10	8	10	10	16	17	0	93	1	1	0	3	1	3	15	8	32	
Sag Harbor (a) .....	5	10	8	7	19	7	5	15	0	76	4	6	2	1	2	17	13	7	52	
Smithville (a) .....	5	15	9	2	11	11	9	2	0	64	---	---	---	---	---	---	---	---	---	
Spencertown .....	10	5	2	9	9	21	7	29	1	93	6	3	2	9	10	17	10	23	80	
Wampsville .....	2	2	19	9	11	3	46	1	0	93	1	2	19	8	11	3	37	0	81	
Watertown .....	0	38	0	1	0	47	7	0	0	93	0	36	0	1	1	41	7	0	86	
NEW JERSEY--																				
Bloomfield .....	2	16	0	15	3	31	7	19	0	93	---	---	---	---	---	---	---	---	---	
Burlington, [Frost] .....	10	19	5	2	0	14	18	11	14	93	8	11	3	0	1	10	5	7	45	
Lambertville .....	7	8	6	14	3	12	1	31	0	82	---	---	---	---	---	---	---	---	---	
Newark (b) .....	9	9	2	11	3	11	1	16	0	62	---	---	---	---	---	---	---	---	---	
PENNSYLVANIA--																				
Bedford .....	0	0	0	16	0	13	4	39	0	72	0	0	0	9	0	11	5	18	43	
Cannonsburg .....	8	6	30	0	0	0	43	6	0	93	---	---	---	---	---	---	---	---	---	
Carlisle .....	0	16	5	15	0	16	10	23	7	92	0	6	4	12	0	14	3	17	56	
Chromedale .....	8	27	5	7	12	4	5	15	10	93	4	0	4	1	1	10	16	18	54	
Easton .....	8	4	4	14	10	3	7	25	13	88	5	5	2	4	2	2	9	15	44	
Gettysburg .....	7	17	1	7	13	18	4	25	1	93	1	5	2	4	0	20	5	22	59	
Harrisburg .....	6	0	9	10	12	5	20	29	0	92	1	0	0	3	7	3	11	8	33	
Lewisburg .....	18	13	5	5	17	10	6	5	13	92	6	1	3	4	6	5	17	10	52	
Meadville .....	3	2	7	12	6	6	25	30	93	93	2	1	4	5	4	14	10	17	57	
Morrisville .....	7	6	8	5	15	17	9	19	6	93	2	2	0	13	2	21	10	12	62	
Nazareth .....	17	15	8	8	18	9	7	11	0	93	4	2	1	1	6	6	7	8	35	
Norristown .....	0	5	8	12	1	10	36	9	0	81	0	4	9	2	1	6	28	5	55	
North Whitehall .....	4	4	2	4	0	6	4	16	0	40	---	---	---	---	---	---	---	---	---	
Philadelphia .....	5	14	8	3	9	18	8	28	0	93	0	7	2	1	2	8	6	8	34	
Pocopson .....	13	9	8	3	11	14	21	13	0	92	9	3	0	1	3	8	13	6	43	
Somerset .....	7	2	5	18	6	9	20	26	0	93	13	3	15	19	1	0	1	10	62	
West Haverford .....	9	8	5	2	3	18	1	15	1	62	4	3	0	1	1	9	7	9	34	
DELAWARE--																				
Newark, [Martin] .....	6	10	6	6	1	8	3	17	0	57	2	0	5	1	2	2	1	0	13	
MARYLAND--																				
Bladensburg .....	2	16	5	8	3	5	3	16	0	61	---	---	---	---	---	---	---	---	---	
Frederick .....	6	15	1	5	9	13	11	21	9	90	2	1	1	2	5	3	27	11	52	
Ridge .....	9	12	2	27	10	11	4	15	0	90	---	---	---	---	---	---	---	---	---	
Sykesville .....	3	0	6	10	20	20	25	9	0	93	0	0	7	3	0	9	47	3	69	
DISTRICT OF COLUMBIA--																				
Washington .....	0	17	4	17	3	24	5	21	2	93	---	---	---	---	---	---	---	---	---	
VIRGINIA--																				
Alexandria .....	13	13	5	8	14	14	6	20	0	93	---	---	---	---	---	---	---	---	---	
Berryville .....	4	9	1	14	3	15	1	14	1	62	9	1	1	0	0	10	4	5	33	
Crichton's Store (a) .....	35	9	2	11	16	15	0	4	1	3	0	0	0	0	1	43	19	1	64	
Kanawha (a) .....	0	0	0	0	0	4	8	3	16	31	---	---	---	---	---	---	---	---	---	
Portsmouth .....	18	10	8	17	11	13	5	11	0	93	---	---	---	---	---	---	---	---	---	
Trout Run Valley .....	17	1	0	3	46	0	6	13	7	93	2	0	1	0	2	4	22	6	37	
Winchester .....	0	0	5	4	6	1	25	0	52	93	---	---	---	---	---	---	---	---	---	
Wirt Court-House .....	3	16	4	34	0	0	0	2	22	81	1	37	3	20	0	2	0	0	63	

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

b Observations taken morning and evening.

## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NORTH CAROLINA—																			
Chapel Hill .....	14	18	16	1	3	■	20	15	0	93	1	4	9	1	8	23	7	5	58
Goldsborough .....	9	12	12	9	6	3	13	2	6	72	0	1	0	0	3	2	6	1	13
SOUTH CAROLINA—																			
All Saints .....	3	22	11	14	11	15	9	8	0	93	1	11	7	4	10	10	16	8	67
Camden .....	7	20	9	10	3	18	8	11	7	93	1	10	8	9	0	20	13	8	69
Charleston, [Johnson] .....	3	7	2	4	3	12	1	4	0	36	—	—	—	—	—	—	—	—	—
Charleston, [Dawson] .....	0	18	5	14	0	16	1	8	0	62	—	—	—	—	—	—	—	—	—
Edisto Island (a) .....	5	12	7	10	■	6	7	4	1	58	■	3	0	3	4	1	6	3	20
St. John's .....	■	13	0	22	0	13	0	14	0	62	—	—	—	—	—	—	—	—	—
GEORGIA—																			
Savannah .....	9	11	12	20	17	3	12	10	0	94	0	2	2	1	3	3	3	3	17
Sparta .....	7	24	14	13	3	5	7	19	0	92	2	6	■	■	1	11	16	12	62
Thomaston (a) .....	16	23	1	10	4	7	5	27	0	93	—	—	—	—	—	—	—	—	—
Whitemarsh Island .....	6	11	8	16	14	5	10	9	12	91	0	7	1	5	7	4	10	8	42
Zelulon .....	6	3	26	5	4	17	20	11	■	92	4	9	10	9	0	11	14	8	65
FLORIDA—																			
Atsena (a) .....	6	4	6	0	0	6	10	1	3	36	■	4	3	■	■	4	6	2	25
Gainsville (a) .....	2	14	16	9	2	26	11	12	0	92	0	0	1	1	■	1	0	0	3
Jacksonville .....	0	38	2	9	4	22	6	11	1	93	0	15	4	6	■	18	25	3	71
St. Augustine (a) .....	1	43	4	14	0	7	1	23	■	93	1	40	3	15	0	8	1	21	89
Salt Ponds .....	5	3	6	15	■	4	12	■	2	62	—	—	—	—	—	—	—	—	—
Warrington .....	1	28	3	19	2	24	2	14	■	93	1	10	3	10	1	18	1	8	52
ALABAMA—																			
Auburn .....	2	3	7	30	3	10	15	12	0	82	—	—	—	—	—	—	—	—	—
Greene Springs .....	1	9	1	2	8	5	4	8	0	38	2	4	1	3	8	■	13	8	45
Greensborough (a) .....	11	4	1	4	2	0	0	12	0	34	0	7	■	■	0	■	0	5	12
MISSISSIPPI—																			
Columbus .....	7	13	4	12	6	11	3	37	0	93	3	■	1	1	2	7	14	24	58
Oxford .....	10	8	19	16	11	7	5	16	1	93	5	4	1	2	2	7	15	2	38
TEXAS—																			
Austin .....	14	10	1	31	■	7	7	17	■	93	4	12	■	24	9	15	7	10	84
New Braunfels .....	24	3	15	11	12	0	0	1	27	93	1	0	0	3	5	0	0	1	10
Pin Oak (a) .....	7	3	1	5	10	0	0	5	■	31	—	—	—	—	—	—	—	—	—
Washington .....	12	0	0	0	19	0	■	0	0	31	—	—	—	—	—	—	—	—	—
TENNESSEE—																			
Glenwood .....	7	12	5	5	12	6	5	3	38	93	5	6	3	1	10	16	23	■	70
KENTUCKY—																			
Ballardsville .....	18	16	3	1	15	21	8	11	0	93	—	—	—	—	—	—	—	—	—
Paris .....	9	10	4	6	4	24	11	24	0	92	1	0	1	2	9	7	19	0	39
Springdale .....	2	16	6	1	5	18	5	7	33	93	—	—	—	—	—	—	—	—	—
OHIO—																			
Bellefontaine .....	2	17	4	8	7	22	7	11	0	78	0	■	■	7	1	34	10	20	78
Cheviot (b) .....	10	13	12	9	7	9	22	11	0	93	0	1	0	■	■	■	0	■	53
Cincinnati, [Harper] .....	13	12	8	1	0	22	29	8	■	93	1	■	0	■	0	■	1	0	2
Cincinnati, [Telegraph] .....	3	2	1	1	0	5	1	10	8	31	—	—	—	—	—	—	—	—	—
Cleveland .....	20	5	1	9	16	1	7	15	2	76	4	1	1	2	4	2	12	5	31
Dayton, [Fisher] .....	18	18	11	2	3	21	13	7	■	93	10	9	6	0	1	8	12	9	55
Gallipolis .....	9	4	6	5	11	6	■	7	0	51	—	—	—	—	—	—	—	—	—
Germantown, [Groneweg] .....	43	16	5	5	5	17	0	0	0	91	16	11	■	1	0	18	2	2	50
Germantown, [Binkerd] .....	1	2	12	3	3	13	50	9	0	93	0	0	0	0	0	■	2	0	2
Granville .....	3	9	3	0	2	14	11	5	38	85	3	0	2	0	0	9	8	5	27
Hillsborough .....	1	28	0	10	■	33	■	19	0	93	1	3	0	3	3	17	1	17	45
Hiram .....	29	8	0	8	7	14	9	18	0	93	10	1	0	4	4	7	17	■	49
Jefferson .....	7	18	4	9	2	14	6	33	0	93	2	14	2	8	4	6	5	16	57
Oberlin .....	15	16	5	5	8	9	5	18	11	92	4	■	2	1	3	2	27	17	58
Savannah .....	7	2	0	8	0	23	13	40	0	93	4	0	0	8	■	10	12	18	52
Scioto (a) .....	17	16	10	26	3	1	2	6	0	81	—	—	—	—	—	—	—	—	—
Unionville .....	10	17	5	7	5	23	10	10	6	93	3	5	■	6	3	21	21	9	68
Urbana .....	3	9	■	10	3	12	3	22	0	64	5	2	■	4	4	12	17	16	62
Zanesville, [Holston] .....	24	4	2	10	2	13	14	24	0	93	—	—	—	—	—	—	—	—	—
Zanesville, [Dayton] .....	6	8	1	5	4	4	4	18	38	88	0	2	1	5	4	11	8	20	51

a For changes in hours of observation, &c, see notes to table of thermometer for this month.  
 b Velocity of clouds recorded without direction in most cases.



## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MICHIGAN—																				
Ann Arbor, [Woodruff] ..	10	21	14	1	4	13	8	11	12	92	7	5	8	0	3	17	18	18	76	
Ann Arbor, [Winchell] ..	18	19	14	10	1	9	9	11	2	93	9	9	1	1	0	22	10	9	61	
Cooper ..	7	1	15	1	1	0	34	1	33	93	4	0	11	3	0	1	18	0	37	
Detroit ..	23	14	24	9	8	9	2	4	0	93	0	4	10	2	1	5	1	1	24	
Grand Rapids[, Currier]..	2	31	7	6	2	11	4	6	24	93	0	2	2	2	1	4	2	2	15	
Monroe ..	3	39	5	12	2	9	0	22	0	92	0	34	7	12	2	11	1	27	94	
Saugatuck (a) ..	1	3	14	0	0	2	4	0	0	24	3	6	9	5	2	2	6	4	37	
Romeo (a) ..	31	14	11	0	10	4	12	8	1	89	13	4	3	0	4	3	8	1	36	
St. James ..	26	6	15	5	11	13	1	12	1	90	0	1	1	4	4	12	7	13	42	
INDIANA—																				
New Albany ..	15	10	1	14	3	15	7	28	0	93	7	5	1	4	3	13	7	14	54	
New Harmony ..	18	0	16	11	7	7	9	17	0	85	3	0	4	1	2	0	18	3	31	
Richmond ..	0	6	4	8	1	10	4	11	16	60										
ILLINOIS—																				
Athens ..	3	28	3	5	11	10	4	12	0	76	1	4	0	1	2	5	15	14	42	
Augusta ..	3	11	14	6	11	14	23	6	5	93	1	5	7	2	2	8	16	7	48	
Carthage (a) ..	1	7	7	6	4	3	5	15	4	52	0	5	0	2	0	2	3	11	26	
Manchester (a) ..	5	6	5	3	11	6	38	15	0	93	1	1	3	0	2	1	11	2	21	
Marengo ..	0	31	18	3	14	7	17	2	0	92	5	0	7	2	0	2	0	1	23	
Ottawa ..	8	20	0	3	13	3	11	12	6	82	6	3	0	2	2	3	3	8	27	
Peoria ..	7	4	36	3	16	3	21	3	0	93										
Riley (a) ..	0	6	13	1	0	4	3	4	0	31										
Upper Alton ..	7	13	3	6	10	0	7	38	0	93	8	12	4	7	10	12	7	36	96	
Warsaw ..	3	10	8	9	10	23	12	15	1	91	6	8	2	2	1	21	13	19	72	
West Salem ..	20	6	0	5	12	8	3	10	20	93	1	0	0	0	1	9	22	9	42	
MISSOURI—																				
Rochepoint ..	0	4	4	6	4	4	2	6	0	30										
St. Louis ..	8	8	21	8	2	11	21	14	0	93										
WISCONSIN—																				
Appleton ..	6	40	0	4	4	25	4	10	0	93	6	35	0	4	2	22	5	19	93	
Beloit ..	27	19	9	5	20	4	5	4	0	93	4	1	3	2	2	1	7	1	21	
Cascade Valley (a) ..	0	7	0	13	0	1	0	6	0	27	0	8	0	7	0	0	0	5	20	
Janesville ..	4	41	4	3	12	14	6	3	8	93										
Kenosha ..	1	28	18	2	12	13	8	2	0	84										
Milwaukee, [Winkler] ..	4	46	10	6	2	12	5	5	0	90										
Milwaukee, [Pomeroy] ..	5	2	0	1	1	1	2	7	0	19										
Norway ..	10	30	4	3	15	10	14	4	3	93	1	9	0	0	0	8	43	7	68	
Platteville ..	7	10	25	12	2	6	15	16	0	93	5	6	13	1	1	16	28	9	79	
Racine, [Seymour] ..	0	16	3	6	0	3	2	1	0	31										
Superior ..	14	44	9	2	4	2	3	15	0	93	14	45	9	2	4	2	3	14	93	
Waukesha ..	3	42	10	2	5	18	7	6	0	93	1	6	4	2	0	4	9	4	30	
IOWA—																				
Dubuque ..	1	2	11	13	24	10	27	2	0	90	0	1	1	2	6	3	0	1	14	
Fort Madison (a) ..	9	20	9	9	6	12	3	22	0	90	0	6	4	3	4	11	22	15	65	
Franklin (a) ..	5	0	0	2	3	2	3	2	0	17										
Iowa City ..	22	4	27	1	6	2	24	5	2	93	1	1	7	4	10	2	7	1	33	
Muscatine ..	5	13	7	19	9	16	0	24	0	93	0	3	2	4	1	17	2	14	43	
Pleasant Plain (a) ..	7	10	15	18	8	8	17	10	0	93										
Quasqueton (a) ..	0	8	2	6	1	15	1	13	1	47	1	0	0	0	0	1	0	1	3	
MINNESOTA—																				
Hazlewood ..	6	3	4	16	22	10	0	29	0	90	0	0	0	2	4	0	1	2	9	
CALIFORNIA—																				
Sacramento ..	4	1	0	18	35	23	5	7	0	93	1	4	1	10	7	11	2	4	40	
Stockton ..	0	0	0	0	2	20	0	11	0	33										
MEXICO—																				
City of Mexico ..	0	10	0	41	29	5	5	3	0	93	7	0	0	1	0	0	2	1	11	
SOUTH AMERICA—																				
Catharina Sophia, Sur'm(a) ..	0	28	18	8	3	0	0	0	0	57	0	15	37	4	1	0	0	0	57	

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	1	11	0	5	15	30	20	8	0	90	3	5	0	2	11	14	28	0	72	
St. John's (a) .....	0	4	0	1	0	10	3	3	0	21	—	—	—	—	—	—	—	—	—	
St. Martin .....	0	13	1	20	3	47	0	6	0	90	—	—	—	—	—	—	—	—	—	
Toronto (a) .....	0	16	4	15	2	25	2	13	13	90	—	—	—	—	—	—	—	—	—	
MAINE—																				
Carmel (a) .....	0	1	1	13	1	6	2	11	13	48	0	0	0	9	1	3	2	12	27	
Cornish .....	12	7	1	10	11	4	15	33	0	89	0	0	0	0	0	0	0	2	2	
Gardiner .....	1	11	3	17	6	19	7	11	15	90	0	1	0	0	1	13	3	28	46	
Perry .....	0	2	3	19	14	31	2	19	0	90	0	1	1	3	1	12	4	35	57	
Portland .....	9	6	8	9	23	7	17	5	0	84	0	1	0	3	1	8	24	5	42	
Steuben .....	2	17	0	10	3	38	6	7	7	90	2	11	2	1	2	13	20	10	61	
NEW HAMPSHIRE—																				
Barnstead .....	0	6	5	15	0	6	2	56	0	90	4	30	15	17	0	3	0	1	70	
Concord .....	3	11	0	32	0	21	7	16	0	90	—	—	—	—	—	—	—	—	—	
Londonderry .....	1	0	2	4	2	2	1	24	54	90	0	0	0	0	0	1	3	6	10	
Manchester .....	0	4	2	8	10	32	27	7	0	90	1	5	3	4	3	21	21	5	63	
Stratford .....	0	0	8	2	2	7	5	7	0	31	1	0	0	4	8	13	19	4	47	
VERMONT—																				
Brandon .....	8	0	3	8	41	10	5	7	7	90	1	2	0	0	0	16	6	37	62	
Burlington .....	12	1	1	2	70	1	3	0	0	90	0	0	0	0	0	0	4	0	4	
Craftsbury .....	3	4	4	7	24	23	16	7	0	90	5	1	1	0	8	13	28	14	70	
Shelburn .....	8	1	0	0	64	4	2	11	0	90	0	14	23	8	0	0	0	0	45	
MASSACHUSETTS—																				
Amherst .....	0	3	4	28	3	18	5	26	0	87	4	5	1	2	3	16	13	8	52	
Boston .....	0	3	1	1	0	8	0	5	12	30	—	—	—	—	—	—	—	—	—	
Bridgewater (a) .....	5	11	4	4	7	43	7	0	0	90	7	42	7	9	5	12	4	3	89	
Cambridge (a) .....	1	5	7	5	1	24	7	9	22	81	—	—	—	—	—	—	—	—	—	
Mendon .....	0	7	3	5	3	49	7	16	0	90	1	7	3	5	3	49	5	17	90	
Nantucket .....	0	12	0	8	4	49	5	7	5	90	—	—	—	—	—	—	—	—	—	
New Bedford .....	1	11	1	9	5	43	4	15	1	90	2	2	0	1	1	4	15	12	37	
Newburyport .....	3	0	7	10	19	6	24	10	0	88	—	—	—	—	—	—	—	—	—	
North Attleborough .....	13	7	0	3	33	18	9	7	0	90	0	8	0	0	23	9	17	8	74	
Princeton .....	3	12	7	2	2	19	30	15	0	90	2	10	8	2	1	16	26	8	71	
Richmond .....	0	8	0	9	2	38	0	32	2	86	0	4	0	6	1	29	5	20	65	
Westfield .....	5	8	3	10	11	13	22	14	0	86	—	—	—	—	—	—	—	—	—	
Weymouth .....	1	6	4	10	11	17	0	0	0	58	—	—	—	—	—	—	—	—	—	
Williamstown (a) .....	2	2	14	11	4	14	24	11	4	86	1	1	1	6	1	4	8	18	40	
Worcester .....	22	1	1	2	9	22	24	0	0	90	0	0	0	0	0	2	1	0	3	
RHODE ISLAND—																				
Providence (a) .....	3	15	0	8	12	25	7	20	0	90	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Georgetown .....	5	21	8	8	16	19	10	0	2	90	0	20	16	6	7	1	3	1	54	
New London .....	4	9	0	5	16	44	2	10	0	90	—	—	—	—	—	—	—	—	—	
Norwich .....	1	16	2	18	3	28	4	2	16	88	—	—	—	—	—	—	—	—	—	
Pomfret .....	4	11	0	4	16	28	5	21	0	89	5	10	0	2	7	17	8	20	69	
Saybrook .....	8	6	8	11	7	32	0	4	5	90	0	1	2	1	1	6	18	6	41	
Wallingford .....	5	6	3	2	11	39	10	3	11	90	3	6	1	1	3	14	18	13	59	
NEW YORK—																				
Angelica .....	1	0	0	6	5	41	30	7	0	90	0	0	0	0	0	26	15	0	41	
Baldwinsville .....	0	1	5	9	4	14	20	23	0	76	0	0	2	1	3	8	32	16	62	
Beverly .....	5	5	0	13	9	39	1	11	0	83	3	0	0	11	5	17	10	6	62	
Blackwell's Island .....	2	14	18	17	3	12	22	2	0	90	2	13	19	17	3	12	22	2	90	
Capton .....	1	10	1	0	3	53	4	4	2	84	0	5	1	5	4	38	4	2	59	
Flatbush .....	1	8	8	9	26	16	11	13	0	90	2	2	2	1	0	11	12	14	44	
Geneva .....	4	1	2	19	17	5	11	8	23	90	0	0	0	0	0	9	37	13	59	
Houseville .....	3	0	0	4	35	13	19	16	0	90	0	0	0	0	13	23	28	10	74	
Lodi .....	2	2	2	10	14	20	21	12	7	90	4	2	12	2	0	2	29	7	58	
Lowville .....	10	2	3	4	14	18	17	22	0	90	2	2	0	4	1	13	23	17	62	
Mexico .....	0	0	16	11	0	8	35	14	0	90	0	0	1	0	6	2	36	3	48	
Morrisania .....	1	2	5	20	22	9	12	19	0	90	—	—	—	—	—	—	—	—	—	
New York city .....	1	5	7	24	2	24	16	11	0	90	1	2	12	4	1	19	33	4	76	

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.



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NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK--Continued.																				
North Salem	3	4	1	13	19	32	6	12	0	90										
Ogdensburg	4	5	0	2	4	15	5	0	0	35										
Oswego	1	3	4	7	22	11	37	0	5	90										
Ovid	1	1	1	11	13	24	19	20	0	90	1	1	0	5	7	15	23	27	79	
Penn Yan (a)	6	7	0	0	5	43	23	6	0	90										
Pompey Hill	7	2	1	7	18	26	19	10	0	90										
Rochester, [Harkness]	9	0	7	7	9	6	23	3	26	90										
Rochester, [Pratt]	9	5	3	7	6	25	28	6	0	89	0	0	0	0	0	6	19	7	32	
Spencertown	4	2	0	12	3	32	10	27	0	90	0	1	0	6	0	22	9	12	50	
Utica	0	3	6	17	0	5	0	20	0	51										
Wampsville	2	0	8	8	17	9	38	7	0	89	1	1	10	8	15	9	33	6	83	
Watertown.	0	0	0	0	2	70	17	1	0	90	1	0	0	0	2	65	15	1	84	
NEW JERSEY--																				
Bloomfield	0	6	0	12	0	37	18	5	0	78										
Burlington, [Schmidt]	1	5	14	12	1	12	30	13	1	89	1	5	6	4	1	7	21	9	54	
Lambertville	0	5	2	10	9	23	5	30	0	84										
Newark (b)	1	7	2	15	2	17	7	9	0	60										
PENNSYLVANIA--																				
Bedford	0	0	0	10	1	22	7	35	0	75	0	0	0	7	0	16	12	21	56	
Cannonsburg	0	0	12	0	1	0	70	7	0	90										
Carlisle	0	12	0	10	0	34	15	7	12	90	0	7	0	9	0	25	12	5	58	
Chromedale	3	9	4	10	13	9	3	19	20	90	7	2	3	0	4	8	16	16	56	
Easton	10	1	0	12	11	4	10	18	23	89	4	1	3	4	4	2	17	19	54	
Gettysburg	0	8	4	0	11	34	10	10	13	90	2	4	0	1	4	16	34	19	80	
Harrisburg	0	0	1	16	11	4	45	12	0	89	1	0	0	4	4	3	32	6	50	
Lewisburg	4	8	3	11	13	15	8	2	26	90	2	1	2	0	2	12	19	10	48	
Meadville	0	0	1	1	11	11	14	0	43	90	1	0	1	1	3	8	40	3	57	
Morrisville	1	6	0	1	25	26	8	1	22	90	2	0	0	0	5	24	21	1	59	
Moss Grove	0	0	1	1	7	9	50	11	3	82	0	0	1	1	2	5	47	17	73	
Nazareth	8	7	3	13	9	13	32	5	0	90	5	0	3	2	4	3	22	4	43	
Norristown	0	1	6	15	8	20	24	1	0	75	10	3	7	3	0	9	23	0	55	
North Whitehall	2	4	10	0	10	6	3	5	0	40										
Pocopson	6	4	3	3	7	37	20	3	0	83	2	0	0	1	0	0	30	5	46	
Somerset	8	0	2	6	1	20	36	17	0	90	1	14	25	16	5	0	1	7	69	
West Haverford	3	1	7	2	2	23	3	13	5	59	4	1	1	0	1	4	16	13	40	
MARYLAND--																				
Bladensburg	3	5	1	5	1	16	1	11	0	43										
Frederick	6	11	3	4	13	16	16	7	11	87	1	3	2	1	5	4	36	6	58	
Ridge	5	3	21	14	18	13	13	3	0	90										
Sykesville	0	1	2	9	24	25	27	2	0	90	0	2	3	5	4	12	51	0	77	
DISTRICT OF COLUMBIA--																				
Washington	0	9	2	15	0	36	6	16	5	89										
VIRGINIA--																				
Alexandria	9	10	2	11	16	24	4	14	0	90										
Berryville	0	10	1	15	6	8	15	31	0	86	17	2	2	4	0	6	8	0	53	
Crichton's Store (a)	21	8	6	5	38	4	4	2	1	89	3	1	0	0	3	19	36	2	64	
Kanawha	0	0	0	0	0	1	4	0	25	30										
Lewisburg	0	2	3	4	1	14	22	7	11	64	1	0	1	2	0	0	16	0	20	
Poplar Grove	0	6	11	11	21	23	4	6	0	87	0	3	2	2	1	13	24	15	60	
Portsmouth	5	1	0	0	62	0	0	5	11	90	2	0	3	1	3	0	12	0	27	
Trout Run Valley	9	1	0	0	1	1	11	0	67	90										
Winchester	0	0	0	10	1	1	11	0	67	90										
Wirt Court-House	0	0	0	24	0	0	0	3	54	89	2	51	0	12	0	0	0	0	67	
NORTH CAROLINA--																				
Chapel Hill	7	7	11	2	17	6	29	5	0	84	0	2	0	3	7	15	21	5	53	
SOUTH CAROLINA--																				
All Saints	6	4	18	9	23	8	19	3	0	90	1	0	5	6	8	15	49	5	89	
Camden	0	8	3	10	5	47	6	3	8	90	8	3	3	0	0	15	30	5	64	
Charleston, [Johnson]	0	0	0	5	8	8	2	0	0	29										
Charleston, [Dawson] (c)	0	3	9	11	1	25	4	7	0	60										

a For changes in hours of observation, &c., see notes to table of thermometer for this month.

b Observations taken a. m. and p. m.

c Observations taken at sunrise and 4 p. m.

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
SOUTH CAROLINA—Cont'd.																				
Edisto Island (a) .....	5	4	5	9	13	33	4	9	5	87	3	1	0	1	2	13	4	8	32	
St. John's .....	0	3	0	32	11	11	0	14	0	60										
GEORGIA—																				
Savannah .....	4	3	4	15	29	14	12	9	0	90	0	0	0	2	0	0	1	0	3	
Sparta .....	3	12	6	11	3	29	8	18	0	90	0	4	3	7	1	13	20	11	59	
Thomaston (a) .....	7	9	6	6	0	8	0	51	0	87										
Whitemarsh Island .....	2	4	2	7	29	14	13	7	12	90	2	2	0	3	5	10	27	9	58	
Zebulon .....	6	2	10	0	0	1	9	0	0	28	3	0	3	0	0	4	8	4	22	
FLORIDA—																				
Atsena .....	11	3	9	8	0	19	31	3	6	90	4	3	17	5	1	9	23	2	64	
Gainesville (a) .....	3	11	12	3	6	29	15	11	0	90	0	2	3	0	0	0	0	0	5	
Jacksonville .....	2	19	1	18	5	35	5	4	1	90	1	12	2	4	0	27	12	4	62	
St. Augustine (a) .....	1	17	13	23	1	18	0	17	0	90	0	11	8	17	0	23	3	15	77	
Salt Ponds .....	3	4	5	34	5	3	2	4	0	60										
Warrington .....	0	14	2	22	0	39	8	5	0	90	1	8	1	1	1	6	0	8	29	
ALABAMA—																				
Auburn .....	2	1	0	21	11	9	35	11	0	90	1	1	1	9	3	15	19	5	54	
Carlowville .....	3	19	11	29	0	15	5	7	0	89	9	2	2	2	8	3	6	4	36	
Greene Springs .....	2	0	2	1	3	1	13	5	0	27	5	1	3	3	7	3	21	7	50	
Greensborough .....	6	2	5	10	16	18	9	14	0	80	4	1	11	3	4	6	7	9	45	
MISSISSIPPI—																				
Columbus .....	1	0	10	0	2	14	18	24	0	86	1	4	5	3	1	11	12	18	55	
Oxford .....	2	13	12	23	14	17	7	2	0	90	4	0	2	3	1	2	8	5	25	
TEXAS—																				
Austin .....	0	4	7	48	15	6	1	3	0	90	16	1	5	32	20	15	4	12	105	
New Braunfels .....	1	1	23	17	30	0	0	1	16	89	0	3	1	1	5	1	0	0	11	
Pin Oak (a) .....	0	0	0	14	8	7	1	0	0	30										
Washington .....	4	0	0	0	25	0	1	0	0	30										
TENNESSEE—																				
Glenwood .....	3	2	2	5	15	20	3	7	33	90	0	1	0	1	2	17	42	6	71	
Walnut Grove (a) .....	0	0	4	1	0	0	1	0	7	13	0	2	0	0	0	0	0	0	5	
KENTUCKY—																				
Ballardsville .....	12	1	0	3	33	27	4	10	0	90	0	0	0	0	1	3	0	2	6	
Danville .....	3	9	3	1	0	49	14	11	0	90	0	2	0	0	0	29	19	5	55	
Paris .....	2	10	2	10	3	31	6	26	0	90	3	2	1	1	0	13	24	2	46	
Springdale .....	1	4	2	1	8	19	12	4	39	90										
OHIO—																				
Bellefontaine .....	0	1	1	4	11	33	8	10	0	68	1	1	0	0	2	44	13	13	74	
Cheviot .....	4	7	7	7	10	19	24	12	0	90	0	1	0	0	2	1	1	0	5	
Cincinnati, [Harper] .....	19	2	2	4	6	20	25	12	0	90										
Cincinnati, [Telegraph] .....	1	1	1	0	2	8	0	3	8	30										
Cleveland .....	18	0	0	5	16	18	12	14	2	85	5	0	0	2	1	5	29	3	45	
Dayton, [Fisher] .....	4	4	0	3	13	29	15	19	1	88	10	3	0	0	4	9	13	11	50	
Germantown, [Groneweg] .....	12	6	3	16	3	32	0	0	0	81	3	5	2	10	2	22	1	17	62	
Germantown, [Binkerd] .....	0	1	1	2	8	26	33	6	11	90	0	1	1	0	0	7	37	12	58	
Granville .....	0	3	1	0	0	17	10	3	47	81	0	0	1	0	0	16	0	2	28	
Hillsborough .....	0	0	0	14	1	39	2	22	0	89	0	0	1	1	1	15	2	17	37	
Hiram .....	4	2	0	0	3	34	34	12	1	90	4	1	0	0	4	8	33	10	60	
Jefferson .....	2	9	4	13	2	23	13	24	0	90	0	2	2	2	1	5	3	4	19	
Oberlin .....	4	6	1	5	0	22	14	10	19	87	0	0	0	0	0	6	54	5	65	
Portsmouth .....	23	21	10	16	1	5	1	7	0	84										
Savannah .....	1	0	0	2	0	64	10	13	0	90	0	0	0	2	0	35	10	10	57	
Unionville .....	1	0	2	5	4	36	13	7	16	90	2	3	1	0	4	33	14	14	71	
Urbana .....	0	0	0	11	7	20	9	8	0	55	3	1	0	1	3	11	35	0	60	
Zanesville, [Holston] .....	6	7	0	1	1	13	29	33	0	90	0	4	8	4	3	0	3	0	22	
MICHIGAN—																				
Ann Arbor, [Woodruff] .....	1	2	2	8	10	18	13	6	19	79	0	2	1	1	2	9	31	19	65	
Battle Creek .....	1	2	2	6	18	19	18	8	16	90	1	0	0	0	3	8	39	16	67	
Cooper .....	0	0	2	0	1	2	42	0	43	90	0	0	1	0	0	0	22	0	23	
Detroit .....	6	5	8	4	16	29	15	7	0	90										

a For changes in hours of observations, &amp;c., see notes to table of thermometer for this month.



## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MICHIGAN—Continued.																			
Grand Rapids, [Currier] ..	1	1	1	4	4	38	4	6	31	90	0	0	0	0	0	8	9	5	22
Holland .....	1	2	8	2	4	24	33	16	0	90	6	0	1	1	5	16	40	12	81
Monroe .....	0	1	0	2	2	47	0	37	0	89	0	2	1	1	1	22	0	55	82
Romeo .....	5	2	7	2	10	13	27	7	8	81	3	0	0	0	2	7	11	4	27
INDIANA—																			
New Albany .....	13	5	0	14	7	23	8	20	0	90	3	0	0	4	3	12	7	12	41
New Harmony .....	3	2	3	16	20	18	21	5	0	88	0	0	0	1	1	1	26	3	32
ILLINOIS—																			
Athens .....	2	5	1	7	16	25	0	5	0	61	2	1	0	3	0	16	19	13	54
Augusta .....	1	3	6	5	20	24	16	5	10	90	1	2	1	0	8	3	25	7	47
Brighton .....	4	8	1	3	14	36	15	9	0	90	1	0	7	3	1	1	3	0	16
Manchester (a) .....	6	2	1	0	14	23	32	12	0	90	2	0	1	0	7	20	22	6	58
Marengo .....	0	4	3	12	26	31	11	3	0	90	0	0	1	0	0	0	0	0	1
Ottawa .....	6	1	1	5	17	31	9	12	3	85	5	0	0	1	4	5	7	7	29
Peoria .....	3	1	10	8	37	2	16	3	0	80	0	0	0	0	0	1	0	0	1
Riley (a) .....	1	0	0	0	0	13	2	1	0	17	1	2	0	0	4	10	2	23	42
Upper Alton .....	0	8	6	11	10	42	7	6	0	90	1	5	0	0	1	32	9	11	59
Warsaw .....	5	4	2	2	37	10	4	1	25	90	1	1	5	0	1	7	26	15	56
MISSOURI—																			
Palmyra .....	3	0	3	11	4	52	14	16	17	120	2	1	0	7	2	43	21	9	85
Rocheport .....	1	2	1	10	10	9	6	3	0	42	—	—	—	—	—	—	—	—	—
St. Louis .....	6	1	7	15	26	16	13	6	0	90	—	—	—	—	—	—	—	—	—
WISCONSIN—																			
Appleton .....	6	7	0	1	7	40	12	17	0	90	7	5	0	0	5	32	12	29	90
Beloit .....	14	3	2	2	34	17	7	10	1	90	2	3	0	0	0	0	10	2	17
Janesville .....	3	2	2	5	13	37	0	9	10	90	—	—	—	—	—	—	—	—	—
Kenosha .....	2	4	7	4	33	20	12	5	0	90	—	—	—	—	—	—	—	—	—
Madison, [Schue] .....	1	1	3	8	16	27	20	13	1	90	—	—	—	—	—	—	—	—	—
Milwaukee, [Winkler] ..	0	7	14	21	2	17	14	15	0	90	—	—	—	—	—	—	—	—	—
Milwaukee, [Pomeroy] ..	4	2	2	17	5	9	19	15	0	73	—	—	—	—	—	—	—	—	—
Norway .....	2	2	6	2	15	18	34	8	3	90	0	0	1	0	2	1	43	14	61
Platteville .....	2	2	1	21	6	17	20	21	0	90	1	0	0	0	3	21	37	6	68
Racine, [Seymour] .....	0	4	1	4	0	10	3	6	1	29	—	—	—	—	—	—	—	—	—
Superior .....	9	42	13	2	1	18	0	4	0	89	8	38	12	5	1	19	3	2	88
IOWA—																			
Dubuque .....	0	0	1	2	37	20	20	1	0	81	4	2	1	3	11	5	0	0	26
Fort Madison (a) .....	4	14	2	15	13	28	1	13	0	90	2	1	0	0	3	14	35	4	59
Franklin .....	3	1	1	2	18	41	8	10	6	90	0	0	1	0	0	1	0	0	2
Iowa City .....	0	0	20	3	14	4	48	1	0	90	5	2	7	3	7	0	0	0	24
Muscatine .....	0	8	0	29	6	33	8	6	0	90	0	5	0	4	0	30	2	3	44
Pleasant Plain .....	1	2	3	7	13	7	8	5	0	47	—	—	—	—	—	—	—	—	—
Quasqueton (a) .....	0	0	0	7	5	28	3	13	1	57	0	0	0	0	0	1	1	0	2
MINNESOTA—																			
Belle Prairie .....	4	2	2	6	5	8	7	5	12	51	2	0	2	2	5	5	13	6	35
Hazlewood .....	1	0	0	5	31	13	5	35	0	90	0	0	0	2	1	1	5	0	0
CALIFORNIA—																			
Sacramento .....	12	1	1	8	35	12	7	14	0	90	2	2	3	3	3	4	0	0	17
Stockton .....	0	0	0	0	1	3	1	21	0	26	—	—	—	—	—	—	—	—	—
MEXICO—																			
City of Mexico .....	2	13	2	49	11	7	0	3	3	90	2	1	3	3	0	3	2	4	18
SOUTH AMERICA—																			
Cath'na Sophia, Sur'am(a)	0	39	19	26	4	1	0	1	0	90	0	18	50	23	0	0	0	0	91
Colonia Tovar, Ven. (a) ..	0	0	0	0	0	0	3	0	0	3	1	5	11	22	1	0	0	0	40

a For changes in hours of observations, &amp;c., see notes to table of thermometer for this month.

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	18	4	0	6	12	11	17	25	0	93	13	1	0	1	11	6	26	14	72	
St. John's .....	11	4	1	6	14	14	9	22	0	81	—	—	—	—	—	—	—	—	—	
St. Martin .....	0	7	1	3	2	48	10	17	0	93	—	—	—	—	—	—	—	—	—	
Toronto (a) .....	2	5	3	11	7	25	5	22	15	93	—	—	—	—	—	—	—	—	—	
MAINE—																				
Carmel (a) .....	0	3	1	3	0	9	9	24	2	51	0	4	0	1	0	8	8	14	35	
Cornish .....	12	2	5	6	3	8	5	51	0	93	—	—	—	—	—	—	—	—	—	
Gardiner .....	2	3	3	9	4	20	4	27	21	93	1	2	0	1	3	12	7	20	46	
Monson .....	7	2	8	6	7	3	12	33	8	86	7	1	5	4	4	4	14	26	55	
Perry .....	2	1	2	15	9	33	6	24	1	93	1	0	0	1	2	7	8	16	35	
Portland .....	5	13	5	10	7	17	23	9	0	89	4	0	1	2	1	2	19	4	33	
Steuben .....	0	10	2	4	0	53	6	15	0	93	0	4	0	0	0	33	15	5	57	
NEW HAMPSHIRE—																				
Barnstead .....	1	2	0	3	0	9	2	76	9	93	0	10	14	21	7	0	0	0	52	
Concord .....	0	4	4	10	0	12	4	51	3	88	—	—	—	—	—	—	—	—	—	
Londonderry .....	0	5	1	5	2	4	0	26	31	74	0	1	4	2	0	0	0	5	12	
Manchester .....	1	4	6	3	3	33	30	8	0	88	0	4	5	1	1	15	31	1	59	
Stratford .....	0	0	8	1	0	7	16	5	0	37	1	0	2	0	0	9	21	13	46	
VERMONT—																				
Brandon .....	13	0	2	10	33	10	8	9	8	93	0	1	1	1	0	6	15	31	55	
Burlington .....	14	0	0	3	51	4	17	4	0	93	0	0	0	0	0	0	1	0	1	
Craftsbury .....	5	4	5	4	23	19	21	12	0	93	6	0	0	1	5	7	36	17	72	
Shelburn .....	8	0	0	3	62	5	1	14	0	93	1	9	14	14	3	0	0	1	42	
MASSACHUSETTS—																				
Amherst .....	7	0	4	28	2	15	7	22	1	86	0	2	0	0	0	10	9	11	32	
Boston .....	0	1	1	2	0	7	0	1	13	31	—	—	—	—	—	—	—	—	—	
Bridgewater (a) .....	3	5	6	3	0	45	11	20	0	93	0	44	11	18	3	6	6	3	91	
Cambridge (a) .....	0	7	5	3	0	26	14	10	19	84	—	—	—	—	—	—	—	—	—	
Mendon .....	1	4	0	3	0	59	8	18	0	93	1	4	0	3	0	59	9	17	92	
Nantucket .....	13	3	11	3	1	12	35	15	0	93	—	—	—	—	—	—	—	—	—	
New Bedford .....	5	7	1	2	4	40	13	21	0	93	0	1	0	0	0	5	6	4	16	
Newburyport .....	4	7	9	7	7	5	40	16	0	95	—	—	—	—	—	—	—	—	—	
North Attleborough .....	5	2	3	5	27	14	23	14	0	93	4	2	1	3	11	8	32	6	67	
Princeton .....	4	7	5	3	0	11	30	33	0	93	0	4	0	0	0	6	35	19	54	
Richmond .....	0	4	1	9	1	53	0	25	0	93	1	3	0	5	0	23	1	13	46	
Westfield .....	6	3	5	9	10	16	29	15	0	93	—	—	—	—	—	—	—	—	—	
Weymouth .....	3	10	1	1	2	15	14	16	0	62	—	—	—	—	—	—	—	—	—	
Williamstown (a) .....	0	1	3	7	4	12	35	17	12	91	0	0	0	4	2	6	6	18	36	
Worcester .....	20	1	1	3	1	31	18	18	0	93	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Providence .....	1	11	1	2	12	18	20	18	0	83	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Georgetown .....	2	25	5	2	15	25	11	6	1	93	2	11	21	5	8	0	1	0	48	
New London .....	4	7	0	5	7	50	3	17	0	93	—	—	—	—	—	—	—	—	—	
Norwich .....	0	9	0	19	1	29	0	2	32	92	—	—	—	—	—	—	—	—	—	
Pomfret .....	4	8	2	4	9	30	2	34	0	93	2	5	1	0	3	13	8	15	48	
Saybrook .....	5	4	5	5	4	26	4	6	4	64	4	4	1	0	1	7	9	2	28	
Wallingford .....	8	5	3	6	7	28	9	12	15	93	2	4	2	0	0	7	31	9	55	
NEW YORK—																				
Angolica .....	2	1	1	5	5	42	28	9	0	93	0	0	0	0	0	24	8	0	32	
Baldwinsville .....	3	2	5	3	5	12	26	24	0	80	0	0	0	0	4	2	29	7	42	
Beverly .....	6	6	0	8	12	44	1	11	5	93	3	1	0	4	7	20	18	4	57	
Blackwell's Island .....	1	13	11	12	13	18	17	8	0	93	1	13	11	12	13	18	17	8	93	
Clinton .....	1	2	7	11	3	8	37	1	6	76	3	5	14	14	1	0	1	4	42	
Flatbush .....	1	12	5	5	19	19	13	19	0	93	2	2	2	0	0	4	12	20	42	
Geneva .....	2	1	0	17	13	4	23	12	21	93	0	0	0	1	0	45	5	0	51	
Houseville .....	1	0	0	6	19	30	23	14	0	93	0	0	0	3	2	19	28	9	61	
Lodi .....	2	0	1	17	7	5	9	31	21	93	0	0	0	2	6	2	19	19	48	
Lowville .....	10	5	0	6	8	10	26	28	0	93	8	2	0	0	5	8	21	21	65	
Mexico .....	2	0	16	14	7	9	37	8	0	93	2	0	1	1	2	6	24	9	45	

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
New York—Continued.																			
New York city .....	1	12	1	16	1	28	20	14	0	93	0	3	8	0	0	9	39	2	61
North Salem .....	3	11	6	9	27	20	7	10	0	93	—	—	—	—	—	—	—	—	—
Ogdensburg .....	6	1	0	2	0	16	8	2	0	35	—	—	—	—	—	—	—	—	—
Oswego .....	1	5	3	5	18	6	41	0	14	93	—	—	—	—	—	—	—	—	—
Ovid .....	2	3	2	10	8	30	10	28	0	93	1	0	1	8	2	18	18	26	74
Penn Yan (a) .....	3	3	0	0	14	47	26	0	0	93	—	—	—	—	—	—	—	—	—
Plainville (a) .....	0	2	2	4	4	6	43	6	0	67	4	2	26	3	0	0	0	0	35
Pompey Hill .....	4	1	3	5	14	19	21	13	0	80	0	0	0	1	1	1	3	2	8
Rochester, [Harkness] .....	10	4	3	2	14	7	22	5	26	93	—	—	—	—	—	—	—	—	—
Rochester, [Pratt] .....	11	5	1	7	3	31	21	13	0	92	1	2	0	0	2	4	21	14	44
Sag Harbor .....	8	5	4	11	10	29	19	7	0	93	3	1	1	4	2	8	24	5	48
Spencertown .....	2	0	1	8	1	30	4	30	17	93	7	2	1	4	3	11	3	32	63
Utica .....	0	0	7	19	1	1	5	31	5	69	—	—	—	—	—	—	—	—	—
Wampsville .....	6	0	9	6	11	5	46	10	0	93	1	0	6	5	12	5	31	12	72
Watertown .....	0	2	0	0	11	69	7	4	0	93	0	2	0	0	5	68	9	4	88
New Jersey—																			
Bloomfield .....	0	1	3	18	0	39	4	28	0	93	—	—	—	—	—	—	—	—	—
Burlington [Schmidt] .....	0	16	8	4	4	7	25	12	17	93	1	2	2	1	0	3	22	9	40
Lambertville .....	3	6	2	10	7	20	1	37	0	86	—	—	—	—	—	—	—	—	—
Newark (b) .....	0	8	0	9	3	16	9	10	1	62	—	—	—	—	—	—	—	—	—
Pennsylvania—																			
Bedford .....	0	0	0	12	3	15	6	45	0	81	0	0	0	7	0	13	7	26	53
Cannonsburg .....	7	5	26	0	0	3	43	8	0	93	—	—	—	—	—	—	—	—	—
Carlisle .....	1	9	0	12	0	14	20	4	28	88	1	4	0	10	0	10	13	5	43
Chromedale .....	5	13	8	7	3	11	3	17	28	93	0	2	3	3	1	1	26	18	54
Easton .....	6	1	0	11	8	2	5	32	23	88	5	1	1	2	3	3	21	16	52
Gettysburg .....	6	3	2	7	11	27	13	14	10	93	3	1	1	6	1	10	23	21	66
Harrisburg .....	0	1	4	9	5	7	40	21	0	87	0	0	1	1	3	5	17	9	36
Lewisburg .....	—	—	—	—	—	—	—	—	—	—	4	1	0	4	5	7	17	7	45
Meadville (a) .....	2	0	0	1	2	2	4	8	16	35	0	1	0	0	1	3	10	2	17
Morrisville .....	2	9	1	2	6	32	12	8	21	93	0	3	4	1	1	8	27	8	52
Moss Grove .....	1	7	6	3	11	19	32	8	2	89	1	1	0	2	0	8	56	5	73
Nazareth .....	13	3	11	3	1	12	35	15	0	93	4	0	9	0	4	5	23	2	47
Norristown .....	0	4	12	6	8	31	17	3	0	81	0	0	16	1	0	4	33	1	55
North Whitehall (a) .....	2	2	0	0	0	0	3	2	0	9	—	—	—	—	—	—	—	—	—
Philadelphia .....	7	10	7	4	7	26	15	17	0	93	0	5	1	1	0	8	6	9	30
Pocopson .....	5	4	2	9	3	25	22	17	0	87	2	0	1	0	1	5	15	10	34
Somerset .....	2	1	4	7	6	10	39	24	0	93	2	7	33	10	1	1	2	4	60
West Haverford .....	2	7	4	3	2	14	7	14	0	62	3	3	0	0	0	4	15	17	42
Maryland—																			
Bladensburg .....	0	12	4	4	1	15	1	9	0	46	—	—	—	—	—	—	—	—	—
Frederick .....	6	7	5	5	5	18	16	5	15	82	3	2	1	1	2	5	24	8	46
Ridge .....	14	1	2	23	15	16	13	8	1	93	—	—	—	—	—	—	—	—	—
Sykesville .....	0	1	1	14	19	23	34	1	0	93	0	2	1	7	0	4	54	1	69
District of Columbia—																			
Washington .....	0	14	1	10	0	44	6	16	2	93	—	—	—	—	—	—	—	—	—
Virginia—																			
Alexandria .....	16	18	4	8	19	15	4	9	0	93	—	—	—	—	—	—	—	—	—
Berryville .....	0	15	2	27	3	5	0	23	9	84	0	0	4	0	2	3	8	16	43
Crichton's Store (a) .....	30	3	2	6	13	32	3	1	3	93	1	0	0	0	0	19	38	2	60
Lewisburg .....	—	—	—	—	—	—	—	—	—	—	0	0	0	0	1	0	5	0	6
Mustapha .....	8	1	0	0	1	19	0	4	0	33	—	—	—	—	—	—	—	—	—
Poplar Grove .....	0	3	5	0	1	4	0	14	46	89	0	4	2	1	1	33	17	7	65
Portsmouth .....	11	10	4	7	15	25	6	12	1	91	—	—	—	—	—	—	—	—	—
Trout Run Valley .....	9	1	5	1	33	2	3	16	22	92	4	0	3	0	4	1	15	19	46
Wirt Court-house .....	0	3	0	29	0	0	0	1	60	93	0	38	0	16	0	0	0	1	55
North Carolina—																			
Chapel Hill .....	18	0	0	0	7	2	39	4	0	84	5	2	0	2	4	19	14	0	52

a For changes in hours of observation, &c., see notes to table of thermometer for this month.  
 b Observations taken morning and evening.

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
SOUTH CAROLINA—																				
All Saints.....	1	13	15	8	13	11	21	7	1	93	9	7	11	8	2	12	36	10	95	
Camden.....	4	23	4	12	5	30	7	4	4	93	2	11	4	8	1	9	24	5	68	
Charleston, [Johnson].....	0	5	9	4	4	14	1	0	0	37	—	—	—	—	—	—	—	—	—	
Charleston, [Dawson] (a).....	0	9	5	15	5	19	5	4	0	62	—	—	—	—	—	—	—	—	—	
St John's.....	0	8	1	23	1	17	0	12	0	62	—	—	—	—	—	—	—	—	—	
GEORGIA—																				
Savannah.....	13	4	7	20	23	13	7	6	0	93	1	0	1	0	0	0	2	0	1	
Sparta.....	2	24	10	12	5	25	4	9	0	91	3	6	4	5	2	10	8	15	53	
The Rock.....	27	24	13	10	0	3	2	14	0	93	0	0	0	0	0	0	0	1	1	
Whitemarsh Island.....	5	9	8	9	22	8	14	0	17	92	0	8	5	15	2	8	12	9	59	
Zebulon.....	2	4	25	2	2	2	15	3	0	55	0	0	14	0	3	0	8	11	45	
FLORIDA—																				
Atsena.....	1	12	10	5	4	14	29	4	11	93	5	11	13	8	1	11	21	4	77	
Gainesville (b).....	3	16	8	4	9	34	6	12	0	92	0	1	0	1	0	0	0	0	2	
Jacksonville.....	1	18	1	23	5	31	5	0	0	93	2	18	4	10	1	27	3	1	66	
St. Augustine.....	0	18	3	28	1	23	1	18	1	93	0	13	0	15	0	46	0	6	80	
Salt Ponds (c).....	1	9	17	19	8	9	0	2	1	66	—	—	—	—	—	—	—	—	62	
Warrington.....	0	10	1	23	0	46	0	10	0	90	0	18	0	1	0	3	0	5	30	
ALABAMA—																				
Auburn.....	2	5	4	25	9	7	35	0	0	93	4	8	3	3	0	0	9	8	43	
Carlowville.....	1	5	8	39	12	10	5	13	0	93	4	2	1	5	0	2	5	0	25	
Greene Springs (b).....	1	1	0	0	3	0	4	6	0	15	1	1	1	1	4	2	3	18	31	
Greensborough (b).....	7	0	4	20	13	11	2	18	0	75	4	5	6	6	0	4	8	7	46	
MISSISSIPPI—																				
Columbus.....	8	12	11	6	0	15	12	20	0	92	1	4	0	0	5	8	10	14	54	
TEXAS—																				
Austin.....	3	10	2	47	8	20	1	2	0	93	23	13	0	20	11	12	3	4	88	
New Braunfels.....	2	2	39	9	21	0	1	0	17	93	1	3	0	1	1	2	0	0	0	
Pin Oak (b).....	1	1	3	12	0	7	0	1	0	31	—	—	—	—	—	—	—	—	—	
Washington.....	3	0	0	0	28	0	0	0	0	31	—	—	—	—	—	—	—	—	—	
TENNESSEE—																				
Glenwood.....	2	13	4	18	13	8	2	4	29	93	1	4	4	2	6	14	42	10	83	
Walnut Grove (b).....	3	5	14	0	0	1	1	1	45	70	0	3	0	0	2	12	20	0	43	
KENTUCKY—																				
Ballardsville.....	11	13	1	7	23	18	0	14	0	93	0	0	0	1	1	2	0	0	1	
Danville.....	8	17	6	3	2	37	12	8	0	93	0	1	0	4	1	16	22	2	46	
Millersburg.....	13	2	10	3	13	3	9	12	15	80	1	5	5	13	4	0	14	3	45	
Paris.....	6	18	4	15	8	18	7	17	0	93	1	2	0	1	6	7	22	0	39	
Springdale.....	3	4	9	0	7	21	3	6	37	93	—	—	—	—	—	—	—	—	—	
OHIO—																				
Bellefontaine (b).....	0	1	1	4	4	24	10	6	0	50	0	0	0	2	1	28	7	4	42	
Cheviot (c).....	6	12	4	13	2	20	21	15	0	93	—	—	—	—	—	—	—	—	64	
Cincinnati, [Harper].....	2	10	7	0	0	3	24	6	0	52	0	1	1	0	0	0	1	0	3	
Cincinnati, [Telegraph].....	1	2	2	3	0	8	1	5	0	31	—	—	—	—	—	—	—	—	—	
Cleveland.....	14	4	2	10	16	5	11	17	8	87	3	0	0	0	3	5	17	5	33	
Dayton, [Fisher].....	4	20	0	11	3	25	8	10	0	90	1	0	2	0	0	10	14	12	44	
Germantown, [Groneweg].....	15	20	0	8	0	33	0	0	0	84	3	9	0	4	0	30	0	7	53	
Germantown, [Binkerd].....	2	3	11	4	4	14	0	6	41	93	3	1	0	0	4	0	19	18	51	
Granville.....	1	11	3	0	0	8	10	1	54	88	1	3	0	0	0	7	10	3	24	
Hillsborough.....	0	25	0	14	2	34	0	17	1	93	0	2	0	1	1	18	2	19	43	
Hiram.....	13	2	0	1	16	15	12	16	18	93	8	2	0	0	12	8	10	14	54	
Jefferson.....	4	18	3	10	5	18	7	28	0	93	2	4	2	4	2	11	3	15	43	
Oberlin.....	7	13	6	4	5	20	3	12	21	91	3	3	3	0	0	9	32	8	58	
Savannah.....	0	4	1	1	2	44	27	14	0	93	0	1	0	0	2	28	10	8	49	
Unionville.....	5	11	3	2	4	24	14	7	23	93	0	4	1	0	3	24	0	16	54	
Urbana.....	0	10	1	19	2	17	3	8	0	60	0	5	2	0	3	11	22	11	54	
MICHIGAN—																				
Ann Arbor, [Woodruff].....	5	12	0	13	7	16	6	7	26	92	0	2	0	2	2	13	25	15	65	
Battle Creek.....	6	3	5	8	25	18	10	1	16	92	1	1	0	2	1	10	43	1	59	
Cooper.....	0	0	0	0	0	0	17	0	75	93	—	—	1	0	—	—	26	1	28	

a Observations taken at sunrise and 4 p. m.

b For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

c Velocity of clouds observed, but not the direction.



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MICHIGAN—Continued.																			
Detroit .....	7	11	11	11	12	23	10	8	0	93	6	0	0	0	0	0	2	8	16
Eagle River .....	0	2	5	1	13	5	19	12	0	58	0	0	0	2	1	11	2	1	17
Grand Rapids, [Currier] ..	0	4	0	10	1	18	9	5	46	93	0	0	0	2	1	11	2	1	17
Holland .....	9	2	14	5	4	30	10	7	5	86	2	2	2	0	2	27	30	5	70
Monroe .....	0	39	4	17	1	23	5	2	0	92	5	30	0	5	0	16	4	15	76
Romeo (a) .....	2	2	8	2	17	8	29	6	11	85	5	0	0	0	0	1	17	4	27
INDIANA—																			
New Harmony .....	17	0	7	18	13	14	14	8	0	91	1	0	1	1	1	4	22	0	30
Richmond .....	0	5	4	5	1	21	4	7	43	90	0	0	0	0	0	0	0	0	0
ILLINOIS—																			
Athens .....	0	4	14	8	10	16	26	1	14	93	1	2	0	0	0	7	24	21	55
Augusta .....	0	4	14	8	10	16	26	1	14	93	2	1	5	1	6	5	35	2	57
Brighton .....	8	14	4	3	5	38	9	12	0	93	1	1	5	4	0	2	1	2	16
Manchester (a) .....	10	3	0	0	16	22	28	14	0	93	6	4	1	3	9	15	22	8	68
Marengo .....	0	7	7	10	30	30	6	1	2	93	1	1	0	0	0	0	0	1	3
Ottawa .....	2	11	3	13	10	27	8	8	2	84	3	1	1	1	3	5	3	5	22
Riley .....	0	5	7	4	3	4	6	14	9	52	0	0	0	0	0	0	0	0	0
Upper Alton .....	2	4	8	19	8	32	7	12	0	92	3	5	0	1	9	8	0	15	41
Warsaw .....	2	4	8	19	8	32	7	12	0	92	9	3	5	2	1	15	3	19	57
West Salem .....	5	4	1	5	18	9	6	4	40	93	2	2	0	0	3	14	37	3	61
MISSOURI—																			
Palmyra .....	6	4	4	17	12	23	17	15	24	122	6	3	4	8	7	9	27	2	73
St. Louis .....	9	17	15	14	10	9	9	10	0	93	0	0	0	0	0	0	0	0	0
WISCONSIN—																			
Appleton .....	1	16	2	0	5	38	9	22	0	93	1	11	2	0	4	31	7	37	93
Beloit .....	13	6	5	11	30	12	9	5	0	92	0	0	3	1	3	0	4	0	11
Bay City (a) .....	5	5	0	0	0	5	3	0	0	18	0	0	0	0	0	0	0	0	0
Janesville .....	6	5	4	20	18	15	10	4	11	93	0	0	0	0	0	0	0	0	0
Kenosha .....	1	7	5	5	12	5	5	3	45	89	0	0	0	0	0	0	0	0	0
Madison, [Schue] .....	2	2	8	12	20	20	17	8	0	89	0	0	0	0	0	0	0	0	0
Milwaukee, [Winkler] .....	3	12	16	29	3	9	14	7	0	93	0	0	0	0	0	0	0	0	0
Milwaukee, [Pomeroy] ..	6	5	5	29	1	5	14	14	0	84	0	0	0	0	0	0	0	0	0
Norway .....	5	5	2	3	30	19	12	2	12	90	0	0	0	0	0	4	43	4	51
Platteville .....	2	2	5	30	3	23	18	10	0	93	1	0	0	2	0	16	50	3	72
Racine, [Seymour] .....	0	8	1	2	3	10	1	1	1	27	0	0	0	0	0	0	0	0	0
Superior .....	3	30	6	0	2	35	4	13	0	93	2	29	4	0	2	34	6	16	93
Waukesha .....	2	14	10	11	23	18	12	2	0	92	1	1	1	0	2	1	4	0	10
IOWA—																			
Border Plains .....	7	1	3	38	24	10	4	6	0	93	11	1	5	1	9	5	20	6	59
Fort Madison (a) .....	2	10	2	52	7	13	1	6	0	93	1	3	1	0	0	13	34	8	60
Franklin .....	0	1	3	12	15	26	15	5	16	93	0	0	0	0	0	0	0	0	0
Muscatine .....	2	9	4	24	12	17	22	3	0	93	0	2	0	5	0	22	0	6	36
Pleasant Plain .....	3	2	3	4	12	5	3	1	0	33	0	0	0	0	0	0	0	0	0
MINNESOTA—																			
Hazlewood .....	0	2	0	5	48	5	2	29	0	92	0	0	1	0	5	2	2	0	10
CALIFORNIA—																			
Sacramento .....	6	1	1	17	32	27	2	7	0	93	1	1	0	2	0	0	0	1	5
Stockton .....	0	2	0	0	0	0	3	26	0	31	0	0	0	0	0	0	0	0	0
MEXICO—																			
City of Mexico .....	31	7	9	30	1	1	2	11	1	93	5	3	4	6	2	1	1	6	23
SOUTH AMERICA—																			
Catharina Sophia, Sur'm(a) ..	1	45	17	12	8	5	0	0	1	93	1	24	51	19	0	0	2	0	97
Colonia Tovar, Venezuela ..	0	0	0	0	0	0	0	0	0	0	0	3	13	35	1	0	0	0	52

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal	16	13	3	7	9	5	20	17	0	94	10	12	5	4	9	8	17	15	80	
St. John's (a)	6	0	1	2	11	7	3	18	0	48										
St. Martin	2	12	2	15	3	32	7	20	0	93										
Toronto (a)	5	12	0	7	2	22	3	33	9	93										
MAINE—																				
Cornish (b)	4	6	4	23	8	7	9	26	0	87										
Gardiner	1	10	6	30	6	10	3	9	18	93	0	3	2	5	3	7	3	13	36	
Monson	0	3	6	6	10	4	1	23	0	53	3	2	0	2	0	0	0	3	10	
Perry	3	3	6	22	26	17	4	12	0	93	1	2	6	4	8	14	3	11	49	
Portland	5	9	18	15	17	4	16	8	1	93	0	0	1	0	0	5	16	2	24	
Steuben	1	21	2	14	2	36	2	9	0	93	2	9	0	2	2	13	11	4	43	
NEW HAMPSHIRE—																				
Barnstead	2	5	17	11	0	7	7	44	0	93	2	15	10	30	0	7	0	6	71	
Concord	0	13	21	0	7	11	3	26	12	93										
Manchester (a)	3	3	4	17	5	8	14	9	2	65	0	3	5	17	2	7	15	5	54	
Stratford	0	0	19	2	4	9	0	2	0	45	0	0	5	3	4	12	17	11	52	
West Enfield	14	4	2	10	16	13	14	20	0	93	14	3	2	8	7	8	1	22	65	
VERMONT—																				
Brandon	14	0	5	16	19	9	6	18	6	93	7	0	0	0	2	8	13	21	51	
Burlington	34	2	1	6	34	4	6	6	0	93	0	0	0	0	0	0	3	0	3	
Craftsbury	5	14	7	5	25	15	15	7	0	93	4	8	1	2	8	13	21	12	69	
Shelburn	13	1	0	3	42	4	4	23	0	90	0	7	9	18	1	0	0	0	35	
MASSACHUSETTS—																				
Amherst	5	3	2	30	5	11	7	21	1	85	2	3	0	7	6	7	6	11	42	
Bridgewater (a)	3	14	9	8	5	23	11	20	0	93	5	24	11	19	3	14	9	8	93	
Cambridge (a)	0	7	7	4	3	19	7	11	24	82										
Mendon	1	6	0	7	3	35	7	25	0	93	0	6	9	7	5	30	11	25	93	
Nantucket	9	19	2	10	6	24	3	7	13	93										
New Bedford	1	11	2	17	2	27	3	29	1	93	3	4	1	6	5	7	11	7	44	
Newburyport	4	12	14	9	15	4	18	14	0	90										
North Attleborough	7	7	6	7	20	10	10	17	0	84	7	3	11	2	15	6	19	8	71	
Princeton	2	14	14	7	0	12	21	23	0	93	1	11	14	6	0	12	20	15	79	
Richmond (a)	0	8	0	12	0	34	0	21	0	75	0	7	0	14	1	32	0	13	67	
Westfield	0	4	9	14	6	9	29	22	0	93										
Weymouth	0	5	0	21	3	11	0	16	0	62										
Williamstown (a)	5	1	8	9	9	6	5	25	2	70	0	0	0	5	0	0	3	2	10	
Worcester	19	1	3	13	11	17	20	9	0	93	0	0	0	0	0	0	4	0	4	
RHODE ISLAND—																				
Providence (a)	3	11	4	9	8	24	10	22	1	92										
CONNECTICUT—																				
Georgetown	4	20	6	14	32	10	3	3	1	93	0	13	11	10	3	3	3	2	51	
New London	2	0	4	13	9	30	5	24	0	93										
Norwich	1	19	0	11	1	23	2	4	28	89										
Pomfret	5	6	5	11	10	16	5	35	0	93	4	5	4	8	7	17	7	16	68	
Saybrook	8	3	4	13	3	29	4	16	13	93	3	2	2	4	1	6	17	4	39	
Wallingford	4	0	1	17	5	15	0	25	20	93	4	0	4	12	1	17	27	6	73	
NEW YORK—																				
Angelica	3	1	1	8	9	18	35	18	0	93	0	1	0	2	3	16	25	1	48	
Baldwinsville	10	2	3	0	4	16	19	26	0	80	10	1	1	0	3	1	30	18	64	
Beverly	9	7	0	10	13	27	0	20	6	92	4	9	2	9	3	20	12	16	75	
Blackwell's Island	6	20	17	12	5	14	10	9	0	93	6	11	13	7	5	12	9	7	70	
Cazenovia	9	0	0	4	8	10	33	25	2	91	9	0	0	4	2	11	44	11	81	
Clinton	1	5	8	16	5	20	36	2	0	93	1	0	0	1	4	6	23	7	42	
Fishkill Landing (a)	0	2	4	1	0	0	0	0	0	7										
Flatbush	9	7	3	11	15	13	9	26	0	93	1	2	3	2	2	8	14	25	57	
Geneva	3	2	0	9	14	7	30	15	13	93	0	0	0	0	0	4	48	3	55	
Houseville	13	2	2	6	16	23	11	20	0	93	7	4	0	5	5	24	10	15	70	
Lodi	8	0	0	4	10	12	19	33	7	93	2	1	0	2	1	7	23	24	60	
Lowville	10	3	3	7	11	11	21	27	0	93	12	5	0	1	5	7	26	10	66	
Mexico	7	0	8	14	16	4	22	22	0	93	3	0	0	2	2	7	36	9	59	

a For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

b Velocity of clouds observed, but not the direction.



## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
New York city .....	2	5	5	23	0	13	24	21	0	93	0	2	10	5	1	14	36	4	72	
North Salem .....	4	5	1	17	18	15	6	27	0	93	---	---	---	---	---	---	---	---	---	
Ogdensburg .....	2	3	0	0	0	5	6	3	0	19	---	---	---	---	---	---	---	---	---	
Oswego .....	3	11	7	3	13	14	36	2	4	93	---	---	---	---	---	---	---	---	---	
Ovid .....	0	0	0	3	20	10	24	27	0	93	1	0	0	2	19	4	23	26	75	
Penn Yan (a) .....	15	8	0	0	10	10	47	3	0	93	---	---	---	---	---	---	---	---	---	
Plainville .....	2	6	0	4	1	6	29	18	0	66	0	4	42	9	2	2	0	4	63	
Rochester, [Harkness] .....	9	3	3	4	4	21	23	26	0	93	---	---	---	---	---	---	---	---	---	
Rochester, [Pratt] .....	5	2	2	3	3	18	20	24	0	80	4	2	1	1	4	1	20	25	59	
Sag Harbor .....	10	5	14	6	20	5	16	14	0	93	---	---	---	---	---	---	---	---	---	
Spencertown .....	6	5	0	7	3	24	4	44	0	93	1	4	0	5	1	12	11	40	75	
Utica .....	0	2	19	8	1	3	7	18	0	58	---	---	---	---	---	---	---	---	---	
Wampsville .....	2	0	2	4	16	6	45	18	0	93	1	0	2	4	16	5	41	13	85	
Watertown .....	0	22	0	0	4	41	19	1	0	93	---	---	---	---	---	---	---	---	---	
NEW JERSEY—																				
Bloomfield .....	6	2	6	9	1	24	9	29	0	86	---	---	---	---	---	---	---	---	---	
Burlington, [Schmidt] .....	3	12	3	9	6	17	27	15	1	93	3	1	0	1	6	17	19	11	58	
Lambertville (b) .....	2	7	0	17	4	18	4	35	0	87	---	---	---	---	---	---	---	---	---	
Newark .....	4	3	2	9	2	14	5	20	3	62	---	---	---	---	---	---	---	---	---	
PENNSYLVANIA—																				
Bedford .....	0	2	0	9	0	15	2	47	0	75	0	2	0	4	0	16	4	28	54	
Cannonsburg .....	6	0	19	0	0	3	58	7	0	93	---	---	---	---	---	---	---	---	---	
Carlisle .....	2	1	1	4	5	6	6	16	47	88	3	1	1	3	5	4	9	11	37	
Chromedale .....	6	3	0	10	4	8	2	25	35	93	2	6	0	6	2	7	28	12	63	
Easton .....	14	2	0	11	6	6	8	28	24	93	4	2	0	4	5	4	25	19	63	
Gettysburg .....	11	3	1	3	9	15	11	29	11	93	2	1	0	4	2	15	24	20	68	
Harrisburg .....	4	1	0	10	8	0	29	38	0	90	3	1	0	1	3	2	15	15	41	
Lewisburg .....	7	10	2	0	11	10	18	4	25	93	4	2	1	0	3	9	17	5	41	
Meadville .....	4	0	0	3	4	6	4	17	52	90	2	0	0	2	2	10	21	18	55	
Morrisville .....	2	1	2	5	4	20	11	2	13	60	1	1	0	4	1	17	17	3	44	
Nazareth .....	20	4	3	3	5	19	22	17	0	93	15	0	1	1	5	5	23	5	55	
Norristown .....	1	1	0	13	5	28	20	10	0	78	0	0	7	2	0	19	29	3	60	
North Whitehall (a) .....	0	0	1	0	0	1	6	10	0	18	---	---	---	---	---	---	---	---	---	
Philadelphia .....	5	6	6	11	6	20	18	21	0	93	1	0	2	0	4	17	11	7	42	
Pocopson .....	6	1	0	2	7	30	31	15	0	92	3	2	0	2	2	7	19	7	42	
Somerset .....	6	3	0	8	4	20	20	32	0	93	0	10	31	19	2	2	0	3	67	
West Haverford .....	4	2	0	8	0	14	15	14	5	62	1	6	3	2	0	1	16	18	47	
MARYLAND—																				
Bladensburg .....	3	2	1	3	0	8	1	15	0	33	---	---	---	---	---	---	---	---	---	
Frederick .....	6	1	1	1	6	18	23	14	19	89	0	1	0	1	8	5	45	10	70	
Sykesville .....	1	2	5	16	1	13	35	20	0	93	0	0	2	7	0	2	55	2	68	
DISTRICT OF COLUMBIA—																				
Washington .....	0	4	2	7	2	22	17	33	6	93	---	---	---	---	---	---	---	---	---	
VIRGINIA—																				
Alexandria .....	26	15	2	9	15	6	0	20	0	93	---	---	---	---	---	---	---	---	---	
Berryville .....	10	6	2	8	1	12	5	13	8	65	8	3	0	0	3	5	6	3	28	
Crichton's Store (a) .....	21	3	3	3	30	18	5	9	1	93	0	0	0	0	2	26	31	3	62	
Lewisburg .....	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2	7	11	4	24	
Mustapha .....	10	1	0	0	0	16	3	1	0	31	0	0	0	0	1	1	0	0	2	
Poplar Grove .....	0	4	5	0	0	2	19	8	47	85	0	0	0	0	0	11	42	24	77	
Portsmouth .....	15	10	7	8	17	12	12	10	0	91	---	---	---	---	---	---	---	---	---	
Trout Run Valley .....	5	0	0	1	39	0	9	13	26	93	4	0	0	0	1	2	19	24	50	
Wirt Court-House .....	0	16	0	22	0	0	0	0	55	93	0	66	0	9	0	2	0	0	77	
NORTH CAROLINA—																				
Chapel Hill .....	13	16	4	1	4	8	39	8	0	93	3	2	0	0	2	21	29	4	61	
Goldsbrough .....	5	11	11	5	17	15	6	8	13	91	1	4	0	1	9	22	3	2	42	
SOUTH CAROLINA—																				
All Saints .....	7	14	8	7	12	15	19	11	0	93	4	12	10	3	1	12	49	4	95	
Camden .....	0	23	5	7	5	30	8	8	6	92	2	7	5	5	2	12	29	11	73	
Charleston, [Johnson] .....	0	3	6	1	5	12	5	6	0	38	---	---	---	---	---	---	---	---	---	
Charleston, [Dawson] (c) .....	0	12	3	13	2	22	4	0	0	62	---	---	---	---	---	---	---	---	---	

<sup>a</sup> For changes in hours of observation, &c., see notes to table of thermometer for this month.

<sup>b</sup> Observations taken a. m. and p. m.

<sup>c</sup> Observations taken at sunrise and 4 p. m.

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
SOUTH CAROLINA—Contin'd.																			
Edisto Island (a).....	3	4	12	7	7	7	2	6	0	48	0	0	4	3	1	2	3	5	18
St. John's.....	0	9	0	22	0	22	0	9	0	62	—	—	—	—	—	—	—	—	—
GEORGIA—																			
Savannah.....	8	2	8	19	30	13	6	7	0	93	0	0	0	0	0	0	1	0	1
Sparta.....	7	19	7	7	7	19	6	19	0	91	1	5	3	4	1	15	14	9	52
Thomaston (a).....	9	11	8	11	0	19	11	26	0	95	0	0	0	0	0	3	0	2	5
Whitemarsh Island.....	2	4	7	10	29	12	17	7	5	93	4	3	0	0	1	4	17	12	50
Zebulon.....	0	2	3	1	0	2	9	3	0	20	0	0	0	0	0	0	1	0	1
FLORIDA—																			
Atsena.....	2	5	14	12	6	12	24	12	5	92	1	5	16	11	6	5	11	4	59
Gainesville (a).....	3	14	7	9	12	25	14	0	0	93	—	—	—	—	—	—	—	—	—
Jacksonville.....	3	13	2	27	6	34	2	5	1	93	0	3	3	15	0	37	8	0	66
St. Augustine.....	0	5	7	45	1	20	0	15	0	93	0	0	0	40	0	42	0	8	90
Salt Ponds.....	3	7	5	20	17	3	2	6	2	65	—	—	—	—	—	—	—	—	—
Warrington.....	0	15	0	16	4	43	4	11	0	93	4	17	2	7	0	6	0	7	43
ALABAMA—																			
Auburn.....	12	4	4	14	28	12	0	10	0	93	7	7	3	3	17	4	9	3	53
Carlowville.....	5	9	11	28	16	9	7	8	0	93	5	0	4	6	7	2	1	1	26
Greensborough (a).....	3	4	0	23	13	0	1	16	0	60	5	2	1	7	6	3	0	8	41
MISSISSIPPI—																			
Columbus.....	15	10	9	3	13	8	8	23	0	89	4	6	1	1	7	6	4	17	46
TEXAS—																			
Austin.....	11	8	4	33	16	16	0	5	0	93	22	11	4	19	11	13	0	5	85
New Braunfels.....	7	2	16	30	18	1	2	2	15	93	—	—	—	—	—	—	—	—	—
Pin Oak (a).....	1	1	0	14	1	9	3	2	0	31	—	—	—	—	—	—	—	—	—
Washington.....	3	0	1	0	26	0	1	0	0	31	—	—	—	—	—	—	—	—	—
TENNESSEE—																			
Glenwood.....	11	15	3	7	10	11	10	8	18	93	3	4	1	1	1	14	44	11	79
Walnut Grove (a).....	2	7	6	0	0	1	1	1	27	45	0	2	0	1	0	13	12	1	29
KENTUCKY—																			
Ballardsville.....	15	14	1	1	16	11	8	27	0	93	0	0	1	0	2	6	10	7	26
Millersburg.....	6	2	7	1	1	2	19	8	1	47	1	1	0	1	1	3	43	0	50
Paris.....	7	14	0	4	4	15	6	43	0	93	2	0	0	0	6	6	26	2	42
Springdale.....	5	10	3	1	1	15	7	16	35	93	—	—	—	—	—	—	—	—	—
OHIO—																			
Bellefontaine.....	2	4	2	3	0	16	21	19	0	75	3	1	0	1	4	23	13	24	69
Cheviot.....	16	12	6	8	3	16	19	13	0	93	0	0	0	1	0	1	1	0	0
Cincinnati, [Harper].....	12	2	2	0	0	5	45	27	0	93	—	—	—	—	—	—	—	—	—
Cleveland.....	18	2	0	10	31	4	4	18	2	89	6	0	0	1	1	3	17	22	50
Dayton, [Fisher].....	23	13	0	4	10	24	2	13	0	89	10	5	0	2	3	13	3	9	45
Germantown, [Groneweg].....	32	3	0	11	1	21	0	8	0	76	9	0	0	5	0	21	1	0	42
Germantown, [Binkerd].....	6	8	0	2	2	11	7	9	41	86	3	1	0	0	2	4	18	16	44
Granville.....	0	5	0	0	0	13	16	0	57	91	0	1	0	0	0	0	12	1	23
Hillsborough.....	3	21	1	6	1	27	7	18	0	84	0	1	0	0	0	14	7	15	37
Hiram.....	11	0	0	2	7	14	16	18	25	93	7	0	0	0	4	4	36	11	62
Jefferson.....	0	10	2	9	8	15	6	43	0	93	0	0	0	4	7	10	6	26	53
Oberlin (a).....	2	2	1	3	3	13	0	21	19	70	1	1	2	0	0	5	26	16	51
Savannah.....	4	0	0	4	0	13	28	44	0	93	1	0	0	3	0	6	24	27	61
Unionville.....	15	5	2	1	4	18	12	17	19	93	2	0	0	2	1	7	26	30	68
Urbana.....	3	4	0	12	0	10	3	16	0	48	3	0	0	2	0	12	23	14	54
MICHIGAN—																			
Ann Arbor, [Woodruff].....	4	2	1	2	10	14	8	27	23	91	1	2	0	0	2	4	22	25	56
Battle Creek.....	17	0	1	1	13	7	11	14	29	93	5	0	0	0	0	5	29	10	49
Cooper.....	0	0	0	0	2	1	27	0	63	93	0	0	0	0	2	0	0	2	12
Detroit.....	2	12	3	4	9	46	6	11	0	93	2	0	1	0	0	2	2	5	12
Eagle River.....	1	11	1	0	3	1	15	8	0	40	—	—	—	—	—	—	—	—	—
Grand Rapids, [Currier].....	0	11	0	6	0	24	6	10	36	93	0	0	0	0	0	4	8	5	17
Holland.....	17	4	14	2	12	6	17	21	0	93	16	1	0	0	3	4	26	19	69
Monroe.....	2	23	1	5	3	8	0	48	0	90	0	11	0	2	0	0	0	79	92
Romeo (a).....	10	4	3	1	9	6	10	27	10	80	10	0	0	0	3	3	16	9	41

a For changes in hours of observation, &amp;c., see notes to table of the thermometer for this month.



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NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
INDIANA—																				
New Harmony .....	26	2	5	9	6	5	12	16	0	81	2	0	0	1	1	2	19	5	30	
Richmond .....	5	10	0	1	3	13	4	8	38	82										
ILLINOIS—																				
Athens .....	3	19	1	12	8	10	4	14	0	71	0	0	0	0	0	2	13	39	54	
Augusta .....	3	8	13	6	13	11	14	10	15	93	2	1	0	0	8	2	21	4	38	
Brighton .....	6	25	5	5	9	19	10	14	0	93	3	5	0	4	1	3	0	2	18	
Manchester (a) .....	17	0	2	3	8	8	21	34	0	93	2	0	0	0	3	10	25	18	58	
Marengo .....	0	24	1	8	9	42	4	5	0	93	0	1	0	0	0	0	0	0	1	
Ottawa .....	10	10	1	1	22	12	0	13	2	77	3	1	0	0	3	1	3	8	19	
Peoria .....	12	5	6	0	9	18	21	22	0	93	0	0	0	0	1	2	3	8	14	
Riley .....	1	1	13	8	3	12	7	18	15	78										
Upper Alton .....	0	0	0	0	3	4	0	14	0	21	12	11	0	1	0	4	3	15	46	
Warsaw .....	9	18	3	19	9	10	5	20	0	93	4	0	0	0	3	10	4	31	56	
West Salem .....	14	5	2	5	9	5	1	8	44	93	3	0	0	0	0	5	40	8	56	
MISSOURI—																				
Palmyra .....	12	3	2	14	18	20	7	15	21	112	8	1	0	5	3	5	32	8	62	
St. Louis .....	14	12	12	11	6	7	12	12	0	86										
WISCONSIN—																				
Appleton .....	0	21	0	1	3	22	11	35	0	93	0	18	0	0	3	19	13	40	93	
Beloit .....	30	6	1	8	16	15	10	7	0	93	3	0	0	0	0	1	5	1	10	
Janesville .....	9	8	9	8	14	12	7	10	16	93	0	0	1	0	0	0	1	0	2	
Kenosha .....	3	8	10	3	12	5	4	9	34	88										
Madison, [Schue] .....	1	1	6	7	22	0	27	12	2	86										
Milwaukee, [Winkler] .....	4	27	13	21	3	5	10	10	0	93										
Milwaukee, [Pomeroy] .....	3	11	3	36	0	13	10	12	0	88										
Norway .....	9	5	12	8	11	8	25	9	6	93	0	2	0	0	0	4	50	6	62	
Platteville .....	8	10	1	21	6	10	10	27	0	93	1	5	6	23	6	3	0	12	58	
Superior .....	3	39	3	0	5	23	3	24	0	91	1	33	1	0	3	28	2	22	90	
Waukesha .....	7	10	10	11	5	22	13	15	0	93	5	0	0	0	0	2	19	13	39	
IOWA—																				
Border Plains .....	10	1	4	12	20	0	8	28	1	93	8	0	1	1	2	1	4	7	24	
Fort Madison (a) .....	3	15	9	10	8	22	1	21	4	93	3	0	0	0	0	1	23	20	47	
Franklin .....	9	2	1	5	13	11	7	10	35	93										
Muscatine .....	0	12	0	17	0	37	2	25	0	93	0	2	0	2	0	21	1	23	49	
Pleasant Plains .....	6	5	1	2	6	4	1	7	0	32										
MINNESOTA—																				
Hazlewood .....	1	0	2	4	25	5	4	49	0	90	0	0	1	3	1	0	6	0	11	
CALIFORNIA—																				
Sacramento .....	2	3	2	31	33	13	4	5	0	93	1	0	0	3	5	7	0	0	16	
MEXICO—																				
City of Mexico .....	26	14	18	2	1	0	2	28	0	91	0	3	0	2	2	0	2	2	23	
Vera Cruz .....	1	11	9	4	3	11	3	5	6	53										
SOUTH AMERICA—																				
Catharina Sophia, Sur'm(a) .....	0	31	23	27	7	3	0	2	0	93	1	4	50	33	2	0	0	1	91	
Tovar, Venezuela .....	5	1	1	0	0	0	2	2	0	11	4	6	9	23	8	1	0	0	51	

a For changes in hours of observation, &amp;c., see notes to table of the thermometer for this month.

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal	18	5	6	2	9	31	13	20	1	105	14	3	5	2	5	15	15	18	77	
St. John's (a)	8	0	0	0	7	12	5	34	0	66	—	—	—	—	—	—	—	—	—	
St. Martin	0	15	0	11	2	38	6	18	0	90	0	0	0	2	0	0	0	0	2	
Toronto (a)	0	13	3	12	3	23	4	28	4	90	—	—	—	—	—	—	—	—	—	
Wolfville	2	5	4	11	8	18	17	14	8	87	3	3	1	10	9	16	14	16	72	
MAINE—																				
Carmel (a)	0	2	1	5	0	10	10	7	14	49	0	1	0	5	0	8	5	3	22	
Cornish (a)	2	5	0	5	5	1	11	22	0	51	0	0	0	0	0	1	0	0	1	
Gardiner	0	12	1	20	2	22	3	13	17	90	1	2	1	4	2	17	4	11	42	
Monson	4	0	5	12	8	5	5	38	13	90	—	—	—	—	—	—	—	—	—	
Perry	1	2	1	6	18	25	5	32	0	90	1	2	0	3	2	13	5	11	37	
Portland	5	10	15	6	12	13	12	11	0	84	2	0	0	1	1	11	8	4	27	
Steuben	1	8	1	9	2	21	3	14	4	63	2	1	0	0	0	11	8	10	32	
NEW HAMPSHIRE—																				
Barnstead	0	0	0	5	0	13	14	58	0	90	1	19	10	37	0	3	0	0	70	
Concord	0	8	0	22	0	25	0	35	0	90	—	—	—	—	—	—	—	—	—	
Manchester	0	3	4	10	8	14	18	25	1	83	1	1	7	10	5	9	26	4	63	
Stratford	2	0	8	1	0	6	2	1	0	20	1	0	1	2	1	11	12	5	33	
West Enfield	0	0	0	10	18	13	18	31	0	90	4	1	0	6	1	6	3	28	49	
VERMONT—																				
Brandon	6	0	2	18	23	9	0	19	7	90	2	0	0	1	3	7	20	15	48	
Burlington	18	8	1	8	46	0	9	0	0	90	0	0	0	0	0	0	3	0	3	
Craftsbury	4	12	6	10	21	15	13	9	0	90	3	5	0	3	3	11	22	16	63	
Shelburn	14	0	0	0	61	5	1	0	0	90	1	15	14	8	0	0	0	1	39	
MASSACHUSETTS—																				
Amherst	3	1	0	41	3	6	4	32	0	90	1	0	1	3	2	15	10	11	43	
Boston	5	9	15	14	12	51	27	47	0	180	—	—	—	—	—	—	—	—	—	
Bridgewater (a)	5	11	15	3	4	33	10	9	0	90	—	—	—	—	—	—	—	—	—	
Cambridge (a)	2	6	4	3	1	27	5	3	29	80	—	—	—	—	—	—	—	—	—	
Mendon	2	5	4	3	2	34	6	34	0	90	3	5	4	3	2	36	8	29	90	
Nantucket	5	14	4	8	9	34	2	8	6	90	—	—	—	—	—	—	—	—	—	
New Bedford	7	9	0	15	3	33	13	10	0	90	0	2	0	4	1	10	16	15	48	
Newburyport	3	1	18	8	12	0	17	10	0	78	0	0	0	0	1	0	2	0	3	
North Attleborough	16	4	9	4	27	15	9	6	0	90	6	4	7	3	19	8	10	2	59	
Princeton	0	5	16	5	0	12	38	13	1	90	1	3	12	3	0	8	32	6	65	
Richmond	1	3	1	15	1	44	0	25	0	99	1	1	0	14	5	26	3	12	62	
Westfield	3	3	13	11	0	15	13	23	0	90	—	—	—	—	—	—	—	—	—	
Weymouth	3	0	0	14	1	22	5	15	0	60	—	—	—	—	—	—	—	—	—	
Williamstown	3	0	3	21	14	15	4	29	0	89	0	0	0	6	0	2	1	7	16	
Worcester	19	1	0	2	6	23	30	9	0	90	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Providence (a)	6	15	3	4	1	28	5	27	0	89	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Georgetown	15	17	3	10	19	13	9	4	0	90	2	22	16	4	2	1	2	5	54	
New London	0	8	8	9	6	42	0	17	0	90	—	—	—	—	—	—	—	—	—	
Norwich	0	11	0	17	0	23	2	1	34	88	—	—	—	—	—	—	—	—	—	
Pomfret	4	11	0	12	5	32	3	23	0	90	2	4	0	10	4	20	5	9	54	
Saybrook	9	4	3	12	2	34	6	12	7	89	0	0	0	4	3	8	13	6	37	
Wallingford	12	2	1	7	14	21	3	11	19	90	1	4	0	4	4	15	16	5	49	
NEW YORK—																				
Angelica	1	5	1	8	5	24	42	4	0	90	0	0	0	2	0	18	5	1	26	
Baldwinsville	0	0	8	7	3	12	29	17	3	79	0	0	0	0	1	2	31	10	44	
Beverly	10	5	0	7	14	32	0	10	4	82	1	1	0	11	9	21	7	2	52	
Blackwell's Island	4	23	22	14	10	2	4	11	0	90	1	21	17	8	9	0	4	9	71	
Cazenovia	4	0	0	3	10	25	10	28	9	89	3	0	0	4	10	12	21	21	71	
Clinton	2	2	8	11	10	15	33	8	1	90	1	0	0	4	4	8	29	4	50	
Flatbush	10	6	4	5	22	21	0	16	0	90	0	2	0	3	4	12	7	12	40	
Geneva	6	3	1	7	23	9	20	4	17	90	0	0	1	0	4	3	26	5	39	
Lodi	0	2	0	10	19	14	9	21	6	90	1	0	0	0	3	6	16	15	41	
Lowville	16	3	0	5	15	13	13	25	0	90	3	1	0	0	5	14	30	9	62	

c For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month



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NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
McGrawville	6	9	7	7	0	8	36	17	0	90	2	1	0	1	3	8	31	2	48
Mexico	31	12	20	1	4	0	2	20	0	90	0	1	1	14	0	13	23	1	53
New York city	3	3	1	20	1	18	15	29	0	90	0	1	1	14	0	13	23	1	53
North Salem	2	2	3	17	19	26	3	18	0	90	—	—	—	—	—	—	—	—	—
Ogdensburg	9	1	1	3	5	0	0	2	0	30	—	—	—	—	—	—	—	—	—
Oswego	5	12	3	12	19	6	26	2	4	89	0	0	1	0	0	0	0	0	1
Ovid	7	2	2	9	9	30	17	13	1	90	5	0	0	1	3	19	15	20	63
Penn Yan (a)	9	4	0	0	29	15	30	3	0	90	—	—	—	—	—	—	—	—	—
Plainville	1	3	2	4	6	6	35	18	0	75	—	—	—	—	—	—	—	—	—
Rochester, [Harkness]	6	9	1	6	7	30	21	10	0	90	—	—	—	—	—	—	—	—	—
Rochester, [Pratt]	7	10	1	6	7	30	20	9	0	90	1	1	0	2	0	5	24	7	40
Sag Harbor	4	9	7	10	23	17	8	12	0	90	1	2	4	0	8	15	12	10	52
Spencertown	25	4	2	9	15	18	9	8	0	90	7	4	0	2	4	11	15	26	69
Utica	0	0	13	16	5	4	13	3	0	54	—	—	—	—	—	—	—	—	—
Wampsville	0	0	3	4	28	15	37	3	0	90	0	0	4	3	16	11	31	3	68
Watertown	2	19	0	0	2	34	25	8	0	90	1	20	1	0	0	30	19	8	79
NEW JERSEY—																			
Bloomfield	3	5	0	13	1	39	4	26	0	91	—	—	—	—	—	—	—	—	—
Burlington, [Schmidt]	3	6	8	10	13	16	23	7	3	89	2	2	2	6	1	12	15	6	46
Lambertville	4	5	0	6	13	27	2	19	0	76	—	—	—	—	—	—	—	—	—
Newark (a)	7	6	0	0	1	28	2	8	0	61	—	—	—	—	—	—	—	—	—
Salem	6	7	3	6	16	15	4	12	15	84	2	2	2	1	1	0	0	0	8
PENNSYLVANIA—																			
Bedford	0	0	0	3	3	22	6	44	0	78	0	0	0	1	2	14	5	24	46
Cannonsburg	1	1	12	0	0	4	63	4	0	90	—	—	—	—	—	—	—	—	—
Carlisle	1	5	0	13	2	12	7	8	40	88	0	2	0	8	2	9	4	10	35
Chromedale	7	8	2	7	7	14	1	8	36	90	2	0	0	2	0	14	22	5	45
Easton	5	2	2	9	11	4	11	17	28	90	1	2	0	2	2	9	19	9	44
Gettysburg	13	4	0	0	11	33	12	5	12	90	2	1	0	0	3	22	20	3	51
Harrisburg	6	0	0	18	7	4	14	29	0	80	1	0	1	8	4	1	10	11	36
Lewisburg	5	1	1	4	11	21	16	6	25	90	1	0	1	2	6	13	11	3	37
Meadville	1	0	0	3	17	4	10	12	43	90	0	0	0	0	3	12	25	4	44
Morrisville	5	1	1	2	14	27	7	10	23	90	1	0	0	2	3	14	22	3	45
Moss Grove	3	1	1	0	17	13	31	21	0	87	0	0	1	0	0	17	27	11	56
Nazareth	17	4	1	6	14	9	15	4	20	90	8	0	2	1	14	3	11	3	42
Norristown	0	1	4	4	7	30	32	0	0	78	3	0	2	1	2	9	27	2	46
North Whitehall (a)	4	4	1	1	4	6	7	1	0	28	—	—	—	—	—	—	—	—	—
Philadelphia	5	11	6	8	12	24	8	18	0	90	0	0	1	0	1	5	4	0	11
Pocopson	11	1	2	2	5	38	18	7	0	84	1	0	1	1	5	9	18	2	37
Somerset	3	1	2	7	3	28	27	19	0	90	1	16	17	11	0	0	0	1	46
Tarentum	18	1	1	2	4	16	15	11	22	90	1	0	0	1	0	5	58	2	67
West Haverford	3	3	2	6	2	21	6	14	3	60	5	3	1	3	2	5	12	4	35
MARYLAND—																			
Bladensburg	1	7	1	4	4	8	5	5	0	30	—	—	—	—	—	—	—	—	—
Frederick	0	5	1	6	10	13	11	13	30	89	2	0	0	0	2	9	28	3	44
Ridge	13	8	3	14	19	20	1	7	0	85	—	—	—	—	—	—	—	—	—
Sykesville	0	5	5	9	0	10	55	6	0	90	1	1	2	4	1	4	41	1	55
DISTRICT OF COLUMBIA—																			
Washington	0	9	2	11	5	37	4	12	10	90	—	—	—	—	—	—	—	—	—
VIRGINIA—																			
Alexandria	15	7	3	11	33	5	3	13	0	90	—	—	—	—	—	—	—	—	—
Berryville	7	2	3	6	8	3	0	9	4	42	0	1	0	0	4	4	5	0	14
Crichton's Store (a)	23	10	0	3	33	11	2	0	7	89	0	0	0	0	0	16	26	0	42
Lewisburg	1	0	0	0	0	0	1	0	0	2	2	0	0	0	1	0	33	0	36
Mustapha	4	0	0	0	11	1	2	0	0	18	—	—	—	—	—	—	—	—	—
Poplar Grove	0	0	10	2	0	8	13	4	38	75	0	0	0	1	2	16	24	15	58
Portsmouth	15	14	4	7	11	12	2	5	0	70	—	—	—	—	—	—	—	—	—
Trout Run Valley	2	0	0	0	44	1	6	9	28	90	1	0	0	2	2	4	4	14	27
Wirt Court-House	0	12	0	34	0	0	0	0	43	89	0	41	0	14	0	0	0	0	55

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NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NORTH CAROLINA—																			
Chapel Hill .....	15	3	6	3	12	14	32	5	0	90	5	2	0	1	7	14	17	3	49
Goldsborough .....	9	8	4	3	26	5	6	7	16	84	5	0	1	0	3	4	0	0	13
SOUTH CAROLINA—																			
All Saints .....	8	17	6	13	7	2	9	28	0	90	3	9	0	5	2	12	34	8	73
Camden .....	4	9	3	11	9	19	5	19	11	90	6	9	3	4	2	12	8	14	58
Charleston, [Johnson] .....	2	15	9	16	1	4	0	3	0	50									
Charleston, [Dawson] .....	2	22	4	15	0	7	2	8	0	60									
Columbia .....	7	7	5	12	14	17	13	15	0	90	8	10	9	5	5	3	4	9	53
Edisto Island .....	24	13	11	20	7	4	4	7	0	90	3	1	0	1	0	5	0	5	15
St. John's .....	0	6	0	23	0	10	1	18	0	60									
GEORGIA—																			
Savannah .....	14	8	16	26	7	4	4	11	0	90	0	0	0	0	0	0	1	0	1
Sparta .....	4	17	14	10	4	12	4	14	0	79	5	6	3	6	0	5	8	7	40
Thomaston .....	9	10	7	34	6	6	2	16	0	90	0	0	0	0	0	1	0	2	3
Whitemarsh Island .....	12	15	4	13	5	3	4	9	25	90	4	9	3	6	2	5	6	6	41
Zebulon .....	0	4	25	2	0	0	0	0	0	31	0	0	0	0	0	1	0	0	1
FLORIDA—																			
Atsena .....	7	35	24	0	0	7	10	3	0	90	0	19	21	3	1	3	2	2	51
Gainesville (a) .....	7	34	18	7	3	4	1	14	0	88	0	0	1	0	0	0	0	0	1
Jacksonville .....	2	57	0	7	3	7	0	14	0	90	0	24	2	0	0	10	3	3	42
St. Augustine .....	2	54	21	3	0	0	1	0	0	90	0	27	10	37	0	2	0	7	83
Salt Ponds .....	2	28	17	4	3	2	1	3	0	60									
Warrington (a) .....	0	9	2	11	5	37	4	12	13	90	1	0	0	1	5	8	0	5	20
ALABAMA—																			
Auburn .....	4	2	6	36	11	6	7	16	0	88	3	0	3	8	6	2	3	0	40
Carlowville .....	4	6	5	25	9	30	4	6	0	89	6	0	1	5	0	3	0	0	21
Greene Springs .....	17	17	5	15	15	14	4	2	0	89	0	2	1	2	4	3	3	1	22
MISSISSIPPI—																			
Columbus .....	16	9	5	3	10	11	6	25	0	85	0	2	0	1	3	0	6	13	34
Port Gibson .....	4	2	1	0	0	1	7	7	0	22									
Natchez .....	12	3	8	0	4	2	0	0	0	38									
TEXAS—																			
Austin .....	23	17	0	33	0	11	1	5	0	90	23	17	1	32	2	16	4	12	107
New Braunfels .....	13	4	28	5	5	0	0	1	34	90	1	0	0	0	1	0	3	0	5
Pin Oak (a) .....	2	3	4	16	1	4	0	0	0	30									
Washington .....	0	9	2	11	5	37	4	12	10	90									
ARKANSAS—																			
Perrysville .....	0	2	0	17	0	2	0	3	0	24	0	2	0	17	0	2	0	0	24
TENNESSEE—																			
Glenwood .....	6	7	0	11	12	13	5	10	26	90	0	2	1	1	8	10	28	5	55
Knoxville .....	27	20	1	0	3	16	5	14	0	88									
KENTUCKY—																			
Ballardsville .....	15	2	1	5	24	26	3	11	0	87	0	0	0	0	0	3	2	0	0
Paris .....	3	5	1	14	3	22	15	26	0	89	0	0	1	0	7	0	15	0	23
Springdale .....	2	5	1	1	5	21	12	6	36	89									
OHIO—																			
Cheviot .....	4	4	7	13	7	20	22	13	0	90									
Cincinnati, [Harper] .....	10	5	7	0	0	27	34	7	0	90									
Cincinnati, [Telegraph] .....	12	12	0	15	33	42	21	45	0	180									
Cleveland .....	5	7	1	11	22	21	7	9	1	84	1	1	0	0	1	2	14	8	27
Dayton .....	12	5	2	1	0	36	8	18	0	82	7	1	1	1	0	17	5	10	42
Germantown, [Groneweg] .....	15	1	1	0	1	37	0	21	1	86	6	0	0	2	1	32	2	11	54
Granville .....	1	1	3	0	1	13	13	1	48	81	0	0	1	0	1	14	8	3	27
Hillsborough .....	2	11	1	15	6	25	0	27	2	89	0	0	0	0	1	15	2	10	28
Hiram .....	1	0	2	2	10	15	12	34	9	88	1	0	1	0	7	8	14	6	37
Jefferson .....	1	1	3	17	4	26	11	27	0	90	0	0	0	2	1	15	1	11	30
Madison .....	8	3	2	5	15	23	16	4	14	90	0	1	0	1	0	28	25	10	65
Oberlin .....	2	3	1	4	11	19	17	11	9	77	0	0	1	0	2	7	39	2	51
Savannah .....	0	10	0	6	3	34	14	23	0	90	0	1	0	6	3	23	7	14	54
Sidney .....	2	8	1	0	7	19	6	10	0	62	1	7	6	5	0	23	8	10	60

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Urbana .....	1	2	2	20	2	19	1	11	0	58	1	0	1	0	3	14	19	8	43	
West Bedford .....	10	12	25	19	7	2	8	5	2	90	1	0	0	0	0	3	25	14	43	
Zanesville, [Dayton] .....	3	3	0	6	4	24	1	5	38	84	2	1	0	2	22	3	2	34		
MICHIGAN—																				
Battle Creek .....	5	1	4	3	22	16	10	12	17	90	2	0	0	0	0	10	37	9	58	
Cooper .....	0	0	5	0	2	2	41	0	40	90	0	0	11	7	3	0	12	2	35	
Detroit .....	4	14	2	3	6	29	20	12	0	90	4	0	1	0	0	0	22	1	28	
Eagle River .....	1	5	0	0	0	15	36	27	0	84	0	0	0	0	0	11	12	3	26	
Grand Rapids, [Currier] ..	2	7	0	4	32	1	2	40	90	0	0	0	0	0	6	19	45	4	86	
Holland .....	11	1	16	3	9	15	26	9	0	90	12	0	0	0	0	17	0	42	77	
Monroe .....	0	13	0	1	19	23	0	24	0	80	1	7	0	0	10	17	0	42	77	
Romeo (a) .....	10	0	1	1	24	8	22	6	8	80	2	0	0	1	4	5	12	2	26	
INDIANA—																				
New Harmony .....	10	0	1	11	7	12	24	15	0	80	0	0	0	1	1	1	22	1	26	
Richmond (a) .....	0	2	0	4	2	4	0	0	14	26	0	0	0	0	0	0	0	0	0	
ILLINOIS—																				
Athens .....	1	6	0	11	12	13	7	20	0	70	0	0	0	0	0	17	19	20	56	
Augusta .....	3	5	4	5	12	27	19	8	7	90	2	0	0	1	5	7	14	3	32	
Brighton .....	1	5	2	4	6	39	14	17	0	88	0	3	2	6	0	1	2	1	15	
Manchester (a) .....	6	1	0	0	5	19	32	26	0	90	2	0	0	0	2	17	16	15	52	
Marengo .....	0	7	3	7	16	32	9	1	0	75	0	0	0	0	0	0	0	0	0	
Ottawa (a) .....	5	8	2	3	7	19	24	3	79	1	0	1	0	2	5	4	3	16	16	
Peoria .....	13	0	3	1	13	12	44	4	0	90	1	0	0	0	1	5	11	2	20	
Riley .....	7	0	7	4	4	11	23	8	22	86	0	0	0	0	0	0	0	0	0	
Warsaw .....	4	0	1	16	14	24	3	26	1	89	1	1	0	1	0	16	9	18	46	
West Salem .....	7	0	0	7	15	11	12	13	25	90	0	0	0	0	0	8	34	2	44	
MISSOURI—																				
Palmyra .....	14	2	6	8	12	32	15	28	9	121	4	0	0	0	14	8	16	10	52	
St. Louis .....	4	5	3	10	11	23	21	13	0	90	0	0	0	0	0	0	0	0	0	
WISCONSIN—																				
Appleton .....	1	10	1	4	5	29	14	26	0	90	2	9	0	3	5	30	13	28	90	
Beloit .....	11	2	1	5	30	9	18	14	0	90	0	0	0	0	1	3	7	2	13	
Janesville .....	10	2	3	14	13	24	8	7	9	90	0	0	0	0	0	0	0	0	0	
Kenosha .....	5	1	6	6	6	14	14	6	27	85	0	0	0	0	0	0	0	0	0	
Milwaukee, [Winkler] ..	1	7	6	13	1	18	17	27	0	90	4	0	0	0	1	4	60	2	71	
Norway .....	5	1	3	4	22	29	14	7	5	90	3	1	0	7	0	17	20	15	63	
Platteville .....	5	1	6	22	4	10	15	27	0	90	3	1	0	7	0	17	20	15	63	
Superior .....	3	16	2	5	1	29	1	30	0	87	2	17	3	3	2	27	3	30	87	
Waukesha .....	5	0	4	9	6	31	19	16	0	90	0	0	1	0	4	4	24	10	43	
IOWA—																				
Border Plains .....	4	0	3	5	33	4	18	23	0	90	0	0	0	0	1	0	6	3	10	
Fort Madison (a) .....	5	0	2	4	8	42	4	25	0	90	1	0	1	1	1	13	14	11	42	
Franklin .....	12	3	1	4	9	20	15	13	13	90	0	0	0	0	0	0	0	0	0	
Iowa City .....	0	0	26	1	11	0	50	2	0	90	5	3	19	0	1	0	4	1	33	
Muscatine .....	0	3	0	12	1	37	4	33	0	90	0	0	0	6	1	27	4	18	56	
Pleasant Plain .....	0	0	3	2	6	6	8	8	0	35	0	0	0	0	0	0	0	0	0	
MINNESOTA—																				
Hazlewood .....	2	0	0	0	31	0	9	36	0	78	0	0	0	0	0	0	0	0	0	
CALIFORNIA—																				
Sacramento .....	14	7	4	15	18	12	0	14	0	90	1	0	2	1	5	8	0	3	20	
MEXICO—																				
City of Mexico .....	31	12	20	1	4	0	2	20	0	90	6	1	3	1	2	0	0	3	16	
Vera Cruz .....	3	20	5	3	1	10	5	15	17	79	0	0	0	0	0	0	0	0	0	
SOUTH AMERICA—																				
Catharina Sophia, Sur'm(a) ..	4	14	15	13	2	9	4	29	0	90	3	11	18	33	0	8	2	12	89	
Tovar, Venezuela .....	3	0	0	0	2	0	12	1	0	18	1	1	4	26	5	1	0	1	39	

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	8	■	0	7	7	14	14	41	0	97	3	5	0	5	8	4	10	30	65
St. John's (a) .....	9	7	0	6	6	1	2	20	0	51	—	—	—	—	—	—	—	—	—
St. Martin .....	0	8	0	7	1	45	7	25	0	93	—	—	—	—	—	—	—	—	—
Toronto (a) .....	6	16	2	■	3	27	0	12	21	93	—	—	—	—	—	—	—	—	—
Wolfville .....	7	1	0	6	1	7	30	22	18	12	■	2	0	■	■	12	18	12	53
MAINE—																			
Carmel .....	0	2	1	■	1	13	7	16	26	69	0	2	1	3	1	13	7	16	43
Cornish .....	3	2	0	5	1	5	12	65	■	93	—	—	—	—	—	—	—	—	—
Gardiner .....	0	18	■	19	2	22	■	13	18	92	1	1	0	2	0	15	4	3	26
Monson .....	2	7	■	5	5	4	9	53	8	93	—	—	—	—	—	—	—	—	—
Perry .....	■	3	1	8	4	24	6	39	0	93	■	2	1	5	3	9	12	15	49
Portland .....	13	9	4	4	16	8	21	18	0	93	1	0	0	0	0	1	16	8	26
Steuben .....	6	16	1	4	■	29	5	21	3	85	2	■	■	0	0	12	7	9	39
NEW HAMPSHIRE—																			
Barnstead .....	2	■	0	4	■	10	15	57	0	90	1	13	2	39	9	0	1	1	66
Concord .....	7	3	■	16	4	21	1	41	0	93	—	—	—	—	—	—	—	—	—
Great Falls .....	0	11	0	0	0	28	11	35	0	85	0	0	0	0	0	3	■	1	7
Manchester .....	■	3	1	6	3	20	24	34	0	91	0	■	1	5	0	9	24	9	51
Stratford .....	2	0	4	1	1	■	12	9	0	35	■	0	0	1	2	6	12	13	34
West Enfield .....	0	■	■	3	11	22	12	45	0	93	1	0	■	■	1	4	■	15	24
VERMONT—																			
Brandon .....	23	0	4	10	23	7	12	4	9	92	■	0	0	1	0	3	16	14	43
Burlington .....	36	3	1	1	33	0	18	1	■	93	—	—	—	—	—	—	—	—	—
Craftsbury .....	7	4	1	■	28	12	15	15	3	93	8	1	2	1	4	1	19	13	49
Norwich .....	5	1	0	4	1	28	4	50	0	93	5	4	11	12	7	0	3	1	43
Shelburn .....	4	0	0	0	54	9	■	26	0	93	■	9	10	12	■	■	0	1	32
MASSACHUSETTS—																			
Amherst .....	2	4	0	19	5	11	12	32	■	85	■	1	1	0	0	9	5	19	35
Bridgewater (a) .....	13	9	1	1	2	24	20	23	0	93	1	11	5	10	1	5	0	0	33
Cambridge (a) .....	2	3	2	1	3	18	9	25	22	85	—	—	—	—	—	—	—	—	—
Mendon .....	2	4	0	■	■	37	6	42	0	93	2	3	■	1	0	41	5	41	93
Nantucket .....	■	10	3	1	3	33	■	18	11	93	—	—	—	—	—	—	—	—	—
New Bedford .....	■	8	0	■	3	24	15	32	1	93	3	1	0	0	0	7	6	4	21
Newburyport .....	5	2	9	1	10	10	25	21	0	83	—	—	—	—	—	—	—	—	—
North Attleborough .....	■	4	2	0	27	11	8	29	■	90	2	■	■	0	10	14	12	11	52
Princeton .....	6	5	8	1	1	■	58	8	0	93	3	1	3	0	1	1	33	3	45
Richmond .....	0	17	0	14	1	30	0	31	0	93	4	3	1	■	0	18	4	21	60
Westfield .....	7	7	6	17	5	6	23	18	■	89	—	—	—	—	—	—	—	—	—
Weymouth (a) .....	2	1	■	5	3	17	6	10	0	44	—	—	—	—	—	—	—	—	—
Williamstown .....	9	0	3	20	10	6	11	33	1	93	1	0	1	0	1	1	6	2	12
Worcester .....	36	2	■	0	1	20	21	13	0	93	—	—	—	—	—	—	—	—	—
RHODE ISLAND—																			
Providence .....	9	11	1	2	7	28	9	19	4	90	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Georgetown .....	12	26	6	5	11	9	14	6	4	93	■	3	16	7	1	2	■	0	29
New London .....	6	3	0	■	9	29	12	34	0	93	—	—	—	—	—	—	—	—	—
Norwich .....	1	6	0	11	2	27	1	10	34	92	—	—	—	—	—	—	—	—	—
Pomfret .....	4	10	1	1	3	26	2	45	0	92	0	1	1	■	0	17	6	20	45
Saybrook .....	16	4	1	2	4	24	13	19	10	93	■	1	■	■	0	11	19	8	39
Wallingford .....	12	2	2	1	5	24	10	17	20	93	■	0	1	■	1	■	25	3	40
NEW YORK—																			
Angelica .....	0	0	■	3	1	31	45	13	0	93	0	0	0	■	0	24	14	1	39
Baldwinsville .....	13	1	2	5	1	5	26	14	6	73	3	0	■	1	1	2	20	10	37
Beverly .....	12	■	1	8	13	23	4	19	4	90	1	0	0	7	4	16	6	10	44
Blackwell's Island .....	17	23	11	8	7	0	14	13	0	93	14	16	4	6	5	0	12	12	69
Cazenovia .....	11	0	2	3	8	29	23	16	■	92	4	0	1	1	7	7	35	12	67
Clinton .....	7	13	13	3	1	5	39	9	3	93	0	2	1	■	3	6	18	6	36
Flatbush .....	12	4	6	■	11	15	23	20	0	93	1	0	0	1	0	8	8	10	28
Geneva .....	5	1	1	7	21	10	11	11	26	93	1	■	0	4	■	4	2	12	23
Lowville .....	15	4	0	10	11	13	9	31	0	93	3	3	■	0	2	3	17	15	43
McGrawville .....	2	1	20	10	0	6	40	4	3	86	—	—	—	—	—	—	—	—	—

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Mexico .....	5	4	8	27	15	10	17	7	0	93	7	1	0	1	1	6	22	2	40
New York city .....	2	3	2	9	4	19	23	31	0	93	0	2	3	1	3	4	27	10	50
North Salem .....	7	3	4	18	14	14	6	27	0	93	---	---	---	---	---	---	---	---	---
Ogdensburg .....	9	0	1	4	9	8	2	0	0	33	---	---	---	---	---	---	---	---	---
Oswego .....	6	11	3	6	17	5	25	0	6	79	---	---	---	---	---	---	---	---	---
Ovid .....	11	4	0	10	20	20	17	11	0	93	11	0	0	3	6	11	17	15	63
Penn Yan (a) .....	16	5	0	1	14	18	34	5	0	93	---	---	---	---	---	---	---	---	---
Rochester, [Harkness] .....	11	0	7	2	18	6	19	3	27	93	---	---	---	---	---	---	---	---	---
Rochester, [Pratt] .....	10	2	3	6	9	25	31	7	0	93	3	3	1	0	0	5	9	7	28
Sag Harbor .....	4	1	0	6	13	19	21	12	1	77	1	1	0	0	1	12	14	3	32
Spencertown .....	35	1	1	4	24	7	7	14	0	93	9	0	0	2	5	3	18	22	59
Townsendville .....	10	1	1	13	11	19	11	19	8	93	4	0	0	0	1	1	14	13	33
Wampsville .....	2	0	2	8	33	11	30	7	0	93	1	0	2	5	19	8	23	6	64
Watertown .....	3	17	0	0	3	29	39	2	0	93	3	10	0	0	3	23	34	5	78
NEW JERSEY—																			
Bloomfield .....	10	4	1	3	0	40	1	21	0	80	---	---	---	---	---	---	---	---	---
Burlington, [Schmidt] .....	2	17	2	5	3	24	15	19	3	90	1	5	1	1	2	10	7	7	34
Lambertville .....	1	14	0	4	5	4	5	28	0	78	---	---	---	---	---	---	---	---	---
Newark (a) .....	4	14	0	3	1	21	1	19	0	63	---	---	---	---	---	---	---	---	---
PENNSYLVANIA—																			
Bedford (a) .....	0	0	0	5	0	14	11	19	0	49	0	0	0	1	0	12	0	1	23
Cannonsburg .....	0	1	37	1	0	3	50	1	0	93	0	0	0	0	0	0	2	0	2
Carlisle .....	0	13	1	5	0	17	5	14	37	92	0	9	0	3	0	5	3	7	27
Chromedale .....	2	16	2	3	0	9	3	21	37	93	2	1	0	0	0	11	11	11	36
Easton .....	6	2	0	3	5	6	20	20	30	92	0	0	0	0	2	3	21	11	37
Gettysburg .....	4	7	8	0	6	21	15	2	28	91	0	3	4	0	2	10	15	3	37
Harrisburg (a) .....	4	2	2	12	9	2	20	27	0	78	0	0	0	3	4	0	5	7	19
Lewisburg .....	13	1	1	0	7	18	11	7	34	92	2	0	0	0	2	8	8	4	24
Meadville .....	0	6	1	3	10	14	7	13	36	90	0	1	1	2	1	9	18	7	39
Morrisville .....	6	8	0	1	1	25	14	0	29	92	3	4	0	0	0	13	13	2	35
Moss Grove .....	8	7	17	5	12	6	24	5	4	88	3	2	3	1	0	2	20	6	37
Nazareth .....	11	10	1	0	6	14	12	13	26	93	7	1	0	0	1	4	8	4	25
Norristown .....	3	5	4	1	0	14	45	9	0	81	2	2	1	0	0	2	31	6	44
North Whitehall (a) .....	2	2	0	0	2	4	5	10	0	25	---	---	---	---	---	---	---	---	---
Philadelphia .....	8	0	3	4	8	24	16	24	0	93	0	2	0	0	2	10	2	2	18
Pocopson .....	10	7	2	2	1	32	21	4	0	79	2	4	0	0	0	15	9	2	32
Somerset .....	7	5	12	5	6	21	30	7	0	93	1	11	21	9	2	2	0	6	52
Tarentun .....	17	4	1	6	10	3	11	4	37	93	2	3	0	0	1	8	38	6	58
West Haverford .....	3	7	0	1	2	21	6	13	7	60	1	0	0	1	1	3	8	9	23
MARYLAND—																			
Bladensburg .....	0	13	1	0	1	15	2	5	0	37	---	---	---	---	---	---	---	---	---
Frederick .....	8	11	1	3	5	12	13	0	32	93	0	1	0	1	4	4	30	4	44
Ridge .....	21	0	8	6	15	22	4	6	0	88	---	---	---	---	---	---	---	---	---
Sykesville .....	5	4	6	7	1	13	46	11	0	93	2	2	3	3	0	3	43	1	57
DISTRICT OF COLUMBIA—																			
Washington .....	2	18	1	0	1	35	12	6	12	93	---	---	---	---	---	---	---	---	---
VIRGINIA—																			
Alexandria .....	14	17	3	6	24	9	3	17	0	93	---	---	---	---	---	---	---	---	---
Berryville (a) .....	4	9	2	0	9	4	2	18	15	63	0	0	0	0	0	3	9	3	15
Crichton's Store (a) .....	16	9	2	1	25	22	4	0	14	93	0	0	0	0	0	11	18	0	29
Lewisburg .....	---	---	---	---	---	---	---	---	---	---	0	8	1	0	0	0	22	1	32
Mustapha .....	14	0	0	1	13	3	0	0	0	31	0	0	0	0	3	0	0	0	3
Poplar Grove .....	2	2	2	3	0	3	11	11	58	92	1	4	1	2	0	12	26	5	51
Portsmouth .....	20	15	6	7	16	9	6	12	2	93	---	---	---	---	---	---	---	---	---
Trout Run Valley .....	12	1	0	2	43	3	5	7	20	93	3	1	1	0	2	0	3	22	32
Winchester .....	3	0	0	0	0	10	15	6	59	93	3	0	0	0	0	1	6	5	15
Wirt Court-House .....	0	15	0	25	0	0	0	0	44	93	0	36	1	7	0	11	0	1	56
NORTH CAROLINA—																			
Chapel Hill .....	6	16	2	2	6	11	34	8	0	85	1	12	2	0	0	12	8	1	36
Goldsborough .....	16	12	6	0	14	9	16	4	11	88	0	0	0	0	0	0	2	0	2
Murfreesborough .....	1	18	6	1	1	7	12	1	30	77	0	0	0	0	0	4	14	0	29

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
SOUTH CAROLINA—																			
All Saints.....	14	21	8	8	5	8	17	16	1	93	9	14	4	2	5	11	12	2	54
Camden.....	3	26	2	5	1	19	11	17	14	93	1	10	5	5	0	14	4	6	45
Charleston, [Johnson].....	0	13	3	7	0	3	0	11	0	37									
Charleston, [Dawson] (a).....	3	26	2	4	1	10	3	13	5	62									
Columbia.....	12	23	11	4	0	13	15	15	0	93	2	5	9	9	5	7	5	5	47
Edisto Island.....	18	21	6	2	9	6	1	16	1	80	0	0	2	1	0	1	1	1	6
St. John's.....	0	13	0	8	1	12	4	24	0	62									
GEORGIA—																			
Savannah.....	20	8	17	15	7	5	11	10	5	93	1	0	0	1	1	3	5	0	11
Sparta.....	4	35	7	13	2	13	3	16	0	93	0	8	5	3	1	8	5	4	35
Thomaston.....	7	26	13	14	2	0	6	24	5	92	0	5	0	0	0	0	1	11	12
Whitemarsh Island.....	15	24	5	7	6	0	6	11	23	92	3	4	4	7	2	5	6	8	39
Zebulon.....	1	16	26	0	0	0	7	2	0	52	0	0	2	0	0	4	11	0	17
FLORIDA—																			
Atsena.....	8	39	14	3	1	9	4	9	5	92	4	20	13	1	0	9	1	2	50
Gainesville (a).....	11	32	10	2	1	7	5	20	0	88	0	2	0	0	0	1	0	0	3
Jacksonville.....	22	1	4	17	16	7	3	23	0	93	1	23	4	5	1	5	4	3	46
St. Augustine.....	8	54	14	2	1	0	0	14	0	93	3	41	14	5	1	1	0	6	71
Salt Ponds.....	35	24	7	4	0	0	0	2	0	72	0	0	0	0	0	4	0	0	4
Warrington (a).....	4	46	0	10	0	18	0	15	0	93	0	4	0	5	0	25	0	3	37
ALABAMA—																			
Auburn.....	1	3	5	43	8	8	9	16	0	93	1	7	0	13	5	6	1	6	39
Carlowville.....	10	7	5	13	7	30	7	14	0	93	0	0	3	3	7	6	0	0	19
Greene Springs.....	4	10	8	36	0	24	2	4	0	88	0	1	0	16	2	12	0	0	31
Greensborough.....	5	1	7	51	2	1	0	26	0	93	5	0	6	8	0	5	19	0	43
MISSISSIPPI—																			
Columbus.....	6	4	20	19	13	9	5	16	0	92	4	1	5	11	0	5	9	5	46
Natchez.....	18	4	21	7	10	0	5	7	2	74									
Port Gibson.....	17	5	2	6	7	4	3	2	0	46									
LOUISIANA—																			
Black River.....	33	1	0	3	49	5	2	0	0	93									
TEXAS—																			
Austin.....	19	13	1	29	9	13	11	7	0	93	9	11	2	26	10	14	1	7	80
New Braunfels.....	17	6	21	8	7	1	1	1	30	92	1	1	0	0	0	1	0	0	3
Pin Oak (a).....	13	1	5	7	2	1	0	2	0	31									
Washington.....	6	0	0	0	25	0	0	0	0	31									
TENNESSEE—																			
Glenwood.....	2	12	5	20	22	7	4	2	19	93	1	1	6	11	2	7	19	6	48
Knoxville.....	13	26	3	1	3	38	3	4	0	91									
KENTUCKY—																			
Ballardsville.....	4	17	0	13	18	34	4	3	0	93	0	1	0	2	0	3	2	3	11
Millersburg.....	1	3	8	3	9	1	16	11	0	52	1	0	2	0	0	0	30	0	33
Paris.....	6	13	2	14	12	24	13	8	0	92	4	0	0	1	3	2	17	0	27
Springdale.....	2	6	0	1	5	21	6	5	41	93									
OHIO—																			
Cheviot.....	9	12	21	9	10	11	19	2	0	93									
Cincinnati, [Harper].....	2	10	4	0	0	59	18	0	0	93	0	0	0	0	0	1	1	0	2
Cleveland.....	13	11	4	13	28	7	12	2	3	93	3	2	0	0	1	3	17	2	28
College Hill.....	4	12	1	5	7	13	10	1	38	91	5	9	1	2	11	8	6	1	35
Dayton, [Fisher].....	2	19	8	6	2	29	13	4	0	83	1	14	3	3	1	14	9	2	47
Germantown, [Groneweg].....	16	9	0	11	12	30	0	11	0	89	6	7	1	8	6	22	1	14	65
Germantown, [Binkerd].....	4	12	1	1	6	11	7	3	36	81	2	4	0	0	0	6	20	11	41
Granville.....	0	13	3	2	0	21	8	0	44	91	0	3	0	0	0	19	9	0	31
Hillsborough.....	1	30	1	11	5	29	1	11	3	92	5	3	1	1	1	13	3	7	29
Hiram.....	15	12	0	0	2	20	29	14	0	92	3	5	1	0	2	8	15	5	39
Jefferson.....	5	13	6	19	7	20	11	12	0	93	3	6	3	3	1	10	8	7	41
Madison.....	5	20	2	8	10	17	9	11	16	93	8	2	0	0	0	7	27	17	61
Oberlin.....	3	8	2	4	10	14	6	3	23	73	0	4	2	0	0	4	18	6	34
Portsmouth.....	3	5	3	10	16	28	20	5	1	91									
Savannah.....	0	9	3	6	0	36	14	25	0	93	0	9	3	5	0	19	5	12	53

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## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Sidney .....	5	11	3	13	3	18	4	16	0	73	0	6	5	5	0	21	8	10	55	
Urbana .....	1	7	4	12	6	15	3	5	0	53	1	3	1	3	3	13	22	1	4	
West Bedford .....	5	13	22	17	13	7	6	10	0	93	3	2	4	1	1	3	20	18	52	
MICHIGAN—																				
Battle Creek .....	4	13	7	3	23	13	13	3	14	93	0	0	0	0	1	3	38	2	44	
Cooper .....	1	1	11	2	1	5	21	1	50	93	1	0	8	0	2	4	13	0	28	
Detroit .....	4	21	13	2	5	36	10	2	0	93	3	0	0	0	0	0	3	3	9	
Eagle River .....	0	4	4	2	8	2	24	11	0	55	0	1	0	1	0	10	2	0	14	
Grand Rapids, [Carrier] ..	1	15	3	3	1	22	3	0	40	88	0	1	0	1	0	3	0	75	87	
Monroe .....	4	6	1	0	8	16	2	1	0	88	6	1	0	0	0	3	0	14	87	
Romeo (a) .....	11	3	10	3	14	7	22	0	28	98	1	0	0	2	1	0	14	0	18	
INDIANA—																				
New Harmony .....	12	2	2	16	18	13	8	6	0	77	2	0	0	1	1	1	10	1	16	
Richmond (a) .....	0	12	3	2	1	11	2	2	22	55	0	0	0	0	0	0	0	0	0	
ILLINOIS—																				
Athens .....	2	12	1	16	2	39	1	11	0	85	0	4	0	3	0	27	11	17	62	
Augusta .....	0	18	2	9	28	8	17	4	7	93	0	6	1	5	15	4	9	0	40	
Brighton .....	4	12	3	11	26	17	11	9	0	93	1	4	1	8	1	2	1	2	20	
Manchester (a) .....	13	2	1	1	27	15	27	7	0	93	3	1	0	0	17	16	12	2	51	
Marengo .....	1	12	11	10	19	30	10	0	0	93	0	0	0	0	0	0	0	0	0	
Ottawa .....	0	19	0	3	11	15	12	5	2	67	0	1	0	0	1	1	5	1	9	
Peoria .....	7	15	11	5	12	18	20	5	0	93	0	3	0	0	8	18	3	0	32	
Riley .....	3	13	8	6	16	10	12	6	3	77	0	0	0	0	0	0	0	0	0	
Warsaw .....	0	14	8	19	18	21	5	7	1	93	0	9	8	4	5	18	3	4	51	
West Salem .....	4	6	3	7	23	13	8	2	27	93	0	4	0	0	1	19	26	1	51	
MISSOURI—																				
Cape Girardeau .....	6	4	5	32	13	20	3	13	14	110	3	2	0	9	5	31	8	6	64	
Palmyra .....	0	17	0	8	13	34	15	2	27	116	0	12	1	4	16	24	20	2	79	
St. Louis .....	11	6	7	32	14	11	6	6	0	93	0	0	0	0	0	0	0	0	0	
WISCONSIN—																				
Appleton .....	2	21	1	0	17	39	7	6	0	93	2	17	1	0	15	41	9	8	93	
Beloit .....	18	5	6	3	39	9	6	7	0	93	2	3	0	0	1	2	5	0	13	
Janesville .....	3	21	1	9	25	12	8	3	11	93	0	0	0	0	0	0	0	0	0	
Kenosha .....	0	6	13	1	15	13	9	0	30	87	0	0	0	0	0	0	0	0	0	
Milwaukee, [Winkler] .....	1	24	9	19	2	17	15	6	0	93	0	0	0	0	0	0	0	0	0	
New London .....	5	11	9	6	7	39	10	6	0	93	3	7	0	0	0	26	21	7	64	
Norway .....	17	10	1	5	32	11	5	4	8	93	1	4	2	0	0	4	46	5	62	
Platteville .....	4	3	18	31	10	3	15	9	0	93	2	2	12	2	4	16	21	6	65	
Racine, [Durham] .....	12	1	5	0	9	0	0	5	0	32	4	6	0	0	0	0	0	0	10	
Superior .....	5	28	3	2	6	29	6	14	0	93	0	32	2	3	3	30	8	12	90	
Waukesha .....	0	18	3	5	4	40	10	4	0	84	0	4	1	0	1	9	15	1	31	
IOWA—																				
Border Plains .....	6	7	10	10	32	0	5	14	0	84	0	0	6	1	3	1	2	7	20	
Fort Madison (n) .....	8	9	0	20	15	26	2	11	2	93	0	6	2	3	7	21	9	4	52	
Franklin .....	4	7	2	9	14	31	10	6	7	90	0	0	0	0	0	0	0	0	0	
Muscatine .....	0	10	7	30	7	24	3	12	0	93	1	1	1	5	0	12	1	6	26	
Pleasant Plain .....	0	5	3	5	11	7	3	0	0	34	0	0	0	0	0	0	0	0	0	
MINNESOTA—																				
Hazlewood (a) .....	4	6	3	5	29	11	3	31	0	92	0	3	6	0	2	0	1	10	22	
Princeton .....	6	11	6	2	21	8	12	5	10	81	0	10	3	0	10	3	15	4	54	
CALIFORNIA—																				
Sacramento .....	22	1	4	17	16	7	3	23	0	93	0	0	1	2	1	22	0	8	34	
MEXICO—																				
City of Mexico .....	8	20	27	1	0	0	3	34	0	93	6	1	0	1	3	0	2	7	20	
Vera Cruz .....	1	23	10	5	3	6	9	23	13	93	0	4	11	19	17	2	5	5	63	
WEST INDIES—																				
Port of Spain, Trinidad ..	0	0	0	0	0	0	0	0	0	93	0	13	32	26	2	2	2	14	91	
SOUTH AMERICA—																				
Catharina Sophia, Sur'm(a) ..	2	31	29	23	5	1	0	2	0	93	0	5	40	42	1	0	1	2	91	
Tovar, Venezuela .....	1	0	0	1	0	0	5	0	0	7	0	4	11	19	17	2	5	5	63	

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## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	8	20	0	3	7	16	8	28	0	90	4	20	1	1	6	12	10	25	79
St. Martin .....	0	21	1	8	2	23	6	29	0	90	—	—	—	—	—	—	—	—	—
Toronto (a) .....	1	11	6	8	3	17	10	26	8	90	—	—	—	—	—	—	—	—	—
Wolfville .....	2	6	1	11	2	5	26	30	6	89	2	7	1	9	1	9	23	22	74
MAINE—																			
Carmel (a) .....	0	1	1	5	0	2	5	20	17	54	0	0	0	4	0	3	3	5	15
Cornish .....	2	2	0	5	5	18	4	52	0	89	—	—	—	—	—	—	—	—	—
Gardiner .....	5	10	2	5	2	18	1	34	12	90	2	0	0	1	2	13	6	13	37
Monson .....	3	1	12	7	1	5	0	58	3	90	—	—	—	—	—	—	—	—	—
Perry .....	19	5	0	10	8	12	0	34	0	90	6	4	1	4	13	11	3	7	49
Portland .....	9	8	6	3	7	15	22	20	0	90	2	0	0	0	1	6	14	7	30
Steuben .....	4	27	1	3	0	18	10	26	1	90	1	3	0	3	0	15	15	12	49
NEW HAMPSHIRE—																			
Concord .....	3	11	0	16	0	15	3	39	0	87	—	—	—	—	—	—	—	—	—
Great Falls .....	1	7	0	0	0	22	7	28	0	65	0	0	0	0	0	4	3	1	8
Manchester .....	3	3	0	2	8	11	16	47	0	90	3	3	0	2	6	12	22	22	70
Stratford .....	0	1	1	0	2	0	3	9	0	16	1	0	0	0	2	1	16	9	29
West Enfield .....	1	2	0	3	15	16	11	42	0	90	6	0	0	3	0	8	10	28	64
VERMONT—																			
Brandon .....	25	0	5	1	23	9	6	14	7	90	2	1	0	0	1	5	11	28	48
Burlington .....	18	11	1	18	28	0	14	0	0	90	0	0	0	0	0	0	2	0	2
Craftsbury .....	8	5	2	2	28	8	11	25	0	90	0	0	0	0	4	5	25	19	53
Norwich .....	8	9	2	2	8	24	1	36	0	90	8	5	15	20	15	0	0	0	63
Shelburn .....	20	1	0	0	35	4	0	27	0	87	2	4	13	11	2	1	0	3	36
MASSACHUSETTS—																			
Amherst .....	3	2	1	22	3	12	1	44	0	88	0	0	0	1	1	10	6	18	36
Bridgewater (a) .....	9	3	3	2	2	23	14	34	0	90	0	13	10	17	6	0	0	2	48
Cambridge (a) .....	3	3	1	1	2	14	18	21	16	79	—	—	—	—	—	—	—	—	—
Canton (a) .....	3	2	2	2	4	1	12	4	1	31	—	—	—	—	—	—	—	—	—
Mendon .....	7	9	0	0	1	34	7	37	0	90	2	7	0	0	1	35	7	38	90
Nantucket .....	11	2	3	5	0	21	3	35	8	90	—	—	—	—	—	—	—	—	—
New Bedford .....	3	7	2	3	3	29	5	38	0	90	3	0	0	0	0	4	6	7	22
Newburyport .....	5	3	5	1	8	12	25	21	0	81	0	0	0	0	0	0	0	0	2
North Attleborough .....	12	3	2	2	18	7	15	26	0	85	5	5	1	1	10	8	13	14	57
Princeton .....	6	6	5	3	1	13	38	18	0	90	0	3	3	0	0	6	26	8	46
Richmond .....	0	5	0	11	0	20	0	36	0	72	0	3	0	10	1	20	0	31	65
Westfield .....	7	3	7	12	7	6	24	15	0	81	—	—	—	—	—	—	—	—	—
Weymouth .....	5	1	0	4	5	15	7	23	0	60	—	—	—	—	—	—	—	—	—
Williamstown .....	13	1	5	17	20	3	11	19	1	90	2	1	1	1	9	2	2	4	22
Worcester .....	22	0	0	1	5	16	21	23	0	90	0	0	0	0	0	0	1	0	1
RHODE ISLAND—																			
Providence (a) .....	2	7	0	2	2	28	8	40	0	89	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Georgetown .....	9	22	7	11	9	12	11	5	4	90	2	9	13	0	4	1	1	0	32
New London .....	4	3	2	5	4	32	9	31	0	90	—	—	—	—	—	—	—	—	—
Norwich .....	0	7	0	19	1	27	2	17	17	90	—	—	—	—	—	—	—	—	—
Pomfret .....	2	7	0	6	4	22	5	44	0	90	1	3	0	2	3	10	0	19	47
Saybrook .....	14	4	1	2	6	15	16	24	4	86	1	0	0	0	2	4	13	13	33
Wallingford .....	11	5	0	2	11	15	12	21	12	89	0	1	0	0	1	5	26	8	41
NEW YORK—																			
Angelica .....	0	1	3	9	0	26	21	15	0	75	0	0	0	1	1	28	13	5	48
Baldwinsville .....	0	3	16	5	2	13	19	21	0	82	0	0	0	0	0	3	40	21	64
Beverly .....	2	0	7	14	33	4	23	1	86	0	0	0	6	3	25	12	7	53	—
Blackwell's Island .....	9	8	4	12	5	8	12	32	0	90	8	3	1	8	3	5	7	29	64
Cazenovia .....	4	2	1	3	16	10	24	25	4	89	0	1	0	4	4	13	39	18	79
Clinton .....	—	6	17	7	2	10	43	1	4	90	2	3	50	7	0	3	0	4	69
Fishkill Landing (a) .....	2	10	1	1	1	8	9	9	2	43	0	2	1	0	0	0	12	3	18
Flatbush .....	7	3	1	7	11	13	19	29	0	90	2	1	1	1	0	6	10	16	37
Lowville .....	11	3	3	5	17	11	18	22	0	90	1	0	0	1	1	11	25	21	60
Mexico .....	6	1	14	13	17	10	21	0	0	90	0	0	1	0	1	8	29	12	51

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## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
New York city .....	0	4	2	16	2	17	16	33	0	90	0	3	1	0	2	22	12	21	67	
North Salem .....	4	9	1	11	20	15	4	26	0	90	—	—	—	—	—	—	—	—	—	
Ogdensburg .....	7	5	2	2	1	8	2	3	0	30	—	—	—	—	—	—	—	—	—	
Oswego .....	1	9	14	11	11	5	29	4	2	89	—	—	—	—	—	—	—	—	—	
Ovid .....	2	1	4	10	13	12	29	19	0	90	2	1	2	2	6	17	32	18	80	
Penn Yan (a) .....	7	1	0	1	20	28	31	2	0	90	—	—	—	—	—	—	—	—	—	
Rochester, [Harkness] .....	0	0	3	1	17	9	29	2	23	90	—	—	—	—	—	—	—	—	—	
Rochester, [Pratt] .....	2	3	6	8	15	25	27	4	0	90	2	0	0	0	3	5	29	10	49	
Sag Harbor .....	8	2	3	5	19	18	13	19	3	90	1	1	3	1	2	15	19	7	49	
Spencertown .....	18	5	2	13	17	11	1	23	0	90	11	0	0	2	2	9	17	35	76	
Townsendville .....	3	0	1	17	5	13	14	28	6	90	0	0	0	2	1	10	24	16	53	
Troy (a) .....	8	0	0	0	17	1	23	8	33	90	4	3	10	3	1	0	0	0	21	
Utica .....	0	1	1	21	6	1	10	19	31	90	—	—	—	—	—	—	—	—	—	
Wampsville .....	7	2	4	3	19	4	33	18	0	90	8	2	6	3	19	8	29	11	86	
Watertown .....	0	18	0	0	0	45	14	13	0	90	0	15	0	0	1	41	16	10	83	
NEW JERSEY—																				
Bloomfield .....	2	2	2	5	1	43	21	0	0	90	—	—	—	—	—	—	—	—	—	
Burlington .....	5	12	5	7	3	19	20	19	0	90	4	0	0	1	2	8	13	17	45	
Lambertville .....	0	3	0	4	8	24	0	41	0	80	—	—	—	—	—	—	—	—	—	
Newark (a) .....	7	5	3	4	3	20	3	15	0	60	—	—	—	—	—	—	—	—	—	
PENNSYLVANIA—																				
Bedford (a) .....	0	0	0	20	3	13	4	29	0	69	0	0	0	9	3	11	3	17	43	
Berwick .....	1	2	13	3	9	2	42	12	0	90	—	—	—	—	—	—	—	—	—	
Cannonsburg .....	0	1	13	3	0	14	53	6	0	90	0	0	0	0	0	0	2	0	2	
Carlisle .....	0	3	0	2	1	25	5	21	28	85	0	2	0	1	1	22	3	15	44	
Chromedale .....	6	9	3	4	6	4	3	20	34	89	0	0	1	0	0	11	19	10	41	
Easton .....	7	2	0	8	6	3	19	26	19	90	5	0	2	1	1	6	26	15	56	
Gettysburg .....	5	1	0	0	9	33	13	19	10	90	3	0	0	0	3	21	18	14	59	
Harrisburg .....	0	0	4	18	4	2	4	57	0	89	0	0	0	2	2	0	2	24	30	
Lewisburg .....	5	2	1	2	9	24	18	11	18	90	2	0	0	0	3	5	20	7	37	
Meadville .....	0	0	0	13	14	8	12	14	27	88	3	0	0	2	7	9	26	16	63	
Morrisville .....	2	1	0	3	8	18	10	23	25	90	0	1	0	1	0	16	20	11	49	
Moss Grove .....	0	1	7	5	30	16	17	9	0	85	1	0	0	0	5	16	44	8	74	
Nazareth .....	8	4	0	0	3	6	23	8	33	85	1	1	0	0	1	6	23	8	40	
Norristown .....	3	0	5	3	4	5	52	3	0	75	0	0	5	0	5	4	29	0	43	
North Whitehall (a) .....	5	1	8	0	6	4	14	5	52	90	—	—	—	—	—	—	—	—	—	
Philadelphia .....	1	8	5	9	7	14	20	26	0	90	0	0	1	2	2	4	7	1	17	
Pocopson .....	4	0	0	4	8	22	35	15	0	88	1	0	0	0	1	11	15	2	30	
Shamokin .....	0	0	5	0	0	3	4	78	0	90	0	0	2	0	0	2	45	4	53	
Somerset .....	2	0	0	11	12	14	40	11	0	90	4	14	33	10	1	0	0	1	63	
West Haverford .....	1	0	2	3	3	15	12	18	0	60	1	0	0	0	0	4	14	17	36	
DELAWARE—																				
Newark, [Craven] .....	7	5	4	7	4	17	19	27	0	90	0	0	5	3	0	0	0	1	0	
MARYLAND—																				
Bladensburg .....	0	1	4	4	0	14	2	21	0	46	—	—	—	—	—	—	—	—	—	
Frederick .....	3	5	1	6	4	13	20	18	19	89	3	0	0	0	7	3	30	5	48	
Ridge (a) .....	16	9	3	8	14	21	6	12	1	90	—	—	—	—	—	—	—	—	—	
Sykesville .....	1	3	1	16	0	12	40	17	0	90	0	3	3	5	0	6	47	1	65	
DISTRICT OF COLUMBIA—																				
Washington .....	0	5	0	7	1	37	9	28	2	89	—	—	—	—	—	—	—	—	—	
VIRGINIA—																				
Alexandria .....	6	4	5	9	27	4	8	27	0	90	—	—	—	—	—	—	—	—	—	
Berryville (a) .....	1	9	1	7	21	2	6	29	7	83	4	0	0	1	1	6	13	5	30	
Crichton's Store (a) .....	29	1	0	3	28	12	9	5	1	88	0	0	0	0	0	18	12	0	32	
Lewisburg .....	0	0	0	0	1	1	0	0	0	2	0	0	0	0	4	2	5	0	11	
Mossy Creek (a) .....	4	11	0	3	1	12	4	25	0	60	4	1	0	0	0	8	2	16	31	
Mustapha .....	4	0	0	0	23	2	0	0	0	29	—	—	—	—	—	—	—	—	—	
Poplar Grove .....	0	0	4	2	0	3	13	6	31	59	0	0	0	0	0	22	15	2	39	
Portsmouth .....	17	11	10	7	14	11	3	17	0	90	—	—	—	—	—	—	—	—	—	

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NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Trout Run Valley (a) . . . . .	2	0	0	2	16	0	2	7	10	39	0	0	0	0	1	3	2	2	14	
Winchester . . . . .	0	0	1	0	1	6	24	8	52	90	0	0	0	0	1	0	5	0	6	
Wirt Court-House . . . . .	1	16	1	34	0	1	0	6	30	89	2	33	2	21	0	1	0	0	60	
NORTH CAROLINA—																				
Chapel Hill . . . . .	9	10	8	1	13	8	25	16	0	90	0	1	1	1	9	10	2	1	25	
Goldsbrough . . . . .	23	6	8	4	15	7	8	13	4	88	0	0	0	0	1	0	2	0	3	
Murfreesborough . . . . .	4	10	4	12	2	16	18	2	15	90	0	2	0	3	0	10	19	0	34	
SOUTH CAROLINA—																				
All Saints . . . . .	24	5	7	6	17	20	8	3	0	90	4	2	2	3	4	23	23	0	61	
Camden . . . . .	11	22	0	1	7	24	6	17	2	90	1	1	1	4	2	23	12	6	50	
Charleston, [Johnson] . . . . .	2	12	0	4	4	5	1	3	0	31	—	—	—	—	—	—	—	—	—	
Charleston, [Dawson] (a) . . . . .	3	28	0	3	3	17	0	6	0	60	—	—	—	—	—	—	—	—	—	
Edisto Island . . . . .	13	16	1	4	4	11	4	13	10	76	0	0	0	0	2	11	13	0	26	
St John's . . . . .	0	9	0	13	0	17	0	15	0	54	—	—	—	—	—	—	—	—	—	
GEORGIA—																				
Savannah . . . . .	22	2	9	7	17	9	3	10	0	85	0	0	0	3	0	3	11	2	19	
Sparta . . . . .	7	22	7	5	6	20	4	18	0	89	0	1	0	1	7	20	9	2	40	
Thomaston . . . . .	6	15	11	28	1	9	3	17	0	90	0	0	0	0	0	3	0	2	3	
Whitemarsh Island . . . . .	9	19	4	4	13	8	3	7	23	90	0	1	0	3	5	15	9	2	35	
Zebulon . . . . .	2	7	20	2	0	2	5	8	1	47	0	0	0	2	0	0	0	2	13	
FLORIDA—																				
Atsena . . . . .	8	28	6	18	4	7	3	9	6	89	5	10	2	5	3	6	2	8	41	
Belair . . . . .	4	9	11	13	13	9	1	4	13	77	3	8	5	12	16	10	4	6	64	
Gainesville (a) . . . . .	10	19	6	7	2	11	2	19	0	76	0	2	1	4	0	0	2	2	11	
Jacksonville . . . . .	4	31	0	19	4	13	1	17	1	90	0	4	0	8	2	28	5	0	47	
St. Augustine (a) . . . . .	5	29	14	14	1	11	0	16	0	90	1	27	11	17	2	16	0	10	84	
Salt Ponds . . . . .	17	10	9	21	3	0	0	0	0	60	0	0	0	0	0	12	0	0	12	
Warrington . . . . .	4	46	5	5	5	10	0	15	0	90	4	5	0	4	0	18	6	3	40	
ALABAMA—																				
Auburn . . . . .	10	7	4	29	19	3	7	11	0	90	0	0	1	19	13	3	8	4	48	
Carlowlville . . . . .	9	6	7	15	15	26	6	6	0	90	0	0	0	4	14	1	1	1	21	
Greene Springs . . . . .	0	4	3	43	0	19	8	13	0	90	0	0	2	13	1	8	5	2	31	
Greensborough . . . . .	12	2	0	40	2	2	1	31	0	90	1	0	2	15	4	7	17	2	48	
MISSISSIPPI—																				
Columbus . . . . .	9	8	12	10	13	3	4	30	0	89	1	0	0	2	6	7	11	5	32	
Natchez . . . . .	24	14	11	0	14	0	4	3	1	71	—	—	—	—	—	—	—	—	—	
Port Gibson . . . . .	28	6	6	5	5	7	10	5	0	72	—	—	—	—	—	—	—	—	—	
LOUISIANA—																				
Black River . . . . .	51	3	2	9	17	5	0	3	0	90	2	0	0	0	4	0	0	0	7	
Trinity . . . . .	15	20	10	7	8	4	0	0	1	65	4	13	1	0	2	0	0	0	20	
TEXAS—																				
Austin . . . . .	25	12	0	15	11	8	5	14	0	90	11	5	1	10	12	13	6	14	72	
New Braunfels . . . . .	17	3	7	4	13	1	1	4	36	86	—	—	—	—	—	—	—	—	—	
Pin Oak (a) . . . . .	13	3	7	3	2	0	0	2	0	30	—	—	—	—	—	—	—	—	—	
Washington . . . . .	10	0	0	0	20	0	0	0	0	30	—	—	—	—	—	—	—	—	—	
TENNESSEE—																				
Glenwood . . . . .	5	10	13	12	10	9	5	7	19	90	0	0	0	1	2	14	13	5	41	
Walnut Grove (a) . . . . .	2	3	14	1	0	1	1	2	66	90	0	0	2	0	2	10	14	2	30	
KENTUCKY—																				
Ballardsville . . . . .	9	6	0	2	10	43	5	15	0	90	0	0	0	0	3	8	3	2	16	
Danville . . . . .	6	5	5	4	11	24	12	23	0	90	1	0	0	0	4	20	8	5	38	
Millersburg . . . . .	1	0	3	8	14	4	7	19	1	57	0	0	5	1	1	2	24	0	33	
Paris . . . . .	0	8	0	13	13	17	25	13	0	89	0	0	0	0	15	1	17	1	34	
Springdale . . . . .	1	4	7	2	8	21	13	12	22	90	—	—	—	—	—	—	—	—	—	
OHIO—																				
Cheviot . . . . .	3	2	12	15	10	11	18	12	0	83	—	—	—	—	—	—	—	—	—	
Cincinnati, [Harper] . . . . .	1	2	0	1	14	30	32	10	0	90	1	0	0	0	0	0	1	1	3	
Cleveland . . . . .	1	4	1	2	35	10	16	9	5	89	3	0	0	0	2	12	24	11	52	
College Hill . . . . .	1	2	2	2	17	9	16	11	30	90	0	0	0	1	5	10	10	9	35	

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
Ohio—Continued.																				
Germantown, [Groneweg]	1	2	0	14	4	36	5	25	0	87	0	1	0	5	4	30	4	19	63	
Germantown, [Binkerd]	1	0	1	1	1	12	25	7	27	75	0	0	0	0	0	14	22	44		
Grauville (a)	0	0	1	0	0	13	5	0	13	32	0	0	0	0	0	8	6	0	14	
Hillsborough	1	11	0	16	2	29	2	28	1	90	0	0	0	1	0	14	5	12	32	
Hiram	1	0	0	0	5	31	38	15	0	90	0	0	0	0	9	21	23	7	60	
Jefferson	0	4	0	35	8	20	10	13	0	90	0	3	0	25	6	16	9	12	71	
Madison	2	1	1	8	19	19	14	10	16	90	0	0	0	0	3	12	58	5	78	
Oberlin (a)	0	0	0	2	7	12	7	3	4	35	0	0	0	1	0	2	18	5	26	
Portsmouth (a)	7	1	1	5	5	8	17	19	1	64										
Savannah	5	1	2	10	4	13	18	37	0	90	2	2	1	2	1	7	27	21	63	
Sidney	1	3	3	9	5	20	12	14	0	67	1	5	6	8	0	15	14	20	69	
Urbana	1	0	2	14	4	16	13	13	0	63	0	0	0	1	1	17	28	15	62	
West Bedford	6	0	1	5	12	28	17	18	3	90	3	1	0	0	4	5	23	19	55	
MICHIGAN—																				
Battle Creek	0	0	4	10	17	14	24	15	6	90	0	0	0	0	0	14	47	11	72	
Cooper	2	0	7	0	4	4	66	0	7	90	0	0	0	0	2	0	62	1	73	
Copper Falls Mines	17	13	5	21	11	3	6	9	5	90										
Detroit	3	5	9	6	6	36	10	15	0	90	0	0	0	0	0	1	0	0	1	
Eagle Harbor	17	12	5	21	11	3	7	9	5	90										
Eagle River	0	15	10	0	2	2	19	7	0	55										
Grand Rapids, [Currier]	0	6	4	18	0	18	14	5	20	85	0	0	0	1	1	10	11	1	24	
Grand Rapids, [Strong] (a)	6	5	8	3	5	12	10	2	0	51										
Monroe	8	8	7	5	9	21	7	25	0	90	2	9	7	6	6	6	8	40	90	
Romeo	2	3	1	6	13	12	29	5	10	81	1	0	3	1	4	8	19	7	43	
INDIANA—																				
New Harmony	6	1	2	10	17	11	16	19	0	82	0	0	0	0	1	3	13	0	17	
Richmond	0	0	4	5	6	17	17	6	35	90										
ILLINOIS—																				
Athens	0	1	1	25	0	25	4	28	0	84	0	0	1	3	0	8	30	10	52	
Augusta	2	2	2	10	12	14	21	19	1	90	0	1	5	4	3	2	14	8	37	
Brighton	1	7	2	5	23	19	8	25	0	90	0	8	8	6	0	0	0	0	22	
Chicago (a)	3	0	0	9	3	12	2	4	42	0	0	0	2	2	7	9	5	25		
Manchester (a)	10	1	1	3	22	7	32	14	0	90	3	0	0	0	13	7	18	5	46	
Marengo	1	1	9	9	18	34	18	0	0	90										
Ottawa	0	7	3	4	6	19	16	22	4	81	0	0	0	0	0	4	5	3	12	
Peoria	5	2	6	8	8	13	39	9	0	90	1	0	0	0	1	5	5	3	15	
Riley	9	0	1	5	14	16	19	12	5	81										
Upper Alton	0	0	0	0	0	0	0	2	0	2	4	3	4	4	5	25	15	19	79	
Warsaw	3	1	5	13	13	18	1	33	2	89	1	0	0	1	0	13	2	20	37	
West Salem											0	0	0	0	1	24	31	0	56	
MISSOURI—																				
Cape Girardeau	11	9	2	18	13	13	3	21	28	118	4	2	0	3	5	18	11	6	49	
Palmyra	0	6	3	13	2	22	21	25	24	116	0	6	4	11	2	19	16	18	76	
St. Louis	3	2	1	19	14	11	31	9	0	90										
WISCONSIN—																				
Appleton	2	17	0	6	1	26	13	20	5	90	3	19	0	4	1	21	14	23	85	
Beloit	6	3	0	8	22	14	19	18	0	90	0	2	0	1	0	1	7	0	11	
Janesville	5	6	3	13	14	16	14	13	6	90										
Kenosha	12	1	0	5	7	16	14	10	23	88										
Madison, [Schue]	5	0	1	2	23	17	17	22	0	87	0	0	0	0	0	0	0	2	2	
Milwaukee, [Winkler]	6	1	8	12	8	14	13	28	0	90										
Milwaukee, [Pomeroy]	2	1	4	2	4	6	7	4	0	30										
New London	12	9	1	1	4	29	13	21	0	90	24	6	0	0	2	15	22	8	77	
Norway	3	4	4	3	15	23	25	7	4	88	1	1	3	0	1	5	53	8	72	
Platteville	6	1	9	18	5	16	22	13	0	90	5	0	4	6	2	14	32	8	71	
Racine, [Durham]	0	1	3	6	15	4	21	3	3	56	0	1	0	3	15	3	16	4	42	
Superior	8	17	1	1	0	24	5	16	0	72	7	17	0	2	0	25	7	14	72	
Waukesha	7	4	1	11	2	33	13	18	0	89	5	0	0	0	2	6	21	3	37	
IOWA—																				
Border Plains	6	0	1	18	13	6	5	41	0	90	5	0	0	1	0	13	8	11	38	

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
IOWA—Continued.																				
Fort Madison (a).....	0	2	2	20	14	16	3	24	3	90	2	2	0	1	1	12	23	14	58	
Franklin .....	5	0	2	4	15	22	9	23	10	90										
Muscatine .....	0	10	7	30	7	24	3	12	0	93	0	2	0	2	0	26	0	4	34	
Pleasant Plain.....	4	6	5	10	12	13	15	25	0	90	7	12	24	12	4	0	2	0	61	
MINNESOTA—																				
Hazlewood .....	8	1	0	0	19	0	4	49	0	90	5	0	0	2	5	0	11	5	37	
Lake Winnibigoshish....	13	4	0	9	18	2	5	12	16	81	2	0	0	1	2	2	5	10	22	
Princeton .....	11	5	4	4	11	6	20	11	0	72	15	2	2	0	1	2	11	5	38	
CALIFORNIA—																				
Sacramento .....	24	6	5	17	6	0	5	21	0	90										
MEXICO—																				
City of Mexico.....	5	18	18	9	2	0	6	32	0	90	0	0	0	0	1	0	0	7	0	
Vera Cruz .....	0	15	9	6	4	1	0	26	15	78										
WEST INDIES—																				
Port of Spain, Trinidad ..									1	90	5	19	36	18	4	3	4	1	90	
SOUTH AMERICA—																				
Catharina Sophia, Sur'm (a)	2	40	12	20	11	5	0	0	0	90	0	11	34	30	3	0	0	0	78	
Tovar, Venezuela .....											14	1	13	5	0	1	2	1	43	
AZORES—																				
Horta, Fayal .....	8	13	7	34	14	8	2	2	1	89	3	8	6	22	6	11	2	4	62	

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## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	8	12	2	1	2	11	25	31	1	93	4	7	3	1	1	9	16	27	68
St. Martin .....	0	24	1	8	2	25	5	28	0	93	—	—	—	—	—	—	—	—	—
Toronto (a) .....	3	14	4	8	1	35	4	24	0	93	—	—	—	—	—	—	—	—	—
Wolfville .....	5	9	2	7	2	5	40	20	3	93	6	13	2	3	5	5	31	11	76
MAINE—																			
Carmel (a) .....	0	11	0	2	0	10	8	28	6	65	0	0	0	1	0	5	4	7	25
Cornish .....	1	7	1	5	3	0	8	68	0	93	—	—	—	—	—	—	—	—	—
Gardiner .....	5	29	1	6	0	4	3	33	12	93	0	1	0	1	0	7	1	18	28
Monson .....	2	2	7	4	0	1	3	74	0	93	—	—	—	—	—	—	—	—	—
Perry .....	9	5	2	6	2	5	4	60	0	93	21	6	1	4	4	3	4	21	64
Portland .....	25	5	5	3	0	8	18	28	0	92	3	0	0	0	0	4	10	3	20
Steuben .....	4	32	0	1	0	12	4	39	1	93	3	5	0	0	0	9	12	11	42
NEW HAMPSHIRE—																			
Barnstead .....	0	14	0	0	0	8	10	61	0	93	1	0	13	24	11	0	0	0	55
Concord .....	6	7	0	3	0	4	2	71	0	93	—	—	—	—	—	—	—	—	—
Great Falls .....	0	8	1	4	0	5	0	61	0	88	0	0	0	0	0	2	1	2	5
Manchester .....	8	5	0	4	0	6	11	52	0	88	8	4	0	4	1	7	15	17	56
Shelburne (a) .....	0	0	17	0	0	0	76	0	0	93	0	5	2	24	1	8	0	2	42
Stratford .....	0	0	6	0	1	5	21	8	0	41	0	0	0	0	1	4	19	14	38
West Enfield .....	0	3	0	4	9	0	14	63	0	93	1	0	1	4	8	1	10	55	80
VERMONT—																			
Brandon .....	25	0	2	1	21	4	11	12	12	88	1	0	0	0	1	3	6	21	32
Burlington .....	32	10	2	2	21	0	11	0	0	78	—	—	—	—	—	—	—	—	—
Shelburn .....	0	2	2	1	30	4	6	34	0	88	0	8	5	15	0	1	0	0	29
MASSACHUSETTS—																			
Amherst .....	2	1	1	7	1	5	4	62	1	91	0	0	0	0	0	4	7	21	32
Boston .....	3	3	1	2	1	2	8	17	0	37	—	—	—	—	—	—	—	—	—
Bridgewater (a) .....	9	10	0	6	3	0	22	43	0	93	2	0	7	18	3	5	0	0	41
Cambridge (a) .....	3	6	0	4	3	8	14	33	16	87	—	—	—	—	—	—	—	—	—
Canton .....	14	2	4	6	7	1	33	16	10	93	3	1	0	0	1	1	8	1	15
Mendon .....	1	13	2	5	3	27	2	40	0	93	0	12	2	5	0	30	2	42	93
Nantucket .....	6	10	1	8	1	2	9	55	1	93	—	—	—	—	—	—	—	—	—
New Bedford .....	9	8	0	7	2	11	9	46	1	93	2	3	3	5	4	3	2	10	32
Newburyport .....	7	5	3	3	5	2	36	24	0	85	—	—	—	—	—	—	—	—	—
North Attleborough .....	14	2	4	3	3	10	18	37	0	91	2	7	5	2	4	6	24	10	60
Princeton .....	12	7	5	6	7	7	25	8	0	77	0	1	1	0	0	1	23	12	38
Richmond .....	0	10	0	17	0	7	1	55	0	90	2	6	0	16	1	3	2	5	80
Westfield .....	0	11	1	2	3	5	27	28	0	86	—	—	—	—	—	—	—	—	—
Weymouth .....	3	3	1	4	3	4	6	36	0	60	—	—	—	—	—	—	—	—	—
Williamstown .....	4	2	4	50	5	11	0	11	0	93	0	0	0	5	0	0	1	1	7
Worcester .....	10	11	0	0	2	4	34	33	0	93	—	—	—	—	—	—	—	—	—
RHODE ISLAND—																			
Providence (a) .....	1	13	3	1	3	10	11	51	0	92	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia .....	1	3	27	39	3	7	6	1	6	93	1	3	3	1	0	4	20	24	58
Georgetown .....	17	26	5	5	3	9	0	16	3	93	1	9	19	4	0	2	1	1	37
New London .....	10	3	0	6	0	35	33	0	0	93	—	—	—	—	—	—	—	—	—
Norwich .....	0	12	0	10	2	15	8	32	14	93	—	—	—	—	—	—	—	—	—
Pomfret .....	6	8	1	6	2	4	4	61	0	92	0	0	1	4	2	6	5	21	45
Saybrook .....	8	14	0	6	2	3	26	28	6	93	1	1	1	2	3	2	18	16	44
Wallingford .....	25	4	0	3	3	4	16	32	6	93	0	0	3	2	0	0	28	8	41
NEW YORK—																			
Angelica .....	0	0	4	7	1	13	43	25	0	93	0	0	1	4	0	20	25	22	72
Baldwinsville .....	1	3	11	0	1	3	16	43	0	87	0	1	0	2	1	0	26	40	70
Beverly .....	7	25	0	3	0	28	2	24	2	91	1	9	2	3	2	15	18	17	67
Blackwell's Island .....	12	5	1	5	4	17	32	17	0	93	11	4	1	2	4	10	28	15	75
Cazenovia .....	2	1	2	9	12	2	18	42	5	93	4	0	2	6	8	2	24	26	72
Clinton .....	2	4	11	7	1	1	5	9	1	93	1	1	36	8	0	0	0	0	54
Fishkill Landing .....	0	41	2	8	2	10	14	16	0	93	0	3	1	0	0	0	20	5	29
Flatbush .....	14	9	14	1	10	4	18	33	0	93	4	3	1	3	4	6	13	18	52

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NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Lowville .....	25	0	0	5	10	16	13	24	0	93	1	2	0	0	1	3	11	12	30	
Mexico .....	9	4	16	14	6	5	24	15	0	93	0	0	0	0	1	1	15	5	22	
New York city .....	1	13	4	6	0	2	32	35	0	93	0	3	3	3	1	5	33	20	68	
North Salem .....	0	10	8	10	5	5	13	36	0	93	—	—	—	—	—	—	—	—	—	
Oswego .....	10	5	11	7	14	6	35	3	2	93	—	—	—	—	—	—	—	—	—	
Ovid .....	4	5	1	15	7	16	24	21	0	93	3	5	0	12	3	13	30	18	84	
Penn Yan (a) .....	6	0	0	2	12	17	42	8	0	93	—	—	—	—	—	—	—	—	—	
Rochester, [Harkness] .....	6	1	4	3	14	5	39	7	14	93	—	—	—	—	—	—	—	—	—	
Rochester, [Pratt] .....	3	1	3	10	0	22	34	12	0	91	3	0	2	1	3	10	25	4	48	
Sag Harbor .....	11	10	2	7	9	10	19	25	0	93	3	0	2	5	2	10	19	12	53	
Saratoga .....	4	13	2	3	5	17	21	28	0	93	5	10	3	2	6	16	23	25	93	
Spencertown .....	12	3	0	12	8	1	12	37	0	93	1	2	0	5	2	0	20	35	71	
Townsendville .....	5	1	0	17	3	7	19	34	7	93	0	0	0	1	4	4	20	4	33	
Troy .....	12	4	1	3	3	5	24	21	20	93	0	0	0	0	2	1	10	0	15	
Utica .....	12	2	0	6	13	0	7	14	39	93	—	—	—	—	—	—	—	—	—	
Wampsville .....	1	1	15	3	3	3	57	7	0	90	1	4	15	2	3	4	52	6	87	
Watertown .....	0	34	0	5	0	23	17	9	0	93	0	28	0	3	0	24	17	7	79	
NEW JERSEY—																				
Bloomfield .....	0	0	0	4	0	18	1	58	0	81	—	—	—	—	—	—	—	—	—	
Burlington .....	10	7	8	6	1	7	24	26	4	93	—	—	—	—	—	—	—	—	—	
Lambertville .....	3	8	0	4	5	9	2	53	0	84	—	—	—	—	—	—	—	—	—	
Newark (a) .....	8	8	0	5	0	9	3	29	0	62	—	—	—	—	—	—	—	—	—	
PENNSYLVANIA—																				
Bedford .....	1	0	0	6	3	14	1	52	0	77	0	0	0	6	0	0	1	32	50	
Berwick .....	2	3	20	6	2	2	40	16	1	92	—	—	—	—	—	—	—	—	—	
Cannonsburg .....	1	0	11	8	1	13	50	9	0	93	—	—	—	—	—	—	—	—	—	
Carlisle .....	1	5	6	9	2	11	12	33	7	86	1	2	3	2	1	8	8	19	44	
Chromedale .....	10	11	6	3	2	3	2	34	22	93	7	0	0	1	2	7	18	12	47	
Easton .....	7	3	4	0	1	1	24	31	11	90	4	1	1	1	3	1	16	25	52	
Gettysburg .....	2	11	0	3	4	48	20	29	0	93	1	0	0	1	1	12	30	15	60	
Harrisburg .....	2	4	2	9	0	11	63	0	91	1	2	0	1	0	0	3	21	28	—	
Lewisburg .....	8	4	3	6	2	18	33	12	7	93	5	0	0	0	3	5	15	8	36	
Meadville .....	1	0	0	4	13	13	23	13	25	92	1	0	0	5	2	5	25	21	59	
Morrisville .....	7	10	2	4	5	6	13	31	15	93	3	5	0	3	0	9	12	25	57	
Moss Grove .....	4	1	7	7	12	19	36	7	0	93	4	0	0	0	5	16	50	3	78	
Nazareth (a) .....	14	6	1	2	1	2	25	13	12	76	7	0	0	3	0	2	14	6	32	
Norristown .....	1	0	9	6	1	5	37	22	0	81	0	0	3	3	0	7	39	6	58	
North Whitehall (a) .....	8	3	6	0	1	1	12	26	35	92	—	—	—	—	—	—	—	—	—	
Philadelphia .....	3	8	0	3	5	15	32	21	0	93	0	0	0	0	0	5	5	1	11	
Pocopson .....	7	0	2	1	8	20	37	15	0	90	2	0	0	0	0	7	11	4	24	
Shamokin .....	16	7	8	5	1	4	4	48	0	93	2	1	0	2	0	5	29	11	50	
Somerset .....	2	2	3	6	8	10	44	18	0	93	1	14	33	10	0	0	1	3	62	
West Haverford .....	5	1	3	4	7	4	7	24	7	62	3	2	0	0	0	3	15	19	42	
DELAWARE—																				
Newark, [Craven] (a) .....	0	1	6	2	0	6	10	21	0	50	0	1	4	1	3	1	1	0	11	
MARYLAND—																				
Bladensburg .....	1	2	0	6	0	7	3	29	0	48	—	—	—	—	—	—	—	—	—	
Frederick .....	3	5	1	1	5	16	19	30	13	93	0	0	0	0	1	6	31	0	44	
Ridge (a) .....	14	5	0	9	18	6	8	27	4	91	—	—	—	—	—	—	—	—	—	
Sykesville .....	2	1	5	9	0	11	34	31	0	93	0	0	6	0	0	7	45	2	66	
DISTRICT OF COLUMBIA—																				
Washington .....	1	7	2	8	0	19	12	41	3	93	—	—	—	—	—	—	—	—	—	
VIRGINIA—																				
Alexandria .....	9	1	3	4	9	7	9	50	0	92	—	—	—	—	—	—	—	—	—	
Berryville .....	17	5	2	2	6	12	10	27	11	92	3	0	0	0	1	0	15	0	32	
Crichton's Store (a) .....	25	4	3	4	17	17	11	9	0	90	0	0	0	0	0	54	8	1	63	
Lewisburg .....	0	0	0	0	0	0	6	0	0	6	1	0	0	0	2	2	24	4	33	
Montross .....	13	2	4	6	7	15	17	7	22	93	2	0	1	1	4	9	22	2	41	
Mossy Creek .....	0	17	3	3	1	13	7	41	0	93	0	7	0	0	1	5	5	33	55	
Mustapha .....	7	0	0	0	15	5	0	1	0	28	—	—	—	—	—	—	—	—	—	

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VIRGINIA--Continued.																				
Poplar Grove.....	0	0	9	0	0	3	8	26	41	89	0	1	0	0	0	11	24	14	50	
Portsmouth.....	27	9	10	4	5	9	9	14	0	87	0	1	0	0	0	0	3	0	4	
Smithfield.....	1	3	0	0	1	3	1	2	0	11	0	1	0	0	0	0	3	0	4	
Winchester.....	0	0	1	2	0	1	14	27	48	93	0	0	0	0	0	0	0	0	0	
Wirt Court-house.....	4	30	0	33	1	4	0	3	17	92	4	35	0	27	0	0	0	0	69	
NORTH CAROLINA--																				
Chapel Hill.....	11	7	7	2	5	14	24	23	0	93	0	0	0	0	3	40	2	2	47	
Goldsborough.....	7	12	9	4	5	12	18	7	14	88	0	0	0	1	1	9	2	0	13	
Murfreesborough.....	1	23	2	13	1	5	15	13	19	92	1	5	0	0	0	12	28	1	47	
SOUTH CAROLINA--																				
All Saints.....	15	8	5	6	11	21	16	7	3	93	6	3	1	0	1	19	25	1	56	
Camden.....	12	26	2	5	0	15	15	16	0	93	0	3	0	1	3	21	26	4	58	
Charleston, [Johnson].....	4	11	0	2	4	5	1	12	3	42	0	0	0	0	0	0	0	0	0	
Charleston, [Dawson] (a).....	0	20	2	3	0	23	5	9	0	62	0	0	0	0	0	0	0	0	0	
Edisto Island (a).....	4	29	2	1	3	17	8	21	8	93	0	4	0	2	0	17	0	3	32	
St. John's.....	0	18	0	4	0	16	0	24	0	62	0	0	0	0	0	0	0	0	0	
GEORGIA--																				
Savannah.....	11	9	5	3	15	10	19	20	0	93	0	1	0	0	1	4	12	1	19	
Sparta.....	4	18	5	4	5	17	18	20	0	91	1	2	1	2	0	23	14	3	46	
Thomaston.....	5	11	10	11	2	2	11	41	0	93	0	0	0	0	0	0	0	0	0	
Whitemarsh Island.....	4	21	1	4	9	7	10	16	21	93	0	0	0	1	3	17	8	0	34	
Zebulon.....	0	1	35	3	1	3	34	1	0	78	1	3	5	0	0	3	7	4	23	
FLORIDA--																				
Atsena.....	18	33	4	8	4	7	1	13	5	93	1	11	2	0	1	8	3	6	38	
Gainesville.....	16	9	3	4	3	22	8	27	0	92	0	0	0	0	0	0	0	0	0	
Jacksonville.....	3	18	0	6	3	19	1	41	0	91	0	2	1	5	3	32	4	4	51	
St. Augustine (a).....	8	23	7	9	1	14	7	24	0	93	7	16	2	4	4	13	7	17	70	
Salt Ponds.....	16	13	13	15	5	0	0	0	0	62	0	0	0	0	1	11	4	4	20	
Warrington.....	9	32	2	10	1	4	0	35	0	93	1	0	0	9	0	11	2	6	29	
ALABAMA--																				
Auburn.....	14	3	6	28	4	7	12	17	0	91	2	5	1	7	16	5	2	2	41	
Carlowville.....	19	15	11	7	7	8	2	20	0	89	0	0	0	0	5	4	2	0	11	
Greene Springs.....	2	2	5	23	2	12	16	14	0	76	1	0	0	1	6	11	4	1	24	
Greensborough.....	6	1	0	37	3	1	2	37	0	93	1	0	0	5	7	9	32	3	57	
MISSISSIPPI--																				
Columbus.....	13	4	19	17	8	1	16	14	1	93	0	0	0	0	0	0	0	0	0	
Port Gibson.....	19	6	3	4	9	8	1	7	0	57	0	0	0	0	0	0	0	0	0	
Natchez.....	30	10	5	2	12	1	12	4	0	76	0	0	0	0	0	0	0	0	0	
LOUISIANA--																				
Black River.....	31	7	4	12	24	6	2	7	0	93	8	8	0	0	2	0	0	1	19	
Trinity.....	30	6	18	4	29	3	2	1	0	93	12	8	9	1	1	1	0	1	33	
TEXAS--																				
Austin.....	18	0	1	16	16	12	6	24	0	93	2	0	1	10	16	25	5	11	70	
Pin Oak (a).....	18	0	0	2	11	0	0	0	0	31	0	0	0	0	0	0	0	0	0	
Washington, [Rhodes].....	18	0	0	0	12	0	1	0	0	31	0	0	0	0	0	0	0	0	0	
Washington.....	38	0	0	0	46	0	0	0	0	84	36	1	1	0	49	0	0	0	87	
New Braunfels.....	26	1	9	2	17	0	9	1	27	92	0	0	0	0	1	1	3	0	5	
TENNESSEE--																				
Glenwood.....	15	7	1	14	9	5	5	18	19	93	0	0	0	4	5	12	25	7	53	
Walnut Grove.....	3	4	3	0	1	0	0	0	41	52	0	2	0	1	2	3	6	0	14	
KENTUCKY--																				
Ballardsville.....	2	17	3	6	6	35	20	4	0	93	0	0	0	1	1	10	6	4	22	
Danville.....	1	2	7	11	14	18	30	10	0	93	0	0	0	1	0	25	22	2	50	
Millersburg.....	7	0	9	5	1	5	8	17	0	52	3	0	1	0	0	1	26	0	31	
Paris.....	0	4	2	22	3	24	25	11	0	91	0	0	0	0	10	6	20	0	36	
Springdale.....	0	12	10	3	5	20	12	10	21	93	0	0	0	0	0	0	0	0	0	
OHIO--																				
Cincinnati, [Harper].....	5	6	11	1	4	26	33	11	0	92	0	0	0	0	0	0	0	0	0	
Cincinnati, [Telegraph].....	4	2	5	4	1	5	2	6	2	31	0	0	0	0	0	0	0	0	0	
Cleveland.....	0	0	7	16	12	19	21	11	2	88	1	2	2	0	4	7	25	0	49	

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
Ohio—Continued.																				
College Hill.....	5	1	8	10	10	5	10	16	26	91	0	0	1	1	1	12	8	29		
German town, [Groneweg].....	0	4	0	15	5	41	2	20	0	87	0	3	0	12	2	32	1	14	64	
German town, [Binkerd].....	3	0	3	1	6	15	22	4	30	84	1	0	1	1	2	7	33	4	49	
Granville.....	0	1	4	0	0	15	16	1	30	67	0	0	0	0	0	7	0	0	13	
Hillsborough.....	2	18	0	14	1	35	0	23	0	93	0	0	0	0	0	14	3	4	21	
Hiram (a).....	4	1	0	2	4	6	22	16	0	55	1	0	0	0	3	4	20	0	34	
Jefferson.....	0	10	3	12	5	29	5	29	0	93	0	0	3	0	5	33	5	23	86	
Madison.....	6	6	2	4	8	8	18	9	0	61	1	4	2	0	4	25	40	0	84	
Portsmouth (a).....	8	4	4	6	1	8	17	9	8	65										
Savannah.....	0	2	6	6	2	14	22	41	0	93	0	2	5	4	2	15	20	30	78	
Sidney.....	0	8	6	10	1	29	13	10	0	77	0	3	1	1	0	36	25	15	81	
Urbana.....	0	1	6	14	0	10	19	6	30	86	0	1	2	0	1	13	34	4	55	
West Bedford.....	1	1	5	5	13	21	12	34	0	92	1	0	2	4	4	11	17	22	61	
MICHIGAN—																				
Battle Creek.....	2	0	21	5	5	12	33	6	9	93	2	0	3	0	0	24	44	11	84	
Cooper.....	0	0	15	0	1	4	68	1	4	93	0	0	15	0	0	0	70	0	85	
Copper Falls Mines.....	36	13	3	19	10	0	2	8	0	91										
Eagle River.....	1	23	6	0	10	2	20	1	0	63										
Grand Rapids, [Currier].....	0	11	4	11	2	20	14	4	25	91	0	0	0	0	0	4	4	0	8	
Grand Rapids, [Streng].....	4	14	5	17	6	23	15	9	0	93	9	2	1	3	4	21	41	11	92	
Monroe.....	11	19	10	5	5	0	7	36	0	93	6	18	14	9	2	2	7	35	93	
Romeo.....	1	3	5	8	5	17	32	15	3	89	2	0	1	0	0	0	12	11	32	
INDIANA—																				
New Harmony.....	7	1	12	18	5	3	17	13	0	76	1	0	0	1	0	1	4	0	7	
Richmond.....	0	0	10	8	7	26	14	1	26	92	0	0	0	0	0	1	0	1	2	
ILLINOIS—																				
Athens.....	0	11	6	26	2	15	1	28	0	89	0	2	0	5	0	12	17	22	58	
Augusta.....	0	9	12	18	0	13	17	17	1	93	1	4	7	5	1	3	11	0	38	
Brighton.....	0	16	3	22	2	15	14	21	0	93	1	0	0	11	1	4	0	3	36	
Chicago.....	1	3	9	7	8	18	30	11	6	93	2	4	5	3	2	15	23	10	64	
Manchester (a).....	7	7	5	3	17	4	39	10	1	93	1	0	2	0	5	6	18	2	34	
Marengo.....	0	11	11	13	3	23	31	1	0	98										
Ottawa.....	0	7	14	15	4	0	26	17	7	90	1	0	0	0	1	2	3	0	13	
Peoria.....	0	9	24	3	9	6	32	10	0	93	0	0	0	0	0	5	11	2	18	
Riley.....	2	6	11	12	4	3	21	21	11	91										
Upper Alton.....	10	0	9	6	4	12	12	40	0	93										
Warsaw.....	3	8	15	22	1	10	4	30	0	93	2	2	0	0	0	0	1	16	24	
West Salem.....	2	9	4	17	11	10	10	4	26	93	0	0	0	0	0	22	28	5	55	
MISSOURI—																				
Cape Girardeau.....	5	15	1	29	5	13	4	23	29	124	2	2	0	18	9	9	3	10	53	
Palmyra.....	0	8	9	17	3	6	7	43	15	108	0	4	9	15	4	4	4	23	63	
St. Louis.....	2	7	14	16	10	16	25	3	0	93										
WISCONSIN—																				
Appleton.....	2	17	1	8	3	23	18	15	6	93	2	16	1	7	0	28	16	15	87	
Beloit.....	5	7	3	8	11	16	31	12	0	93	0	0	0	1	1	1	2	0	5	
Janesville.....	0	9	8	16	5	8	35	3	9	93										
Kenosha.....	1	5	5	5	9	5	39	6	16	91										
Madison, [Sterling] (a).....	6	6	2	4	8	8	18	9	0	61	0	0	0	0	0	0	1	0	1	
Milwaukee, [Winkler].....	7	6	5	5	0	15	35	20	0	93										
Milwaukee, [Pomeroy].....	1	2	3	2	1	2	18	2	0	31										
New London.....	10	3	0	6	0	35	33	6	0	93	18	0	0	3	0	16	14	16	67	
Norway.....	3	12	3	3	7	15	40	10	0	93	1	7	2	1	2	6	45	8	72	
Platteville.....	1	9	16	14	2	9	31	11	0	93	0	2	14	3	2	9	26	2	58	
Racine, [Durham].....	5	3	7	1	13	3	59	2	0	93	5	3	7	2	14	1	32	3	67	
Racine, [Seymour].....	1	1	3	2	0	10	2	12	0	31										
Superior.....	3	6	2	1	3	20	10	4	0	49	7	7	1	0	5	17	4	5	46	
Waukesha.....	0	19	2	6	6	39	11	8	0	91	0	0	1	0	0	1	4	7	13	
IOWA—																				
Bellevue.....	11	10	5	12	0	15	20	20	0	93	2	3	1	0	2	6	11	7	32	
Border Plains.....	3	17	6	19	8	1	6	33	0	93	1	1	0	0	1	8	3	10	24	

a For deviations from the usual hours of observation, &amp;c., see notes to table of thermometer for this month.



## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
Iowa—Continued.																			
Camanche.....	0	10	1	8	0	1	7	15	1	43	0	0	0	0	0	0	3	0	3
Fort Madison (a).....	0	15	4	23	2	7	5	35	1	92	0	3	6	4	5	10	16	15	59
Franklin.....	8	5	19	5	4	9	9	25	8	93									
Muscatine.....	0	20	2	14	0	7	0	50	0	93	0	1	0	3	0	5	0	4	13
Pleasant Plain.....	5	11	12	17	7	8	18	12	3	93	5	15	25	5	2	0	3	0	55
MINNESOTA—																			
Hazlewood.....	12	6	9	6	20	1	7	31	1	93	4	3	12	3	2	0	0	8	34
Lake Winnibigoshish.....	25	5	0	17	9	2	5	13	8	84	0	0	0	1	0	1	1	6	9
Princeton.....	12	7	5	5	7	7	25	8	0	77	8	1	4	1	11	1	22	0	48
CALIFORNIA—																			
Sacramento.....	18	11	0	24	4	5	2	26	0	93	2	0	0	6	1	16	1	16	42
MEXICO—																			
Vera Cruz.....	5	4	2	6	4	0	1	29	16	67									
WEST INDIES—																			
Port of Spain, Trinidad ..										93	2	32	43	14	2	0	0	0	93
SOUTH AMERICA—																			
Catharina Sophia, Sur'm(a)	4	37	15	28	7	0	0	2	0	93	0	18	39	31	0	1	0	0	89
AZORES—																			
Horta, Fayal.....	5	18	15	10	17	13	11	1	3	93	0	13	11	3	7	18	8	1	61

a For deviations from the usual hours of observation, &c., see notes to table of thermometer for this month.

## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1856.\*

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>BRITISH AMERICA—</b>													
Montreal	3.370	5.420	1.950	1.510	2.770	1.140	2.490	5.380	1.410	4.090	2.830	3.230	35.590
St. John's			9.780	2.990									
St. Martin	2.650	0.913	0.258	1.835	5.973	4.323	6.373	8.990	3.571	5.220	2.433	2.031	45.469
Toronto	1.360	0.970	1.620	2.790	4.580	3.200	1.120	1.680	4.105	0.835	2.325	3.420	27.875
Wolville	1.120	1.830	0.530	0.930	3.400		3.560	4.510	2.010	2.990	2.050	4.550	
<b>MAINE—</b>													
Corinth			2.550	2.590	2.500	1.250	2.875	8.937	2.250	5.250	2.900	2.800	
Fryeburg	2.100	1.150	1.350	2.590	3.250								
Gardiner	2.251	1.947	0.900	2.460	4.520	2.042	2.490	7.494	3.830	3.198	2.148	4.702	37.975
Moulton									3.437	5.875	2.625	3.250	
Perry	1.700	2.700	1.900	2.700	7.100	4.960	5.050	8.280	2.010	4.090	5.601	3.100	49.200
Portland		1.250				1.549	4.453	6.827	4.890	3.471	2.247	5.154	
Stephen	3.800	2.640	2.510	3.600	8.100	4.900	7.100	9.400	4.700	7.300	3.030		
<b>NEW HAMPSHIRE—</b>													
Bathstead			1.000										
Concord	2.650	2.000	1.612		3.000	3.768	3.375		5.875	1.500	1.200	1.550	
Londonderry	4.300	1.050	0.950	2.200	6.150	0.300	1.000						
Manchester	2.000		0.700							2.235	2.884	5.820	
Stratford			1.700			2.000	2.630		3.848	2.550	2.220	1.800	
West Enfield								19.750	4.875	4.750	4.076	3.500	
<b>VERMONT—</b>													
Brandon			1.375		1.510	1.920	2.645	9.650	3.310	1.755	2.310	2.570	
Burlington	0.960	0.180	0.510	1.360	2.830	1.670	1.670	9.120	3.430	2.280	1.790	1.010	
Craftsbury	2.000	1.700	2.200				1.900	8.520	5.400	1.520	2.000	3.360	
Norwich											1.375		
Shelburne			1.000	1.030	4.700	4.000	4.250	6.300	3.800	2.750	3.900		
<b>MASSACHUSETTS—</b>													
Andover	2.483	0.788	1.118	2.510	5.313	1.920	1.955	12.132	3.472	1.403	2.847	4.187	40.128
Bridge-water						1.815	2.019	2.791	4.627	1.250	2.720	3.695	
Cambridge			1.770	3.459	6.735	2.869	4.242	14.984	4.664	3.238	2.893	3.905	
Lawrence	2.150	2.130	1.030	3.780	6.240	2.733	2.400	18.120	6.530	4.300	4.330	4.560	58.700
Mendon					7.880		1.040	13.850	4.900	2.500	1.262		
Nantucket	3.750	2.030	1.346	2.986	2.659	5.394	1.470	1.163	5.292	2.034	3.610	3.809	35.703
New Bedford	4.610	1.130	1.460	2.850	3.520	1.800	2.950	2.500	4.050	1.680	2.900	3.450	101.100
Newburyport	3.485	1.059	2.050	3.695	5.120	3.160	2.685	12.090	3.697	3.150	2.550	3.985	46.676
North Attleborough	2.560	0.800	0.882	4.630	5.670	2.060	4.005	10.120	5.880	1.300	2.440	4.670	45.417
Princeton		0.690	1.310	2.710	5.560	1.370	2.230	12.390	3.220	3.090	2.840	3.300	
Richmond	3.137	0.650			14.625	9.125	4.750	15.125	11.000	3.125	6.550		
Southwick	3.800												
Springfield	2.260	0.940	0.840	2.730	5.280				9.950	4.240	2.840	1.950	5.740
Westfield	3.820	0.810	2.350	2.760	6.040	2.060	1.930	14.170	3.970	2.350	2.120	5.190	
Weymouth								9.950	4.240	2.840	1.950	5.740	
Williamstown	2.230	0.965	1.650	2.090	6.246		1.270	14.795	4.246	1.200	2.507	3.760	
Worcester	4.600	1.050	1.690	3.390	6.550	1.445	2.680	13.040	3.390		2.220	3.680	
<b>RHODE ISLAND—</b>													
Providence	5.250	0.800	1.550	2.800	4.100	2.470	4.200	5.750	5.100	1.150	2.000	5.300	40.970
<b>CONNECTICUT—</b>													
Georgetown			1.987	3.625	5.630	3.250	2.950	13.750	4.250	1.875	3.325	6.210	
New London	3.250	1.000	1.000	4.020	5.300	2.010	1.980	5.710	3.550	1.600	6.100	5.900	41.670
Pomfret	5.970	1.700	1.150	3.450	4.580	1.390	3.500	12.500	4.310	2.150	2.190	4.800	47.690
Saybrook		1.250	1.760	4.750	5.360	1.760	2.350	10.810	4.910	1.360	3.150	5.900	
Wallingford				4.100	6.830	3.070	2.930	11.630	3.220	1.980	2.670	6.60	
<b>NEW YORK—</b>													
Angelica	2.850	0.550				3.520		1.830	4.820	1.770		1.900	
Beverly		0.300						2.670	13.110	4.280	1.460	2.061	6.470
Blackwell's Island	6.186	1.080	2.100	1.956	4.612	3.000	4.469	6.678	2.885	1.360	2.303	3.610	40.240
Buffalo							2.792	0.592	2.131	0.546			
Canton	3.400	1.150	0.980	1.174	3.278	2.061	1.510						
Cazenovia										1.410	2.840	3.250	
Clinton	1.300	1.300	2.320				1.400	3.070	3.720	1.170	3.650	2.030	
Concord			1.500								1.000		
Fishkill	2.300	0.650	1.300	2.950	1.970							3.370	
Flatbush	4.126	0.980	2.125	2.686	4.187	3.780	8.245	8.040	3.840	0.880	2.620	3.320	39.689
Fordham							3.650		0.583	7.500		3.650	
Geneva	2.316	0.169	0.784	2.267	2.609	3.918	5.091	1.296	2.663	2.137			
Homer	2.070	1.020											
Housesville						1.380	1.580	4.080					
Lake												3.050	
Liberty	1.450	1.220	1.800	2.400									
Lodi	0.344		1.062	2.552	2.250	3.312	3.312	1.750	2.250				
Lowville					2.750	0.190	1.086	2.876	4.172	1.310	2.778	5.112	
Mexico			0.860	2.160	3.650	1.520	2.170	3.340	5.950	4.190	3.370	5.160	
New York city	3.983	0.660	2.180	2.720	4.780	3.500	4.260	6.730	2.500	1.182	2.500	4.450	39.422
North Salem				3.090	4.070	2.600		12.100	3.000	1.530	1.600	3.490	
Ogdenburg						15.675	1.040	3.330	2.900	1.800	2.330		
Oswego				2.030	2.076	1.712	3.678	2.121	6.400	1.500			
Ovid	2.590	0.420	1.230	3.290	3.300	4.270	7.700	1.420	2.730	2.200	1.970	1.540	32.660
Penn Yan	1.790	0.457	1.500	1.880	1.780	3.100	3.250	1.050	2.170	1.100	1.710	1.920	21.680
Plattsburg	1.350	0.300	1.490										
Pompey Hill					2.800	2.450	1.700						
Rochester [Harkness]	3.109	1.550	3.375	2.350	3.110	1.460	1.979	2.700	3.532	1.047	1.670	2.611	28.494
Rochester [Pratt]	1.940	0.771	1.920	2.325	2.400	1.900	1.800	2.700	3.530	0.995	1.325	2.640	24.356
Sag Harbor	5.100	1.100	2.240	3.200	4.030		5.000	6.729	2.600	0.230	2.700	6.410	
Smithville	2.600	2.315	3.580								3.345		
Spencertown	2.237	1.128	1.630	2.630	5.580	1.090	1.765	10.610	4.833	0.717	2.042	3.542	38.294
Townsendville										1.812	1.625	2.313	

\* In cases where the observer recorded only the depth of snow as it fell, without melting, it is estimated in this table as equal to one-tenth of that depth in water; and whenever, from this cause or any other, there is reason to doubt the accuracy of the record, it is indicated by affixing a mark of interrogation.



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1856.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>NEW YORK—Continued.</b>													
Troy .....			2.500								2.348	2.474	
Wampsville .....							2.480	10.510	8.670	2.370	3.990		
Watertown .....	1.650	0.210	1.650	1.440	3.720	1.410	1.830	3.710	3.840	3.830	1.850	2.050	27.190
<b>NEW JERSEY—</b>													
Bloomfield .....	3.151	0.415	1.402	2.882	4.315	3.239	0.540	3.900	0.890	1.355	1.931	3.301	27.321
Burlington .....						?	2.430	4.627	3.118	1.420	2.862	3.772	
Lambertville .....	4.101	0.865	1.828	2.337	3.197	1.930	1.241	4.865	4.660	1.332	2.392	3.671	32.319
Newark .....	3.770	1.250	2.000	2.570	4.315	3.120	1.410	5.700	2.665	1.400	2.850	3.485	31.525
<b>PENNSYLVANIA—</b>													
Bedford .....		0.700	2.000		1.205	1.262	0.995	1.835	1.847	1.728	1.170	1.076	
Cannonsburg .....	3.250	1.166	2.125		2.827	3.176	1.050	1.373	1.675	1.385	2.110	1.540	
Carlisle .....	2.150	0.900				4.178	3.769	2.021	1.574	2.155			
Chromedale .....	2.490	1.170	1.740	3.360	3.060	1.840	2.490	5.460	4.910	1.180	2.960	3.660	34.320
Easton .....	?	0.720	?	2.930	3.460	2.390	1.480	6.440	6.510	0.960	2.460	3.250	
Gettysburg .....	2.750	1.250	1.785	2.910	2.875	2.856	3.780	2.475	1.129	1.590	2.460	2.765	28.616
Harrisburg .....	1.600	?	?	3.763	3.188	3.178	2.046	2.896	0.393	2.035	2.083	2.952	
Lancaster Colliery .....	2.111	0.816	1.280	4.342	2.070	4.354	3.099	3.186	1.580	0.792	2.032	3.110	28.762
Lewisburg .....		0.699	1.488	3.018	3.030	2.390	3.214	2.470	2.038	0.745	2.433	2.671	
Meadville .....					1.770	5.592		2.042	1.993	3.644	2.420	2.331	
Morrisville .....	0.430	0.900	1.650	3.000	2.900	1.900	2.600	4.600	4.200	1.300	2.760	4.100	30.340
Moss Grove .....	1.950	1.850	2.100	3.400		5.200	1.470		2.705	3.850	2.982	3.732	
Nazareth .....		0.554		3.725		2.630	2.270	9.110	4.510	1.350	3.320		
Norristown .....	3.650	1.260	0.453	5.590	3.300	1.160	1.500	7.090	5.820	0.980	3.070	4.170	32.043
Philadelphia .....	3.368	1.128	2.039	3.149	2.334		1.127	5.186	5.702	1.303	2.866	3.619	
Pittsburg .....	3.100	1.500	2.000	2.770	3.321	4.277	3.090	2.054	1.620	2.170	2.138	0.780	28.820
Pocahontas .....	3.910	1.280	2.020	3.710	3.940	1.180	1.710	5.100	3.830	0.910	2.370	4.390	34.350
Randolph .....	1.840	1.700											
Somerset .....					3.288	3.950	1.545	4.241	1.560	2.430	3.395	1.615	
Troy Hill .....	2.730	1.800											
West Haverford .....						1.230	1.302	5.500			3.115		
<b>MARYLAND—</b>													
Bladenburg .....						5.240	2.290	6.480	2.410	1.690	1.960	2.250	
Chestertown .....	2.400	0.870											
Frederick .....	4.787	1.164	1.776	2.900	3.080	2.155	2.836	3.740	1.437	1.845	2.437	2.479	39.635
Sykesville .....		0.483			4.000	1.500	5.833	5.063	2.833	2.750	2.583	3.530	
<b>DISTRICT OF COLUMBIA—</b>													
Washington .....	4.600	0.640	1.785	2.675	4.198	5.949	3.869	4.175	1.910	1.805	2.140	2.340	35.486
<b>VIRGINIA—</b>													
Alexandria .....	4.882	1.144	1.186	2.376	3.126	2.602	2.398	4.182	2.151	1.650	1.981	2.208	29.886
Berryville .....							6.740	2.500	1.230	2.410	2.310	1.620	
Buffalo .....	1.797	0.928	1.506	1.131									
Crichton's Store .....	4.700	0.500	0.750	0.150	0.500	9.370	0.850	3.100	7.500	2.700	4.300	2.050	36.470
Kanawha .....	1.500	1.750	2.000	3.500	4.000	3.250	0.750	2.250	2.500	3.250	2.500	2.000	29.250
Lewisburg .....		?	1.300	1.075	1.900	1.900	4.300	5.310	0.910	3.000	3.940	1.200	
Peach Grove Lodge .....	3.475	2.250	1.700	2.740	5.520	2.361	2.220	3.020	1.710				
Portsmouth .....				3.020	7.430	10.080	1.500	6.880	5.820	4.540	3.280	5.050	
Ruthven .....								6.755	5.140	3.050	3.610	2.020	
Smithfield .....	6.745	1.495	1.855	2.191	2.720	4.875	3.880	4.405	9.298	4.542	2.930	3.555	48.491
Trout Run Valley .....	1.650	2.100	1.875	2.520	2.950	3.760	2.620	2.310	1.660	2.180	1.180		
Winchester .....			1.740	3.610	3.300	3.500			3.670	2.300	2.010	1.870	
<b>NORTH CAROLINA—</b>													
Chapel Hill .....				1.656	3.835	2.369	1.454	3.788	7.460	2.777	3.740	3.458	
Gaston .....								3.520	2.620	2.290	3.840	3.130	
Murfreesborough .....									2.330	2.290	2.820	2.800	
<b>SOUTH CAROLINA—</b>													
Aiken .....	5.295	2.345	5.785	0.793	4.457	4.500	3.250	13.795			5.544	4.595	
All Saints .....	7.140	2.040	4.900	0.440	1.250	2.265	2.060	2.530	0.570	2.360	3.170	4.010	32.735
Camden .....	5.950	2.200	6.270	0.830	6.880	3.080	3.610	8.560	4.410	2.520	4.800	4.830	51.840
Charleston, [Johnson] .....	7.025	2.006	6.412	1.000	7.875	5.037	3.488	7.250	1.950	2.270	2.537	2.287	49.117
Charleston, [Dawson] .....	6.120	2.090	5.550	0.240	2.930	1.580	2.740	5.860	1.320	1.840	1.930	1.720	33.890
Columbia .....									5.660	1.980			
Edisto Island .....		1.525	5.215	0.325	1.660	2.815		6.130	0.415	2.340	1.150	1.660	
St. John's .....	7.300	2.180	7.030	0.800	4.110	8.650	5.370	9.820	0.270	3.080	3.860	5.010	57.480
<b>GEORGIA—</b>													
Savannah .....	7.371	1.178	5.036	1.256	5.798	6.512	4.980	6.369	1.244	1.471	2.202	1.895	45.312
Sparta .....	8.020	2.090	7.260	0.370	4.210	1.900	1.640	9.350	2.120	1.220	9.730	3.960	51.870
Thomaston .....						1.470	2.970	6.800	0.061	0.170	10.490	3.650	
Whitemarsh Island .....	7.200	0.990	4.400	1.340	2.670	3.090	6.840	6.680	0.650	2.080	1.520	1.270	
<b>FLORIDA—</b>													
Atsena .....	3.625	4.125	2.375	1.062	0.625	2.250	12.100	3.375	0.875	0.062	2.875	1.063	34.412
Gainesville .....						6.390	6.090	3.560	2.910	1.280	3.240	2.365	
Jacksonville .....	5.900	3.050	5.750	1.330	4.050	4.425	10.850	7.250	1.100	2.200	3.485	2.925	52.315
St. Augustine .....					4.800	1.250	2.600	3.700	0.000	6.975	2.400	1.400	
Salt Ponds .....	4.930	3.360	1.400	0.210	2.550	2.020	7.590	3.510	4.150	5.020	0.430	0.290	35.450
Warrington .....	5.250	4.750	6.500		7.000	15.500	14.600	8.600	1.350	2.800	7.530	5.850	
<b>ALABAMA—</b>													
Auburn .....	5.530	1.903	6.830	0.875	0.830	6.470	2.380	?	0.580	0.461	10.920	4.000	
Carltonville .....						9.140	1.390	4.850	1.100	0.340	15.600	6.280	
Greene Springs .....	2.910	2.650		4.410	6.120	6.940	1.195		2.200	4.500	9.520	4.680	
Greensborough .....						6.410	2.139	3.127		0.363	14.202	6.368	
<b>MISSISSIPPI—</b>													
Columbus .....	3.760	4.460	3.850	6.348	5.030	4.560	1.843	2.195	4.912	0.518	11.076		
Natchez .....												4.710	
Oxford .....	2.391	4.737	1.885	6.448	1.705	5.633							
Port Gibson .....	2.620	7.050							4.350	1.883	5.780		
<b>LOUISIANA—</b>													
Black River .....												6.633	
St. Francisville .....												4.000	
<b>TEXAS—</b>													
Austin .....			1.396	1.210	2.841	0.617	0.412	1.560	2.670	1.883	2.016	0.217	



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1856.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>TEXAS</b> —Continued.													
New Braunfels .....			1.670	4.900	4.000	2.200	1.000	2.200	4.450	4.600	1.600		
New Wied .....	4.400	1.870											
<b>TENNESSEE</b> —													
Glenwood .....	1.381	2.897	1.640	4.176	6.299	1.234	1.857	3.952	0.716	2.430	6.238	5.680	39.300
Knoxville .....			1.690						2.100	2.620			
Walnut Grove .....											5.840	3.460	
<b>KENTUCKY</b> —													
Baileysville .....							3.850	4.350	1.310	2.047	4.982	4.377	
Danville .....	1.761	2.065	1.049	1.289		2.954	3.245				3.298	4.729	
Millersburg .....					2.067		0.790	4.910		1.550		3.770	
Paris .....	2.500	1.845	1.000	1.912	2.067	3.400	2.530	3.230	0.920	1.982	3.708	3.760	28.864
Springdale .....	1.140	2.330	0.990	1.700	3.010	2.060	1.570	5.150	1.850	1.620	4.560	4.930	30.910
<b>OHIO</b> —													
Bellefontaine .....	2.875	2.717	0.492		1.619	6.640	1.710	2.210					
Cheviot .....		2.790	0.760	1.240	3.060	2.070	3.910	1.690	3.220				
Cincinnati, [Harper] .....	1.110	3.000	1.510	0.725	1.230	4.240	3.432	0.610	3.619	1.740	2.085	2.185	25.486
Cleveland .....	1.250	1.140	0.620	1.350	3.450	2.550	2.260	1.890	2.880	2.420	2.540	3.740	26.690
College Hill .....	1.588	2.340	0.665							1.218	3.118	3.580	
Collingwood .....						2.540	0.750	1.900	2.000	1.450	2.900	1.300	
Dayton, [Fisher] .....				1.088	2.644	2.332	3.160	1.714	2.090	0.702			
Gallipolis .....	2.092	1.780	1.176	1.217	1.945	1.609	4.113	0.762	3.261	1.351	3.573	3.128	24.151
Germantown, [Groneweg] .....	0.987	1.626	0.721	0.878	1.496	1.769	4.718	0.942	1.638	3.207	2.222		
Germantown, [Banker] .....					1.496	1.769	4.718	0.942	1.638	3.207	2.222		
Granville .....	1.390	1.500	0.710	1.650	3.250	5.400	2.230	3.120	0.448	0.500	2.490	2.945	25.633
Hillsborough .....			0.575	1.227	3.020	3.178	1.472	1.446	1.747	3.395	2.985		
Hiram .....	3.690	1.475	0.800	1.090	3.500	3.780	1.200	1.930	4.370	1.700	6.250		30.465
Jefferson .....			1.350	5.600	3.060	4.230	2.800	3.470	1.140	4.210	5.040	5.180	
Madison .....									1.252	4.031	4.750		
Oberlin .....	0.920	0.960	0.350	0.970	4.140	3.070	1.150	2.210	3.700	1.440	2.140		
Perrysburg .....		1.000	1.000		2.375				2.250				
Portsmouth .....	1.900	1.770	1.070	0.750		2.710			1.060	1.780	3.270		
Savannah .....	2.045	2.225	0.880	1.725	7.185	1.825	2.430	1.503	2.213	1.150	1.525	3.538	28.854
Scioto .....					1.980								
Sidney .....									2.720	1.290	3.310		
Unionville .....	3.125		1.016	3.031	3.875	4.500	2.375	2.252					
Urbana .....	1.020	1.900	1.090	1.900	3.840	3.220	3.890	2.370	2.910	2.080	3.600	3.020	20.520
West Bedford .....									1.760	1.990	2.630	2.570	
Zanesville, [Holston] .....			1.584	1.795	3.866	5.225							
<b>MICHIGAN</b> —													
Ann Arbor, [Woodruff] .....		1.014	1.442		2.489	3.189	4.402	1.392					
Battle Creek .....	0.610	0.700	0.080	0.740		1.050	2.780	0.580	1.350	1.530	2.980	2.540	
Cooper .....	1.200	2.100	0.950	1.125	8.750	4.812	1.850	2.400	3.225	3.387	1.900	1.952	33.651
Copper Falls Mines .....											4.295	5.325	
Detroit .....			0.622	1.378	4.787	14.856	3.568	0.953	3.903	2.487	4.428		
Eagle River .....							1.740	2.000	3.400	1.600	2.200		
Grand Rapids .....	1.150	0.200		3.520	3.900	2.350	2.680	1.000	4.750	3.130	4.850		
Holland .....						1.470	2.120	1.670	4.130				
Monroe .....					2.510		1.634	1.520			1.220		
Newark .....				2.465									
Romeo .....	1.037	0.400	0.893	1.973	2.220	4.530	0.001	1.415	1.235	0.985	3.240	3.315	21.369
St. James .....					2.812								
Saugatuck .....	2.200	2.500	0.943										
<b>INDIANA</b> —													
New Albany .....				0.956	2.048	1.370							
New Harmony .....	0.800	0.770	0.580	0.570	3.560	2.830	1.810	4.740	0.710	0.980	2.760	3.070	23.180
Richmond .....				0.892	3.440		2.580	1.135		2.058	3.190	3.435	
<b>ILLINOIS</b> —													
Athens .....	0.950	1.530	0.450	1.480	3.080	1.160	1.510	2.120	1.840	1.560	4.360	5.080	25.120
Augusta .....			0.247	3.131	8.614	1.096	5.986	1.533	1.265	4.521	4.966	6.063	
Brighton .....	1.500					6.560	2.640	5.800	3.510		1.780	0.800	
Chicago .....											3.976	3.860	
Manchester .....	1.104	4.690	1.546	1.226	4.320	1.930	2.111	2.112	1.106	2.460	3.427	4.980	31.012
Marango .....				3.100	3.800	5.700	4.100	3.000	6.500	3.500	2.850	4.610	
Ottawa .....			0.141	1.365	6.197	2.114	2.714	1.536	2.378	2.856	3.643	4.840	
Peoria .....	0.656	1.718	0.560	0.562	3.593	2.125	2.531	1.531	0.718	2.937	4.031	7.000	27.902
Riley .....					4.250	2.745	1.590	3.290	4.460	1.960	3.340	3.040	
Upper Alton .....	0.600	2.160		3.485	2.320	0.600	2.080	3.748			3.460	2.059	
Warsaw .....					5.281		7.812	1.610	2.330	5.250	4.000	4.970	
West Salem .....		2.300	0.650	1.050	2.930	1.870	6.930	4.860	0.860	1.070	3.610	2.950	
<b>MISSOURI</b> —													
Cape Girardeau .....										3.602	4.890	2.930	
Palmyra .....						1.009	5.200	1.999	2.370	1.829	4.185	5.660	
St. Louis .....	1.030	3.640	1.060	6.350	3.030	1.240	4.610	6.820	3.510	2.100	4.900	4.290	42.580
<b>WISCONSIN</b> —													
Appleton .....	0.326	0.076	0.232	2.858	3.037	2.677	2.428	1.225	1.823	2.312	2.450	3.906	23.350
Bay City .....							5.700	3.600	6.500				
Beloit .....	0.000	0.395	0.500	4.040	3.920	2.545	2.105	2.920	2.610	2.090	2.975	3.180	27.880
Janesville .....	0.500	0.110	0.000	2.300	3.950	3.900	1.380	0.550	2.900	1.710	2.200	3.250	22.050
Madison .....				2.500		3.250		1.580			4.920		
Milwaukee, [Winkler] .....	2.000	1.000	0.150	3.100	3.040	4.130	2.265	0.910	2.700	2.480	4.430	2.830	29.025
Norway .....			0.390	4.750	5.250	7.750	3.100	2.350	4.600	1.460	6.700	6.570	
Platteville .....			0.420	2.208	3.100	5.339	1.597	1.215	4.900	2.922	2.780	4.723	
Superior .....							3.439	2.478	3.370	5.310			
Whitesha .....			0.400	2.528	2.390		0.931	1.861	2.194	1.833	2.902		
<b>IOWA</b> —													
Belleuve .....	0.700	0.800	0.410	2.690	3.300	2.350	2.340	1.020	2.830	4.920		6.180	
Border Plains .....							2.286	3.187	2.780	4.125	1.187	1.313	
Dubuque .....	0.440	0.520	0.710	2.180	3.400	1.800							
Fort Madison .....	2.500	1.520	4.200	4.360	3.850	0.590	5.970	1.560	3.200	5.100	4.200	6.705	43.855
Muscatine .....	1.200	4.340	0.610	3.440	4.390	2.680	2.740	1.360	2.450	5.210	4.350	6.150	38.920



No. 50.—INCHES OF RAIN AND MELTED SNOW, 1856.

[illegible]

## No. 51.—BAROMETER—SUMMARY FOR THE YEAR 1856.

NAME OF STATION.	MEAN.				MAXIMA.		MINIMA.		Range for the year.
	7 a. m.	2 p. m.	9 p. m.	Mean.	Date.	Height.	Date.	Height.	
British America—Montreal .....	29.84	29.80	29.81	29.82	Dec. 19	30.86	Dec. 3	29.07	1.79
St. Martin .....	29.74	29.70	29.73	29.72	Dec. 18	30.74	Dec. 14	28.72	2.02
Toronto (a) .....	29.61	29.58	29.61	29.60	Dec. 18	30.44	Dec. 3	28.74	1.70
Maine .....	29.74	29.71	29.72	29.72	Dec. —	30.52	Feb. —	28.71	—
Steuben .....	29.84	29.80	29.82	29.82	Jan. 2	30.68	Feb. 17	28.55	2.13
New Hampshire—Concord .....	29.61	29.56	29.57	29.58	Dec. 19	30.38	Feb. 17	28.67	1.71
Massachusetts—Amherst .....	29.71	29.67	29.70	29.69	Dec. 19	30.56	Dec. 3	28.77	1.79
Nantucket .....	29.94	29.91	29.93	29.93	Dec. 19	30.70	Feb. 17	29.03	1.67
New Bedford .....	29.85	29.82	29.84	29.84	Dec. 19	30.63	Feb. 17	28.97	1.66
Newburyport .....	29.91	29.88	29.91	29.90	Dec. 19	30.75	Feb. 17	28.93	1.82
North Attleborough .....	29.76	29.72	29.76	29.75	Dec. 19	30.56	Dec. 3	28.89	1.67
Princeton .....	28.78	28.74	28.76	28.76	Dec. 19	29.48	Dec. 14	27.76	1.72
Westfield .....	30.04	30.03	30.05	30.04	Dec. 19	30.66	Dec. 3	29.20	1.46
Williamstown .....	29.23	29.20	29.23	29.22	Jan. 5	29.77	Dec. 14	28.18	1.99
Worcester .....	29.42	29.39	29.41	29.41	Nov. 7	30.22	Feb. 17	28.58	1.64
Rhode Island—Providence .....	29.73	29.71	29.73	29.72	Dec. 19	30.55	Dec. 3	28.85	1.70
Connecticut—Pomfret .....	29.01	28.99	28.99	29.00	Dec. 19	30.06	Mar. 2	28.16	1.90
New York—Blackwell's Island .....	29.98	29.95	29.97	29.97	Dec. 19	30.62	Dec. 14	29.16	1.46
Flatbush .....	29.84	29.80	29.82	29.82	Dec. 19	30.66	Dec. 3	28.92	1.74
New York city .....	29.94	29.91	29.92	29.92	Dec. 19	30.78	Dec. 3	29.05	1.73
Oswego .....	29.25	29.23	29.24	29.24	Dec. 18	30.11	Dec. 14	28.20	1.91
Ovid .....	28.86	28.83	28.85	28.85	Dec. 18	29.63	Feb. 16	28.11	1.52
Penn Yan (b) .....	29.20	29.19	29.20	29.20	Dec. 18	29.92	Dec. 14	28.33	1.59
Rochester, [Pratt] .....	29.43	29.40	29.43	29.42	Dec. 18	30.08	Dec. 14	28.48	1.60
Spencertown .....	29.32	29.28	29.30	29.30	Dec. 19	30.05	Dec. 24	28.34	1.71
New Jersey—Bloomfield .....	29.81	29.78	29.81	29.80	Dec. 19	30.59	Feb. 12	29.07	1.52
Burlington (c) .....	29.85	29.82	29.83	29.83	Dec. 19	30.64	Dec. 3	29.07	1.57
Lambertville .....	—	—	—	30.01	Dec. 18	30.69	Dec. 14	29.05	1.64
Pennsylvania—Newark (d) .....	29.90	—	29.87	29.88	Dec. 19	30.72	Dec. 14	29.10	1.62
Carlisle .....	29.20	29.15	29.17	29.17	Dec. 18	29.90	Dec. 14	28.31	1.59
Chromedale .....	29.85	29.80	29.82	29.82	Dec. 19	30.62	Dec. 14	29.02	1.62
Gettysburg .....	29.44	29.39	29.41	29.41	Dec. 18	30.14	Dec. 14	28.56	1.58
Harrisburg .....	29.74	29.71	29.72	29.72	Dec. 18	30.51	Dec. 3	28.93	1.58
Morrisville (e) .....	30.07	30.04	30.05	30.05	Dec. 19	30.89	Dec. 3	29.17	1.72
Norristown .....	29.77	29.74	29.75	29.75	Dec. 19	30.67	Dec. 3	28.84	1.83
Pittsburg .....	28.94	28.91	28.93	28.93	Jan. 31	29.93	Dec. 3	28.13	1.80
Maryland—Frederick .....	29.71	29.66	29.69	29.69	Dec. 18	30.47	Dec. 14	28.81	1.66
Dist. of Columbia—Washington .....	30.04	29.99	30.02	30.02	Dec. 19	30.79	Dec. 14	29.14	1.65
Virginia—Alexandria .....	30.02	29.97	30.00	30.00	Dec. 19	30.76	Dec. 14	29.10	1.66
North Carolina—Chapel Hill .....	29.46	29.43	29.44	29.44	Dec. 19	30.01	Nov. 29	28.81	1.20
South Carolina—All Saints .....	29.99	29.96	29.98	29.98	Feb. 6	30.51	Feb. 16	29.42	1.09
Camden .....	29.90	29.85	29.88	29.88	Dec. 19	30.45	Feb. 16	29.39	1.06
Charleston, [Dawson] .....	—	—	—	—	Dec. —	30.58	Mar. 2	—	—
Georgia—St. John's (f) .....	30.10	30.13	30.12	30.12	Mar. 4	30.60	Jan. 12	29.55	0.92
Savannah .....	30.05	30.01	30.04	30.03	Feb. 6	30.52	Jan. 20	29.55	0.97
Sparta .....	29.40	29.37	29.38	29.38	Feb. 6	29.82	Feb. 16	28.95	0.87
Thomasston .....	29.35	29.32	29.33	29.33	Dec. 15	29.69	Aug. 31	28.69	1.00
Florida—Atsena .....	29.93	29.92	29.93	29.93	Mar. 13	30.30	May 20	29.46	0.84
Jacksonville .....	30.13	30.07	30.10	30.10	Ap. 13, 27	30.53	Feb. 21	29.57	0.96
Salt Ponds (g) .....	29.69	29.74	—	29.71	Feb. 5	30.00	Aug. 28	29.33	0.67
Warrington (g) .....	30.03	30.02	30.00	30.02	Feb. 5	30.47	Aug. 31	29.53	0.94
Alabama—Auburn .....	29.37	29.32	29.35	29.35	Dec. 17	29.71	Feb. 16	28.90	0.81
Tennessee—Glenwood .....	29.58	29.54	29.55	29.56	Jan. 10	30.10	Dec. 2	28.87	1.23
Kentucky—Ballardsville .....	29.09	29.06	29.08	29.08	Jan. 4	29.53	Dec. 2	28.33	0.63
Paris .....	29.19	29.15	29.16	29.17	Jan. 4	29.68	Dec. 2	28.42	1.26
Springdale .....	29.45	29.42	29.42	29.43	Jan. 4	29.98	Dec. 2	28.65	1.33

a Observations taken at 6 a. m., 2 p. m., and 10 p. m.

b Observations taken at sunrise, 2 p. m., and sunset.

c Observations in January not corrected for temperature.

d Observations taken at 7 a. m. and 6 p. m.

e Not corrected for temperature.

f Observations taken at sunrise, 2 p. m., and 9 p. m.

g Hours of observation not uniform throughout the year. See month tables.



## No. 51.—BAROMETER—SUMMARY FOR THE YEAR 1856.

NAME OF STATION.	MEAN.				MAXIMA.		MINIMA.		Range for the year.
	7 a. m.	2 p. m.	9 p. m.	Mean.	Date.	Height.	Date.	Height.	
Ohio.....Cincinnati, [Harper].	29.49	29.45	29.45	29.46	Jan. 10	30.03	Dec. 2	28.72	1.31
.....German't'n,[Groneweg]	29.24	29.19	29.21	29.21	Jan. 4	29.77	Dec. 2	28.39	1.38
.....Granville.....	28.97	28.94	28.96	28.96	Dec. 18				
.....Hillsborough.....	28.87	28.84	28.85	28.85	Jan. 13	29.68	Dec. 14	28.17	1.51
.....Urbana.....	28.76	28.74	28.76	28.75	Jan. 4	29.37	Dec. 2	28.08	1.29
Michigan.....Romeo.....	28.76	28.74	28.76	28.75	Jan. 25	29.29	Dec. 2	27.95	1.34
.....New Harmony.....	29.02	29.01	29.03	29.02	Jan. 25	29.65	Dec. 14	28.02	1.63
Illinois.....Manchester (a).....	29.69	29.64	29.66	29.66	Jan. 10	30.22	Dec. 2	28.80	1.42
Missouri.....St. Louis.....	28.80	28.76	28.76	28.77	Jan. 10	29.40	Dec. 2	28.11	1.29
Wisconsin.....Appleton.....	29.55	29.51	29.53	29.53	Dec. 6	30.30	Dec. 2	28.66	1.64
.....Beloit.....	29.01	28.99	28.99	29.00	Jan. 25	29.68	Feb. 1	28.16	1.52
.....Manitowoc (a).....	29.19	29.16	29.19	29.18	Jan. 25	29.80	Nov. 21	28.21	1.59
.....Milwaukee, [Winkler].				29.71	Dec. ---	30.33	Dec. ---	28.83	1.50
.....Superior.....	29.28	29.26	29.27	29.27	Mar. 9	29.96	Dec. 3	28.31	1.65
Iowa.....Muscatine.....	29.31	29.28	29.29	29.29	Jan. 25	30.11	Nov. 1	28.42	1.69
California.....Sacramento.....	29.48	29.45	29.46	29.46	Jan. 25	30.04	April 15	28.85	1.19
	29.98	29.95	29.95	29.96	Dec. 19	30.62	Sept. 19	29.57	1.05

<sup>a</sup> Observations taken at 7 a.m., 1 p.m., and 9 p.m.

## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.
	7 a.m.	2 p.m.	9 p.m.	Mean.	WARMEST DAY.		HIGHEST DEG.		COLDEST DAY.		LOWEST DEGREE.		
					Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.	Date.	Temp.	
BRITISH AMERICA—	°	°	°	"		°		"		"		°	°
Montreal .....	34.77	48.49	42.10	43.40	July 26	86.03	July 26	92	Dec. 18	-12.00	Feb. 13	-19	111
St. Martin .....	34.77	48.77	37.41	40.32	July 26	82.90	July 26	97	Dec. 18	-16.30	Dec. 18	-24	121
Toronto (a) .....	37.95	47.57	40.83	42.12	July 17	81.77	July 17	92	Feb. 13	-6.88	Feb. 13	-18.7	110.7
MAINE—													
Gardiner .....	39.17	50.99	41.65	43.94	July 27	84.00	July 27	94	Dec. 18	-5.33	Jan. 10	-16	110
Perry .....	36.21	46.17	38.81	40.40	July 25	73.50	July 25	86	Dec. 18	-4.00	Dec. 18	-9	95
Portland .....	40.09	51.93	42.12	44.71	July 27	86.67	July 27	98	Dec. 18	-4.00	Dec. 18	-10	108
Steuben .....	37.54	46.51	39.07	41.04	July 25	84.00	July 25	93	Dec. 18	-7.67	Dec. 18	-13	100
NEW HAMPSHIRE—													
Concord .....	38.70	51.95	44.77	45.14	July 27	84.00	June 29 & July 27.	93	Dec. 19	-7.33	Jan. 7 and Mar. 10.	-14	107
Stratford .....	35.21	47.54	37.46	40.04	July 26	79.00	June 29	97	Dec. 18	-17.00	Dec. 19	-27	124
VERMONT—													
Brandon .....	36.85	48.98	40.30	42.04	June 29	80.50	July 26	91	Dec. 18	-10.16	Jan. 5	-22	113
Burlington .....	38.47	51.34	41.78	42.76	June 29	86.67	Aug. 2	97	Dec. 18	-13.33	Dec. 19	-18	115
MASSACHUSETTS—													
Ambherst .....	38.02	52.07	43.17	44.75	June 29	84.20	July 18	95	Jan. 9	-5.80	Jan. 9 and Feb. 14.	-11	106
Lawrence (b) .....	35.31						June .....	81			December .....	-10	111
Mendon .....	40.69	51.78	43.56	45.34	June 29	85.00	June 29 & July 17.	93	Jan. 9	-6.67	Jan. 9	-9	102
Nantucket .....	47.68	53.51	47.09	49.43	July 28	80.27	July 28	88	Dec. 18	7.23	Dec. 18	1	84
New Bedford .....				46.79	June 22	81.50			Jan. 9	-2.33	Jan. 9	-5	.....
Newburyport .....	40.00	51.07	42.58	44.57	June 29	84.67	June 29 & July 18.	95	Dec. 18	-6.27	Jan. 9	-10	105
North Attleborough ..	41.34	52.31	42.65	45.43	June 20	85.00	June 29	94	Jan. 9	-1.26	Jan. 9	-6.9	100.9
Princeton .....	38.65	47.49	40.70	42.28	June 29	80.00	July 27	89	Jan. 9	-7.90	Jan. 9	-13	102
Richmond .....	37.05	52.75	43.78	44.53	July 19	81.00	July 26	95	Jan. 9	-8.67	Jan. 9, Feb. 13, Dec. 18.	-12	107
Westfield .....	38.84	52.07	43.55	44.82	June 29	85.23	July 18	95	Jan. 9	-6.33	Jan. 9	-11	106
Williamstown .....	38.29	48.86	41.29	42.81	June 29	81.30	June 29	88.5	Dec. 19	-8.77	Dec. 19	-11	99.5
Worcester .....	41.56	51.96	44.80	46.11	July 27	85.00	July 27	93	Jan. 9	-5.33	Jan. 9 and Feb. 14.	-8	101
RHODE ISLAND—													
Providence .....	41.46	54.10	43.71	45.42	June 30	81.00	June 29	95	Jan. 9	-5.00	Jan. 9	-8	103
CONNECTICUT—													
New London .....	43.15	54.29	44.78	47.41	June 21 & July 25.	83.33	July 28	96	Jan. 9	0.00	Jan. 9	-4	100
Pomfret .....	40.68	50.82	42.58	44.69	July 18	82.67	July 18	91	Jan. 9	-7.00	Jan. 9	-10	101
Saybrook .....	44.22	52.44	46.87	47.88	July 27	82.00	July 27	88	Jan. 9	-0.67	Jan. 9	-4	92
NEW YORK—													
Albany .....	36.13	52.08	39.00	42.88	June 30	85.67	June 22	90	Feb. 13	-13.33	Feb. 14	-40	100
Baldwinsville .....	39.11	48.72	43.32	40.38	June 29	80.00	June 29	89	Jan. 9	-4.33	Dec. 18	-8	97
Beverly .....	42.97	52.24	46.34	43.85	June 29	87.00	June 30 & July 27.	91	Jan. 9	-3.00	Jan. 9	-8	97
Blackwell's Island .....	46.06	54.00	49.57	49.88	July 18	85.00	July 18	94	Jan. 9	5.00	Jan. 9	-4	98
Flatbush .....	44.39	54.84	46.53	48.59	July 18	86.17	July 18, 27	94	Jan. 9	-0.76	Jan. 9	-3	90
New York city .....	46.74	55.18	49.36	50.43	July 18	83.43	July 27	95	Jan. 9	-0.73	Jan. 9	-4	90
Oswego .....	40.16	48.99	42.14	43.76	Aug. 2	82.67	June 29 & July 17.	92	Dec. 18	-2.67	Dec. 18	-11	103
Ovid .....	41.58	50.12	42.96	44.89	July 17, 26	83.00	Aug. 2	96	Jan. 9	-4.67	Jan. 9	-9	105
Penn Yan (c) .....	37.37	52.44	45.33	45.05	June 29	81.00	July 25	95	Jan. 9	-3.00	Mar. 10	-12	107
Rochester, [Harkness] ..	43.96	50.74	44.62	46.44	July .....	94.00			Jan. 9	-8.00			.....
Rochester, [Pratt] .....	41.61	51.18	44.62	45.80	July 17	85.67	July 17	95	Jan. 9	-4.00	Jan. 9	-6	102
Spencertown .....	38.87	50.44	41.24	43.18	June 29	84.00	July 18	93	Jan. 9	-14.33	Jan. 9	-22	115
Wampsville .....	40.63	53.44	41.90	45.32	June 29	85.67	June 29 & July 17.	94	Dec. 18	-7.67	Feb. 13	-15	109
Waterford (d) .....	40.27	51.45	43.40	45.04			July .....	97			December .....	-12	100
Watertown .....	39.16	52.88	40.00	44.01	July 17	80.00	June 29	92	Dec. 19	-15.33	Feb. 13	-27	119
NEW JERSEY—													
Bloomfield .....	43.06	56.95	46.25	48.75	July 18	86.33	July 26	102	Jan. 9	-6.00	Jan. 9	-9	111
Burlington .....	45.62	58.24	48.63	50.83	June 28	82.00	June 29	99	Jan. 9	-3.00	Jan. 9	-5	104
Lambertville .....	42.54	59.04	46.21	49.26			July 18	101.5			Jan. 9	-10	111.5
Newark (e) .....				48.12	July 18	86.37	July 27	97	Jan. 9	-1.13	Jan. 9	-7	104
PENNSYLVANIA—													
Bedford .....	41.86	56.25	47.93	48.71	July 18	87.67	July 17	95	Jan. 9	-6.00	Feb. 14	-17	112
Carlisle .....	43.43	55.32	47.30	48.68	July 18	86.67	July 18	94	Jan. 9	-6.17	Jan. 9	-12	106
Chromedale .....	45.21	56.45	46.81	49.49	June 29	87.70	June 29	95	Jan. 9	-7.20	Jan. 9	-11	106
Easton .....	41.99	59.18	45.99	49.05	June 29	88.00	July 26	102	Jan. 9	-5.67	Jan. 9	-12	114
Gettysburg .....	41.87	55.40	46.84	51.37	July 18	89.33	June 18	98	Jan. 9	-5.43	Jan. 9	-16	114
Harriburg .....	47.04	58.18	51.38	52.29	June 30	90.00	July 18	97	Feb. 2, 13	9.00	Feb. 14	2	95
Lewisburg (f) .....	40.74	54.74	45.05	46.84	June 29	87.77	July 17, 30	94	Jan. 9	-7.77	Feb. 14	-21	115
Meadville (g) .....	39.54	54.04	40.85	44.81	June 28	83.00	June 28	95	Feb. 13	-13.00	Feb. 14	-27	122
Morrisville .....	43.79	57.43	46.83	49.35	June 29	84.33	July 27	95	Jan. 9	-1.33	Jan. 9	-6	102
Nazareth .....	42.52	56.27	43.28	47.36	July 30	83.67	July 30	99	Jan. 9	-7.92	Jan. 9	-16	115
Norristown .....	44.64	55.68	48.68	49.67	July 18	87.00	July 18	97	Jan. 9	-2.67	Jan. 9	-6	103
North Whitehall (h) ..	39.55	55.06	48.77	44.46	June 30	84.33	July 17, 18	94	Jan. 9	-4.67	January ..	-14	108
Paradise .....				51.58									.....
Pittsburg .....	42.78	54.06	45.82	47.55	June 29	83.00	July 17	91	Feb. 3	-1.67	Feb. 4	-15	111
Pocopson .....	44.54	58.33	47.50	50.12	June 29	91.00	June 29 & July 18.	100	Jan. 9	-7.00	Jan. 9	-11	111
Shamokin .....							July 30	104			Feb. 14	-25	129
West Haverford .....	45.23	59.00		51.92	June 29	89.50	July 18	100	Jan. 9	-1.50	Jan. 9	-5	105

a Observations taken at 6 a. m., 2 p. m., and 10 p. m.

b Observations taken at 6 a. m.

c Observations taken at sunrise, 2 p. m., and sunset.

d Mean at 6 p. m., 47° 66'.

e Register thermometer used.

f Observations, in January, taken at 7 a. m., 2 p. m., and 7 p. m., and,

in February and March, at 6 a. m., 2 p. m., and 10 p. m.

g Observations interrupted from the 13th to the 31st of July.

h Observations taken at sunrise, noon, and sunset.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.
	7 a. m.	2 p. m.	9 p. m.	Mean.	WARMEST DAY.		HIGHEST DEG.		COLDEST DAY.		LOWEST DEGREE.		
					Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.	Date.	Temp.	
MARYLAND—	"	"	"	"		"		"		"			
Annap's, [Goodman] (a)	44.44	60.11	47.11	50.55	June 30	88.33	July 18	97.5	Jan. 9	— 2.50	Jan. 7	— 6	103.5
Bladensburg (b)	46.68	57.38	49.45	51.17	July 18	90.27	July 18	102	Jan. 9	0.50	Jan. 7	— 5	107
Frederick	43.19	57.17	47.35	49.24	June 29	85.67	June 22	93	Jan. 9	— 7.00	Jan. 9	— 8	105
SYKESVILLE	43.19	57.17	47.35	49.24	June 29	85.67	June 22	93	Jan. 9	— 7.00	Jan. 9	— 20	113
DIST. OF COLUMBIA—													
Washington	46.17	59.22	50.88	52.09	July 18	88.00	July 18	98	Jan. 9	0.16	Jan. 9	— 4	102
VIRGINIA—													
Alexandria	47.99	59.42	51.18	52.86	June 29	88.67	June 29, 30	95	Jan. 9	— 0.17	Jan. 9	— 4	99
Crichton's Store (c)	52.05	63.57	62.60	59.41	July 30	95.33	July 30	103	Feb. 4	14.67	Jan. 10	8	95
Garysville (d)	44.67	59.91	55.83	53.47	July 17	87.25	July 30	96	Jan. 10	7.33	Jan. 10	— 6	104
Kanawha (e)	43.60	60.57	47.53	50.57	June 30	82.00	June 30	96	Jan. 9, 10	4.00	Jan. 10	— 2	98
Lewisburg	43.60	60.57	47.53	50.57	June 30	82.00	June 30	96	Jan. 9, 10	4.00	Jan. 10	— 8	104
Rougmont (e)	43.60	60.57	47.53	50.57	June 30	82.00	June 30	96	Jan. 9, 10	4.00	Jan. 10	— 15	117
Smithfield (e)	43.60	60.57	47.53	50.57	June 30	82.00	June 30	96	Jan. 9	6.50	Jan. 9	— 2	98
NORTH CAROLINA—													
Chapel Hill	50.90	66.53	55.46	57.63	July 30	92.67	July 30	105	Feb. 4	11.67	Feb. 4	5	100
SOUTH CAROLINA—													
All Saints	58.30	67.59	60.86	62.25	July 18, 31	85.67	July 18, 19	91	Dec. 23	23.67	Dec. 23	19	82
Camden	54.12	69.08	57.74	60.31	July 30	89.33	July 29, 30	98	Dec. 23	19.33	Feb. 5	6	92
Charleston, [Dawson]	59.93	70.40	62.85	64.39	July 29	84.33	July 31	94	Dec. 23	22.50	Dec. 23	18	80
St. John's	54.86	68.15	59.50	60.84	July 29	84.33	July 31	94	Dec. 23	22.50	Jan. 23	13	81
GEORGIA—													
Savannah	59.10	72.26	63.14	64.83	June 24	87.33	June 24	100	Dec. 23	26.20	Dec. 24	19	81
Sparta	53.94	70.36	59.28	61.19	June 27, 28	87.33	June and July 27.	99	Feb. 4	18.00	Feb. 5	9	90
Whitemarsh Island	59.12	69.61	63.08	63.90	June 24	86.33	July 31 & Aug. 24.	91	Jan. 22	27.67	Jan. 22 & Feb. 5.	22	72
Zebulon	58.29	68.46	63.50	63.42	July 31	91.33	June 26, 27, July 2, 31.	96	Feb. 4	16.00	Feb. 4	8	88
FLORIDA—													
Aisena (f)	65.82	72.41	68.40	68.88	July 2	87.00	July 2 & Aug. 28.	90	Jan. 23	32.67	Dec. 24	28	62
Jacksonville	64.59	74.48	66.00	68.36	July 1 and Aug. 24.	87.33	Aug. 25	95	Dec. 23	32.33	Jan. 22 & Dec. 24.	24	71
Salt Ponds	72.92	78.76	.....	75.84	July 2 and Aug. 16.	84.50	May 11	89	Feb. 5	49.00	Feb. 5	45	44
Warrington (c)	67.10	72.40	68.76	69.42	Aug. 25	93.00	Aug. 25	95	Feb. 4	25.67	Feb. 4	15	83
ALABAMA—													
Auburn	57.24	70.13	61.29	62.89	Aug. 24	91.00	June 27 & July 15, 16.	98	Feb. 4	17.00	Feb. 4	11	90
MISSISSIPPI—													
Columbus	53.87	68.48	59.13	60.49	Aug. 24	85.53	Aug. 10	97	Feb. 4	12.67	Feb. 4	4.5	92.5
TEXAS—													
Austin	56.22	74.81	63.88	64.64	Aug. 6	91.67	Aug. 12	103	Feb. 3	22.33	Feb. 4	12	91
Pin Oak (g)	56.39	70.37	67.98	64.91	Aug. 11	87.67	Aug. 18	98	Feb. 3	23.33	Feb. 3	16	82
TENNESSEE—													
Glenwood	47.85	61.90	52.94	54.23	June 29	84.00	July 16	93	Feb. 3	2.53	Feb. 4	— 3	96
KENTUCKY—													
Ballardsville	47.21	58.90	52.21	52.77	July 17	89.00	Aug. 6	92	Jan. 9	— 8.67	Jan. 9, 10	— 16	115
Paris	45.15	58.34	49.22	50.90	July 29	87.33	July 29	95	Jan. 10	— 8.00	Jan. 10	— 15	110
Springdale	42.02	62.18	54.49	52.90	July 29	87.67	July 17	99	Jan. 9	— 8.50	Jan. 10	— 22	121
OHIO—													
Cincinnati, [Harper]	47.64	62.12	51.80	53.85	July 17	96.33	July 17	101	Jan. 9	— 6.33	Jan. 9	— 14	115
Cleveland	41.81	53.19	43.78	46.23	July 17	85.83	July 16, 17	92	Jan. 9	— 8.00	Jan. 9	— 17.5	109.5
Germantown, [Groneweg]	41.73	56.87	45.05	47.88	June 22	84.20	June 22	98	Jan. 9	— 14.12	Jan. 9	— 25	123
Granville	42.69	55.00	46.05	47.91	July 17	84.67	July 17	96	Jan. 9	— 10.67	Jan. 9	— 20	116
Hillsborough	43.45	55.25	47.56	50.09	July 17	84.00	July 17	92	Jan. 9	— 9.83	Jan. 9	— 18	110
Hiram	42.25	52.18	43.33	45.92	July 17	86.33	July 17	97	Jan. 9	— 16.00	Jan. 9	— 25	122
Perrysburg (h)	44.87	55.96	46.59	49.14	July 17	92.00	July 17	99	Jan. 9	— 6.33	Jan. 9	— 18	117
Savannah	40.61	54.72	41.85	45.73	July 17	87.00	June 22 & July 17.	98	Jan. 9	— 11.00	Jan. 9	— 22	120
Urbana	41.06	57.94	44.08	47.69	June 22	85.00	June 22	97	Jan. 9	— 14.00	Jan. 9	— 23	120
MICHIGAN—													
Copper Falls Mines (i)	.....	.....	.....	37.48	.....	.....	Aug. ....	92	.....	.....	Jan'y and Feb'y.	— 20	112
Grand Rapids, [Currier]	38.82	51.15	41.74	43.90	July 16	84.00	July 16	94	Jan. 8	— 8.67	Feb. 3	— 24	118
Romeo	39.55	51.09	40.61	43.75	July 17	83.61	Aug. 2	93	Jan. 9	— 14.33	Jan. 9	— 22	115
INDIANA—													
New Harmony	47.42	60.93	51.45	53.27	July 29	90.00	July 29	98	Feb. 3	— 9.33	Feb. 4	— 20	118
ILLINOIS—													
Athens	44.58	60.07	48.10	50.92	July 15	92.33	July 14, 15	103	Feb. 3	— 14.33	Feb. 4	— 25	128
Augusta	41.38	55.67	46.41	47.82	June 28	85.00	June 25	95	Jan. 8	— 15.00	Feb. 3	— 28	123
Manchester (j)	43.28	58.95	44.90	49.04	July 16	87.00	July 15	98	Jan. 9	— 12.00	Jan. 9 and Feb. 3.	— 25	123
Ottawa (k)	44.34	55.49	44.62	48.15	July 16	86.67	June 23, 24, & July 16.	96	Jan. 8	— 10.67	Jan. 9	— 18	114
Pekin (l)	.....	.....	.....	46.55	.....	.....	June and July.	95	.....	.....	Jan'y and Feb'y.	— 25	120
MISSOURI—													
St. Louis	47.81	60.50	51.94	53.42	July 17	92.67	July 17	101	Feb. 3	— 5.67	Feb. 3	— 15	116

a Register thermometer used.

b Observations somewhat broken in most of the months.

c Hours of observations not uniform throughout the year. See monthly tables.

d Observations, in January, taken at sunrise, noon, and sunset; during the remainder of the year, at sunrise, 2 p. m., and sunset.

e Computed from daily maximum and minimum temperatures.

f Observations interrupted for the first twenty days of June.

g Observations taken at sunrise, noon, and sunset.

h Observations taken at 7 a. m., 1 p. m., and 9 p. m.

i Observations taken at 6 a. m., noon, and 6 p. m., for the first ten months.

j Observations taken at 7 a. m., 1 p. m., and 9 p. m.

k Observations taken at 8 a. m., 2 p. m., and 9 p. m., during the first four months of the year.

l Observations taken at sunrise and 1 p. m.

## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1856.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.
	7 a. m.	2 p. m.	9 p. m.	Mean.	WARMEST DAY.		HIGHEST DEG.		COLDEST DAY.		LOWEST DEGREE.		
					Date.	M'n temp	Date.	Temp	Date.	M'n temp.	Date.	Temp.	
WISCONSIN—	°	°	°	°		°		°		°		°	°
Appleton .....	36.81	50.66	40.47	42.65	July 16	84.67	July 16	94	Jan. 8	—21.67	Jan. 9	—25	119
Beloit .....	40.18	54.11	42.25	45.51	July 16	84.67	June 22 & July 24.	94	Jan. 8	—19.67	Jan. 9	—26	122
Janesville .....	36.73	52.35	41.09	33.39	July 16	81.67	June 23 & July 16.	96	Jan. 8	—22.60	Jan. 9	—30	125
Manitowoc (a) .....				42.42			June .....	90			Jan. ....	—22	114
Milwaukee, [Winkler].	37.74	48.37	38.61	41.57	June 28	81.00	June 21 & July 16.	92	Jan. 8	—21.00	Jan. 9	—23	115
Milwaukee, [Pomeroy]	39.54	50.17	40.02	43.24	July 16	87.67	July 16	96	Jan. 8	—15.67	Jan. 9	—26	122
Platteville .....	39.12	54.01	43.10	45.41	June 23	87.33	July 16	95	Jan. 8	—26.00	Jan. 9	—28	123
Superior .....	33.79	44.39	37.25	38.48	June 10	84.33	July 23	98	Jan. 8	—18.60	Feb. 22	—30	128
IOWA—													
Fort Madison (b) .....	42.08	55.73	47.82	48.54	June 24	87.67	June 6	98	Jan. 8	—16.67	Jan. 9	—25	123
Muscatine .....	37.86	53.08	41.80	44.25	June 22	87.33	June 24	97	Jan. 8	—21.00	Feb. 4	—29	126
Pleasant Plain (c) .....	36.71	56.96	43.86	45.84	June 23	84.00	June 23	102	Jan. 8	—17.78	Jan. 9	—24	126
CALIFORNIA—													
Sacramento .....	54.77	66.08	59.25	60.03	July 10	87.67	July 10	100	Jan. 2	38.33	Jan'y and Dec. 22.	—32	58
MEXICO—													
Mirador (d) .....				76.36	April .	82.44			Dec. ....	48.42			

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Observations taken at 6 a. m., noon, and 7 p. m.

c Hours of observations not uniform throughout the year. See monthly tables.

d Observations at 7 a. m., 2 p. m., and 8 p. m.



## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1856.

NAME OF STATION.	FORCE OF VAPOR.			RELATIVE HUMIDITY.								
	MEAN.			MEAN.			MAXIMA.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>									
Montreal (a) .....	.243	.288	.260	725	712	769	100	100	100	24	26	33
Montreal (b) .....	.237	.276	.251	757	706	777	100	100	100	22	22	18
St. Martin (a) .....	.250	.336	.268	851	740	841	98	97	96	39	44	47
St. Martin (b) .....	.234	.320	.257	828	723	828	100	100	100	00	00	00
Toronto (c) .....	.233	.259	.240	827	667	786	100	98	97	46	35	32
VERMONT—												
Burlington .....	.245	.273	.258	733	571	692	-----	-----	-----	00	00	00
MASSACHUSETTS—												
Amherst .....	.310	.347	.326	882	654	832	100	100	100	46	28	38
New Bedford .....	.296	.323	.309	822	684	822	100	100	100	40	20	21
Newburyport .....	.258	.274	.279	815	613	816	100	100	100	22	14	42
North Attleborough .....	.268	.277	.278	730	541	748	100	100	100	00	00	6
Princeton .....	.239	.258	.249	764	620	744	100	100	100	00	15	22
Westfield .....	.253	.271	.307	793	542	841	100	100	100	16	16	36
CONNECTICUT—												
Pomfret .....	.308	.344	.326	899	745	880	100	100	100	28	33	53
NEW YORK—												
Blackwell's Island .....	.280	.305	.298	714	629	702	100	100	100	20	21	5
New York city .....	.280	.308	.301	710	590	694	100	100	100	30	17	23
NEW JERSEY—												
Bloomfield (d) .....	.288	.345	.309	816	610	797	100	100	100	41	26	21
PENNSYLVANIA—												
Chromedale .....	.296	.317	.312	811	592	802	100	100	100	28	16	33
Norristown .....	.267	.302	.298	781	568	734	100	100	100	37	■	00
MARYLAND—												
Frederick .....	.289	.313	.319	732	568	733	100	100	100	17	18	2
DISTRICT OF COLUMBIA—												
Washington .....	.329	.341	.362	826	569	778	100	100	100	40	14	30
VIRGINIA—												
Alexandria (e) .....	.380	.419	.401	873	684	843	100	100	100	13	5	23
SOUTH CAROLINA—												
All Saints .....	.472	.501	.501	848	664	819	100	100	100	23	21	34
Camden .....	.403	.428	.425	809	556	735	100	100	100	00	■	19
Charleston (f) .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
St. John's .....	.430	.492	.478	852	631	808	-----	-----	-----	20	21	1
GEORGIA—												
Savannah .....	.474	.468	.489	784	522	741	99	98	97	32	14	25
FLORIDA—												
Jacksonville .....	.612	.710	.619	904	797	901	100	100	100	26	45	00
Warrington (g) .....	.713	.794	.756	937	887	915	100	100	100	73	56	66
ALABAMA—												
Auburn .....	.363	.341	.353	641	422	567	100	100	94	6	1	12
TEXAS—												
Austin .....	.420	.383	.423	825	431	674	100	100	100	42	00	21
TENNESSEE—												
Glenwood .....	.348	.374	.370	833	530	753	-----	-----	-----	26	14	24
KENTUCKY—												
Springdale .....	.289	.394	.384	873	616	763	100	100	100	00	00	10
OHIO—												
Cincinnati, [Harper] .....	.323	.376	.357	713	557	709	100	100	100	00	00	31
German town, [Groneweg] .....	.288	.302	.311	830	554	761	100	100	100	37	22	23
Hillsborough .....	.320	.344	.332	907	677	829	100	100	100	31	25	36
MICHIGAN—												
Romeo .....	.253	.273	.254	808	634	783	100	100	100	10	8	36
INDIANA—												
New Harmony .....	.347	.392	.385	854	617	819	100	100	100	43	15	39

a According to the tables used by the observer.

b According to the tables adopted by the Smithsonian Institution.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d From January 13th to December 24th.

e No observations during the last half of December.

f Mean force of vapor for the year, .525; computed approximately from the mean monthly dew point.

g Hours of observation not uniform. See monthly tables.

## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1856.

NAME OF STATION.	FORCE OF VAPOR.			RELATIVE HUMIDITY.								
	MEAN.			MEAN.			MAXIMA.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
ILLINOIS—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>									
Manchester (a) .....	.338	.441	.363	922	738	925	100	100	100	39	18	12
IOWA—												
Muscatine .....	.278	.403	.309	827	732	819	100	100	100	00	18	00
CALIFORNIA—												
Sacramento .....	.336	.381	.371	757	600	742	100	100	100	25	12	12

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.



## No. 54.—MEAN CLOUDINESS—SUMMARY FOR 1856.

NAME OF STATION.	7 a. m.	2 p. m.	9 p. m.	NAME OF STATION.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—				DISTRICT OF COLUMBIA—			
Montreal .....	5.92	5.95	5.22	Washington .....	4.44	4.38	3.44
St. Martin .....	4.77	4.99	4.32	VIRGINIA—			
MAINE—				Alexandria .....	4.75	4.20	3.66
Gardiner .....	4.28	4.67	4.50	Berryville .....	4.97	5.10	3.52
Perry .....	5.26	4.77	4.33	Crichton's Store (a) .....	4.39	4.12	4.45
Portland .....	5.52	5.86	4.79	Lewisburg .....	5.42	5.52	4.42
Steuben .....	6.37	5.96	6.07	NORTH CAROLINA—			
VERMONT—				Chapel Hill .....	5.60	5.84	5.33
Brandon .....	5.44	5.63	4.51	SOUTH CAROLINA—			
MASSACHUSETTS—				All Saints .....	4.39	4.54	3.66
Amherst .....	4.86	4.78	4.59	Camden .....	5.24	5.48	4.76
Mendon .....	4.45	4.87	4.41	GEORGIA—			
Nantucket .....	4.36	3.97	4.12	Savannah .....	4.34	4.79	3.42
New Bedford .....	5.39	5.52	5.38	Sparta .....	4.68	5.62	3.74
Newburyport .....	7.35	6.24	7.91	Whitmarsh Island .....	4.43	4.58	3.64
North Attleborough .....	4.42	4.33	3.66	Zebulon .....	3.55	4.01	3.26
Princeton .....	4.92	5.33	4.62	FLORIDA—			
Richmond .....	5.55	5.37	4.81	Atsena .....	4.47	4.61	3.13
Westfield .....	5.21	5.11	4.72	Jacksonville .....	4.40	4.63	2.80
Worcester .....	4.38	4.49	4.07	Warrington (a) .....	4.16	3.79	4.11
RHODE ISLAND—				TEXAS—			
Providence .....	4.32	4.69	4.16	Austin .....	5.82	5.41	3.28
CONNECTICUT—				Pin Oak (b) .....	.....	.....	.....
New London .....	4.64	4.35	4.32	KENTUCKY—			
Pomfret .....	4.69	4.82	4.69	Ballardsville .....	4.47	4.93	3.65
Saybrook .....	4.50	4.67	4.24	Paris .....	4.64	5.09	3.82
NEW YORK—				Springdale .....	4.03	4.81	4.41
Angelica .....	5.05	4.30	4.12	OHIO—			
Baldwinsville .....	5.62	5.75	5.16	Cincinnati, [Harper] .....	4.77	5.22	3.65
Beverly .....	4.85	5.14	4.45	Cleveland .....	5.95	5.79	5.07
Blackwell's Island .....	7.55	5.67	6.72	Germantown, [Groneweg] .....	5.13	5.57	4.29
Flatbush .....	5.01	5.46	4.48	Granville .....	4.72	5.05	3.78
New York city .....	4.90	4.96	4.08	Hillsborough .....	4.17	4.32	2.90
Ovid .....	6.06	5.91	5.36	Hiram .....	5.16	5.43	4.35
Penn Yan (a) .....	6.35	6.23	6.78	Savannah .....	5.37	5.64	4.38
Rochester, [Pratt] .....	7.20	7.53	7.56	Urbana .....	5.14	5.22	3.71
Spencertown .....	4.67	4.66	4.25	MICHIGAN—			
Wampsville .....	6.31	6.29	5.83	Romeo .....	6.17	6.31	4.79
Watertown .....	7.56	7.30	4.92	Grand Rapids, [Currier] .....	5.39	5.21	3.90
NEW JERSEY—				Monroe .....	5.17	4.79	4.82
Bloomfield .....	4.10	4.10	3.64	INDIANA—			
Burlington .....	5.47	5.17	4.98	New Harmony .....	4.46	4.96	4.19
PENNSYLVANIA—				ILLINOIS—			
Bedford .....	4.61	5.55	4.37	Athens .....	4.47	4.47	3.82
Carlisle .....	4.37	4.59	3.84	Augusta .....	3.89	4.14	3.40
Chromedale .....	4.79	5.05	4.07	Manchester (a) .....	4.92	5.42	4.51
Easton .....	4.66	5.08	4.03	Ottawa (a) .....	4.00	4.73	4.37
Gettysburg .....	4.59	4.35	3.72	MISSOURI—			
Harrisburg .....	4.43	4.13	3.85	St. Louis .....	4.37	4.35	4.14
Meadville .....	5.77	5.76	4.38	WISCONSIN—			
Morrisville .....	3.54	3.16	3.49	Beloit .....	4.34	3.48	2.85
Nazareth .....	4.82	5.17	4.20	Milwaukee, [Winkler] .....	4.56	4.39	3.27
Norristown .....	4.73	5.02	4.04	Platteville .....	4.66	4.81	3.92
Pocopson .....	5.62	5.86	4.24	IOWA—			
West Haverford .....	4.05	5.14	.....	Fort Madison (a) .....	6.06	5.97	5.59
MARYLAND—				Muscataine .....	4.15	4.17	3.17
Bladensburg .....	4.95	5.07	4.24	CALIFORNIA—			
Frederick .....	4.75	4.72	3.82	Sacramento .....	3.00	2.88	2.17
Sykesville .....	4.30	4.10	3.06				

a For hours of observation see monthly tables.

b Mean for the year, 2.31. Observations taken at sunrise, noon, and sunset.

## No. 55.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	140	139	13	63	95	197	187	282	2	1118	59	79	16	16	61	110	295	201	837
Toronto (a) .....	43	143	38	96	26	297	46	302	107	1098	—	—	—	—	—	—	—	—	—
MAINE—																			
Gardiner .....	22	176	19	142	37	162	46	247	146	997	13	16	3	16	14	114	40	150	366
Perry .....	49	69	28	126	96	248	52	429	1	1098	46	51	17	36	50	109	73	189	571
Portland .....	132	120	97	60	132	101	232	202	1	1077	31	7	5	10	13	52	156	72	346
Steuben .....	34	248	14	56	12	338	62	259	34	1057	33	75	5	8	6	168	149	113	557
NEW HAMPSHIRE—																			
Concord .....	37	104	30	159	11	186	28	520	15	1090	—	—	—	—	—	—	—	—	—
Stratford .....	42	14	94	12	31	73	207	103	0	576	—	—	—	—	—	—	—	—	—
VERMONT—																			
Brandon .....	234	2	36	81	302	84	108	149	90	1086	39	—	3	7	15	64	141	265	542
Burlington .....	294	64	21	68	157	19	127	30	0	1080	—	—	—	—	—	—	—	—	—
MASSACHUSETTS—																			
Amherst .....	44	33	16	279	31	124	52	468	7	1054	11	31	4	19	16	—	82	187	449
Mendon .....	15	100	32	30	23	466	64	368	0	1098	16	95	33	30	22	464	70	367	1097
Nantucket .....	74	112	34	67	50	294	89	310	66	1096	—	—	—	—	—	—	—	—	—
New Bedford .....	52	123	12	82	37	301	106	375	6	1094	21	23	5	16	11	47	94	95	312
Newburyport .....	69	78	92	52	117	74	312	226	0	1020	—	—	—	—	—	—	—	—	—
North Attleborough .....	149	61	31	41	217	132	200	248	0	1079	71	49	39	18	133	87	221	123	741
Princeton .....	37	126	96	35	17	108	433	245	1	1098	12	68	46	19	5	69	304	121	646
Richmond .....	3	114	2	117	11	331	1	465	45	1089	11	75	2	94	14	250	16	320	782
Westfield .....	62	72	81	110	78	167	325	224	0	1059	—	—	—	—	—	—	—	—	—
Williamstown .....	40	18	81	180	78	127	213	265	40	1042	9	8	6	35	14	38	76	129	315
Worcester .....	241	41	13	28	61	209	305	200	0	1098	—	—	—	—	—	—	—	—	—
RHODE ISLAND—																			
Providence .....	45	153	18	45	70	234	105	399	9	1078	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
New London .....	77	70	24	77	71	348	104	327	0	1098	—	—	—	—	—	—	—	—	—
Pomfret .....	46	126	14	55	88	227	43	496	0	1095	25	84	11	33	45	166	78	229	671
Saybrook .....	128	71	54	71	46	220	173	207	78	1048	25	21	17	15	20	57	169	109	433
NEW YORK—																			
Angelica .....	16	27	25	88	39	325	397	163	0	1080	2	1	2	20	8	295	223	40	591
Ridgswillville .....	50	38	93	62	31	102	216	393	9	994	22	7	5	10	14	21	326	302	707
Beverly .....	87	120	1	88	98	379	25	232	26	1056	28	50	10	76	63	225	138	111	701
Blackwell's Island .....	130	148	119	108	79	134	210	170	0	1098	106	109	92	83	64	109	195	154	912
Flatbush .....	96	88	57	63	158	138	212	286	0	1098	17	23	11	14	13	80	136	173	467
New York city .....	26	109	35	154	14	160	241	357	0	1096	3	38	58	42	10	132	348	128	759
Oswego .....	60	85	73	84	191	120	375	21	59	1068	—	—	—	—	—	—	—	—	—
Ovid .....	63	37	25	99	157	201	297	215	4	1098	53	14	12	58	92	159	295	238	921
Penn Yan (a) .....	84	78	3	7	170	334	360	62	0	1098	—	—	—	—	—	—	—	—	—
Rochester, [Harkness] .....	81	29	43	31	100	115	312	90	297	1098	—	—	—	—	—	—	—	—	—
Rochester, [Pratt] .....	81	57	44	69	88	317	297	123	0	1076	22	11	—	8	18	47	229	111	443
Spencertown .....	157	37	17	85	121	209	86	368	18	1098	56	17	4	42	31	124	156	353	783
Wampsville .....	22	10	92	79	178	80	560	73	0	1094	14	14	95	69	148	78	484	59	961
Watertown .....	8	287	1	20	26	551	164	41	0	1098	7	232	2	14	17	480	144	38	934
NEW JERSEY—																			
Bloomfield .....	30	80	14	99	15	419	97	279	0	1033	—	—	—	—	—	—	—	—	—
Burlington .....	54	137	72	59	47	164	328	146	79	1066	21	47	22	16	17	86	144	84	437
Lambertville .....	24	92	14	91	63	213	32	447	—	976	—	—	—	—	—	—	—	—	—
Newark (a) .....	68	87	11	78	24	193	76	191	7	735	—	—	—	—	—	—	—	—	—
PENNSYLVANIA—																			
Bedford .....	1	2	0	93	18	198	53	487	0	852	0	2	0	56	12	163	61	274	568
Carlisle .....	7	97	23	79	13	200	129	246	275	1069	7	42	11	53	12	127	96	145	493
Chromedale .....	73	150	36	76	63	80	39	288	282	1087	31	19	12	16	15	84	250	155	582
Easton .....	75	32	17	89	73	31	184	278	236	1014	29	21	9	19	24	38	208	151	499
Gettysburg .....	86	95	21	25	90	273	168	221	116	1095	22	20	7	17	17	141	293	181	698
Harrisburg .....	28	21	37	149	85	27	215	457	0	1019	7	5	3	36	38	14	113	164	380
Lewisburg (b) .....	68	67	27	52	90	151	172	97	186	910	—	—	—	—	—	—	—	—	—

a For hours of observation see monthly tables.

b For 11 months only; July wanting.



## No. 55.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
PENNSYLVANIA—Cont'd.																			
Meadville.....	15	8	5	51	131	115	105	180	419	1029	15	6	7	21	28	132	245	122	576
Morrisville.....	43	83	21	33	86	239	170	210	173	1058	21	44	6	28	12	173	233	120	637
Nazareth.....	154	88	39	45	78	139	282	160	91	1076	76	5	17	8	37	45	182	77	447
Norristown.....	12	33	85	71	39	159	415	130	0	944	16	12	71	13	11	83	390	44	640
Pocopson.....	76	50	29	32	61	284	358	156	0	1046	28	12	2	5	14	82	168	48	359
West Haverford.....	38	49	31	35	31	172	88	191	83	718	30	26	6	8	7	46	151	148	422
MARYLAND—																			
Bladensburg.....	18	83	24	38	15	119	20	186	0	503	---	---	---	---	---	---	---	---	---
Frederick.....	67	107	21	40	75	183	205	195	177	1070	19	10	4	8	57	57	161	82	578
Sykesville.....	29	34	37	137	87	193	125	156	0	1098	5	17	42	45	8	54	604	18	793
DISTRICT OF COLUMBIA—																			
Washington.....	5	115	30	105	16	318	119	287	67	1062	---	---	---	---	---	---	---	---	---
VIRGINIA—																			
Alexandria.....	137	127	41	87	212	135	65	293	0	1097	---	---	---	---	---	---	---	---	---
Berryville.....	56	82	30	101	62	91	99	249	87	857	50	10	8	8	35	75	133	61	380
Crichton's Store (a).....	301	62	27	48	269	207	70	55	35	1074	25	4	0	0	9	323	269	10	640
Lewisburg (a).....	---	---	---	---	---	---	---	---	---	---	5	8	2	3	27	19	221	20	306
Trout Run Valley (b).....	117	57	15	25	329	40	72	116	128	899	---	---	---	---	---	---	---	---	---
NORTH CAROLINA—																			
Chapel Hill.....	135	110	76	24	91	119	357	157	0	1069	21	32	13	8	46	259	138	39	556
SOUTH CAROLINA—																			
All Saints.....	135	138	87	97	137	220	177	102	5	1098	51	70	40	35	34	201	318	53	802
Camden.....	63	219	32	79	40	271	130	201	61	1096	26	77	29	37	16	168	240	105	698
Charleston, [Johnson].....	17	106	41	50	37	80	41	62	8	437	---	---	---	---	---	---	---	---	---
Charleston, [Dawson].....	20	196	40	105	16	214	36	107	0	734	---	---	---	---	---	---	---	---	---
St. John's.....	1	134	4	180	3	173	8	221	0	724	---	---	---	---	---	---	---	---	---
GEORGIA—																			
Savannah.....	142	69	112	152	193	106	157	168	0	1093	---	---	---	---	---	---	---	---	---
Sparta.....	47	222	84	105	44	205	99	268	0	1074	16	52	28	41	14	135	161	99	546
Thomaston.....	108	159	77	152	24	85	52	331	0	988	---	---	---	---	---	---	---	---	---
Whitemarsh Island.....	77	158	49	82	165	85	135	130	190	1071	16	53	13	51	32	92	152	90	499
Zebulon.....	19	50	236	16	7	41	155	58	1	583	---	---	---	---	---	---	---	---	---
FLORIDA—																			
Atsena.....	109	227	103	79	41	133	164	115	62	1033	39	112	93	47	23	103	97	64	578
Jacksonville.....	51	268	23	161	64	242	53	227	4	1093	21	129	32	61	8	275	135	29	690
Salt Ponds.....	159	128	120	164	61	27	24	56	9	748	---	---	---	---	---	---	---	---	---
Warrington (a).....	34	322	21	178	18	241	41	191	7	1053	17	100	18	55	9	147	24	79	449
ALABAMA—																			
Auoum.....	70	61	58	283	115	116	203	174	0	1080	---	---	---	---	---	---	---	---	---
MISSISSIPPI—																			
Columbus (c).....	90	104	97	106	76	99	83	244	1	900	---	---	---	---	---	---	---	---	---
TEXAS—																			
Austin.....	198	122	24	316	123	146	40	129	0	1098	146	96	22	225	119	198	71	134	1011
Pin Oak (a).....	82	22	23	106	64	34	8	27	0	366	---	---	---	---	---	---	---	---	---
Washington.....	119	0	1	0	242	0	4	0	0	366	---	---	---	---	---	---	---	---	---
TENNESSEE—																			
Glenwood.....	144	103	39	100	126	143	75	139	229	1098	30	24	18	21	44	131	316	118	702
KENTUCKY—																			
Ballardsville.....	122	107	15	49	192	309	133	168	0	1095	---	---	---	---	---	---	---	---	---
Paris.....	43	128	17	122	62	288	183	247	0	1090	19	5	5	6	71	70	244	8	428
Springdale.....	35	88	58	23	59	261	109	118	329	1080	---	---	---	---	---	---	---	---	---
OHIO—																			
Cincinnati, [Harper].....	86	78	48	20	34	287	374	128	0	1055	---	---	---	---	---	---	---	---	---
Cleveland.....	134	56	20	123	257	136	136	144	29	1035	34	8	3	6	22	71	252	89	485
Germant'n, [Groneweg].....	197	110	17	166	49	335	7	129	3	1013	54	62	7	74	18	314	19	131	679
Granville.....	11	69	22	3	5	180	170	15	152	927	7	0	4	0	1	113	113	16	263
Hillsborough.....	17	219	4	124	28	367	20	240	10	1029	4	12	2	7	8	158	36	137	364
Hiram.....	116	45	9	25	97	265	211	209	80	1057	43	14	6	13	62	153	231	103	625

a For hours of observation see monthly tables.

b For 11 months only; December wanting.

c For 11 months only; January wanting.

## No. 55.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR 1856.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Savannah.....	44	43	12	72	13	337	168	403	0	1097	28	29	■	54	10	206	145	220	701
Urbana.....	15	54	23	134	38	218	100	147	33	762	21	19	■	13	21	136	309	119	647
MICHIGAN—																			
Cooper.....	21	3	74	9	28	92	511	13	412	1094	20	14	367	13	8	1	72	16	511
Grand Rapids, [Currier].....	16	147	30	76	100	20	99	65	341	1084	5	5	2	6	3	80	68	23	192
Monroe.....	51	190	48	73	9	68	20	52	405	1076	49	150	46	63	35	114	41	523	1021
Romeo.....	105	58	60	35	67	190	246	132	85	1041	49	10	8	10	21	68	157	60	384
INDIANA—																			
New Harmony.....	136	15	74	136	142	178	369	159	1	932	---	---	---	---	---	---	---	---	---
ILLINOIS—																			
Atheas (a).....	18	115	20	152	129	113	141	211	0	866	4	16	1	16	2	116	231	209	595
Augusta.....	29	91	97	101	73	203	174	124	65	1098	18	28	32	24	55	47	193	52	449
Manchester (b).....	117	44	19	19	145	100	204	104	1	1092	30	9	7	4	71	119	225	86	551
Ottawa (b).....	56	126	39	79	169	155	364	167	39	976	22	10	2	4	22	43	46	53	212
MISSOURI—																			
St. Louis.....	73	87	103	187	106	177	194	167	0	1091	---	---	---	---	---	---	---	---	---
WISCONSIN—																			
Appleton.....	24	204	7	25	50	434	103	237	11	1095	---	---	---	---	---	---	---	---	---
Beloit.....	177	72	36	80	250	163	150	167	2	1097	18	0	■	0	10	16	60	13	138
Janesville.....	79	136	39	123	157	195	180	88	101	1098	---	---	---	---	---	---	---	---	---
Milwaukee, [Winkler].....	31	176	105	158	25	160	167	180	0	1002	---	---	---	---	---	---	---	---	---
Platteville.....	65	66	107	216	65	131	255	193	0	1098	48	37	62	67	33	150	285	100	782
Superior.....	112	256	76	25	43	237	88	174	0	1011	107	261	68	27	41	238	92	168	1002
IOWA—																			
Fort Madison (b).....	56	138	39	215	89	219	36	291	11	1094	25	23	26	16	29	128	259	148	654
Muscatine.....	7	125	20	212	39	309	58	327	0	1097	1	22	2	35	■	205	15	108	390
Pleasant Plain (b).....	117	62	88	116	31	115	221	147	0	1000	---	---	---	---	---	---	---	---	---

a For 11 months only; July wanting.

b For hours of observation see monthly tables.



NAME OF STATION.	SURFACE CURRENT.								MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>BRITISH AMERICA—</b>																		
Montreal . . . . .	10.57	10.8	9.85	5.30	4.21	7.23	9.79	7.77	7.92	3.55	5.99	5.20	9.20	3.37	4.57	3.84	6.33	4.81
Toronto (a) . . . . .	10.12	7.91	11.88	6.09	6.75	9.81	9.89	9.96	10.1									
<b>MAINE—</b>																		
Gardiner . . . . .	12.32	13.41	15.82	11.82	12.97	9.21	10.01	12.68	8.3	16.62	21.00	12.00	15.86	22.26	14.85	13.60	16.23	15.57
Perry . . . . .	12.50	18.32	17.50	8.4	4.90	7.33	9.5	12.4	10.15	13.88	11.41	12.62	7.22	7.19	4.75	6.23	7.41	
Portland . . . . .	3.97	5.07	4.57	4.09	3.27	3.22	3.12	4.1	10.15	10.3	2.29	4.0	2.40	4.0	2.94	2.32	2.34	2.50
Staten . . . . .	8.00	8.52	3.57	5.39	4.92	6.05	6.52	11.10	10.32	4.40	5.23	2.50	4.29	2.00	3.46	2.69	3.66	3.55
<b>NEW HAMPSHIRE—</b>																		
Concord . . . . .	3.70	7.06	4.60	3.83	0.40	3.60	4.56	5.42	4.81									
Strafford . . . . .	5.89	4.21	9.74	3.27	4.40	5.14	8.16	10.96	6.15									
<b>VERMONT—</b>																		
Brudon . . . . .	3.06	3.00	1.69	3.85	3.14	2.45	3.10	5.42	4.81									
Burlington . . . . .	3.93	7.03	9.95	11.07	8.77	9.35	12.21	9.57	7.96									
<b>MASSACHUSETTS—</b>																		
Amherst . . . . .	11.28	12.00	4.88	7.61	8.21	10.14	10.19	11.38	9.92	26.97	35.37	24.00	29.44	42.75	25.81	24.69	25.5	26.95
Mendon . . . . .	6.47	8.12	3.31	4.63	5.87	3.37	3.51	5.36	4.61	6.0	9.74	5.24	8.90	8.14	3.30	2.60	3.49	4.42
Nantucket . . . . .	13.42	17.14	11.35	13.24	9.02	12.25	8.78	17.91	13.31		5.84	2.00	8.50	6.86	6.54	3.82	4.89	5.04
New Bedford . . . . .	5.07	6.41	7.17	5.96	4.35	4.95	5.03	6.58	6.21	5.0								
Newburyport . . . . .	25.00	41.25	?	12.00	8.00	18.56	16.34	25.17	25.92		6.37	5.82	6.92	4.67	5.70	4.54	3.89	4.82
North Attleborough . . . . .	5.15	6.31	5.26	4.00	3.52	4.10	6.54	4.92	4.92	4.33	6.28	4.26	3.05	2.00	4.29	2.85	4.52	3.80
Princeton . . . . .	3.41	5.48	3.20	1.94	3.65	3.85	2.85	4.80	3.71	3.8	11.68	3.00	12.50	2.71	8.57	6.00	10.98	10.21
Richmond . . . . .	2.00	10.83	3.00	11.76	2.35	8.08	4.00	11.91	9.88	4.1								
Westfield . . . . .	25.00	17.20	25.00	12.00	?	25.00	18.35	17.53	18.33	5.11	10.14	10.50	9.72	6.83	7.87	8.28	10.95	9.48
Williamstown . . . . .	7.98	4.50	12.14	7.08	6.01	8.71	11.10	8.09	8.49	5.1								
Worcester . . . . .	13.50	22.58	8.															

c For eleven months only; December wanting.

*b* For eleven months only; July wanting

## No. 56.—WINDS—MEAN VELOCITY IN MILES PER HOUR—SUMMARY FOR 1856.

NAME OF STATION.	SURFACE CURRENT.								MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
GEORGIA—																		
Savannah.....	2.93	5.51	6.38	4.51	4.26	2.90	3.77	4.66	4.31	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sparta.....	3.49	6.73	5.42	4.86	5.07	5.30	7.91	7.29	6.21	.....	.....	.....	.....	.....	.....	.....	.....	.....
Thomaston.....	8.81	3.97	14.43	3.55	2.00	20.00	13.00	9.32	7.90	.....	.....	.....	.....	.....	.....	.....	.....	.....
White-marsh Island.....	7.34	13.96	10.94	7.84	9.68	10.46	6.89	10.68	8.18	5.25	11.23	6.92	6.18	9.41	7.45	5.01	5.98	6.76
Zebulon.....	9.53	11.76	9.15	13.20	6.00	9.32	6.93	10.00	9.03	.....	.....	.....	.....	.....	.....	.....	.....	.....
FLORIDA—																		
Aisena.....	7.54	8.21	7.70	6.27	12.02	8.77	11.10	10.57	8.39	6.64	3.74	3.35	4.60	3.90	6.33	5.13	6.93	4.99
Jacksonville.....	3.10	4.41	3.39	3.47	6.52	6.65	5.09	3.98	4.74	3.33	4.63	3.19	4.56	6.50	3.94	2.71	5.28	3.93
Salt Ponds.....	11.16	11.03	11.10	9.22	9.50	8.00	10.12	16.91	12.03	.....	.....	.....	.....	.....	.....	.....	.....	.....
Warrington (a).....	9.00	11.55	14.00	11.55	13.53	11.55	10.07	9.90	11.11	2.86	4.05	4.94	3.00	4.22	3.34	4.15	3.52	3.61
ALABAMA—																		
Auburn.....	7.41	8.13	7.17	7.12	4.16	5.41	4.54	7.54	6.28	.....	.....	.....	.....	.....	.....	.....	.....	.....
MISSISSIPPI—																		
Columbus (b).....	4.02	3.92	3.78	5.10	5.28	5.24	4.17	5.00	4.62	.....	.....	.....	.....	.....	.....	.....	.....	.....
TEXAS—																		
Austin.....	10.55	6.70	9.00	8.91	1.74	6.64	8.90	11.49	9.19	4.63	4.41	4.64	5.26	9.04	4.54	3.61	4.78	5.20
TENNESSEE—																		
Glenwood.....	3.38	4.04	2.97	3.59	4.07	4.47	5.81	7.85	3.69	3.67	4.45	4.39	7.14	6.23	3.62	2.64	4.04	3.55
KENTUCKY—																		
Barbardsville.....	3.20	3.60	1.73	2.45	6.40	5.30	3.18	4.63	4.55	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paris.....	4.63	3.67	2.70	3.16	4.53	4.90	5.95	4.57	4.59	7.28	4.80	13.00	4.33	8.06	7.20	6.81	4.09	7.08
Springdale.....	9.55	7.59	7.83	4.18	10.42	8.37	13.22	10.53	6.52	.....	.....	.....	.....	.....	.....	.....	.....	.....
OHIO—																		
Cincinnati, [Harper].....	6.37	5.50	5.55	8.00	7.20	7.30	10.08	7.91	8.09	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cleveland.....	5.80	7.96	4.70	5.17	5.73	10.32	9.78	9.40	7.30	1.01	16.37	13.00	9.33	13.32	14.36	10.11	12.57	11.47
Germantown, [Groneweg].....	2.43	2.45	2.00	1.96	2.08	2.44	5.71	2.81	2.40	2.00	2.00	1.43	1.57	2.40	2.11	4.32	2.03	2.87
Granville.....	7.73	5.17	4.62	10.33	6.00	7.49	7.93	6.23	3.60	3.14	3.75	7.00	12.00	6.14	3.58	5.43	4.66	.....
Hillsborough.....	9.62	6.42	2.00	3.79	8.82	10.36	19.45	10.32	8.71	5.50	5.40	1.00	11.20	8.60	6.24	6.04	5.27	5.90
Hiram.....	5.56	5.20	3.56	5.56	5.22	8.83	5.16	6.14	5.42	11.25	14.21	6.33	14.38	10.08	10.24	10.9	13.21	11.47
Savannah.....	10.77	7.84	7.58	7.65	18.15	8.42	8.70	8.21	8.50	9.54	6.72	4.67	6.57	12.50	7.13	6.94	8.06	8.44
Urbana.....	20.53	16.17	14.30	15.47	20.45	19.69	14.99	18.90	16.95	23.05	24.10	24.78	31.85	25.62	27.01	12.71	24.92	19.60
MICHIGAN—																		
Cooper.....	4.57	6.67	7.28	7.55	5.11	9.30	7.15	11.15	4.46	10.25	14.36	8.54	16.00	5.00	4.00	6.67	12.62	8.37
Grand Rapids, [Currier].....	3.12	3.81	3.48	3.26	2.59	5.29	5.80	4.03	3.11	9.41	10.60	35.00	28.51	20.13	14.05	11.71	11.59	13.52
Monroe.....	9.86	7.69	15.19	9.28	10.27	7.85	7.59	7.93	8.51	5.20	9.26	10.33	6.36	6.43	9.31	12.32	7.36	7.99
INDIANA—																		
New Harmony.....	3.73	2.00	2.79	3.52	5.87	3.86	4.22	4.30	4.04	.....	.....	.....	.....	.....	.....	.....	.....	.....
ILLINOIS—																		
Athens (c).....	6.05	5.11	3.90	3.97	4.21	5.20	6.45	3.94	4.68	53.33	14.56	12.00	20.81	7.00	9.24	6.73	9.73	9.19
Augusta.....	7.83	11.31	9.16	9.23	10.39	11.52	10.58	12.56	10.05	6.67	5.46	7.58	5.42	6.33	5.29	4.01	6.16	5.23
Manchester (a).....	4.79	6.18	5.26	7.00	8.04	5.37	6.15	4.59	5.87	?	?	?	?	2.00	?	4.0	?	3.00
Ottawa (a).....	6.04	6.07	6.74	7.00	7.59	7.05	8.80	5.93	6.74	5.50	4.20	3.00	3.00	7.41	6.35	5.91	5.44	5.82
MISSOURI—																		
St. Louis.....	18.40	19.46	19.07	16.60	14.52	24.04	27.78	25.65	23.15	.....	.....	.....	.....	.....	.....	.....	.....	.....
WISCONSIN—																		
Appleton.....	5.10	10.51	24.14	8.00	9.70	9.50	6.50	7.89	9.01	.....	.....	.....	.....	.....	.....	.....	.....	.....
Beloit.....	5.31	8.24	6.97	7.14	6.00	6.90	6.94	6.74	6.48	11.29	20.56	11.67	13.31	12.80	21.50	18.71	19.15	17.25
Janesville.....	2.61	4.53	3.89	3.73	3.28	4.69	3.33	3.59	3.54	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, [Winkler].....	3.19	6.67	2.61	2.55	5.24	5.22	3.91	5.36	4.61	.....	.....	.....	.....	.....	.....	.....	.....	.....
Platteville.....	5.89	10.45	10.19	7.74	7.01	8.21	8.70	6.97	8.13	7.00	10.78	10.30	6.68	7.12	7.42	6.71	8.14	7.56
Superior.....	4.78	12.96	8.66	4.44	3.35	4.51	6.46	7.93	7.93	7.31	23.71	9.69	14.77	9.90	11.55	12.24	17.71	15.31
IOWA—																		
Fort Madison (s).....	5.02	4.70	5.10	5.18	5.94	7.70	7.77	7.69	6.38	5.20	8.61	5.81	11.50	5.66	5.22	4.61	8.14	5.98
Muscatine.....	4.86	4.17	4.55	4.08	4.15	5.88	4.84	5.23	5.00	4.00	7.82	4.00	4.63	14.50	5.34	4.81	5.36	5.44
Pleasant Plain (a).....	8.33	7.94	6.65	5.38	5.47	4.00	6.48	13.30	7.46	.....	.....	.....	.....	.....	.....	.....	.....	.....

a For hours of observation see monthly tables.

b For eleven months only; January wanting.

c For eleven months only; July wanting.





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REDUCTIONS

OF

METEOROLOGICAL OBSERVATIONS

FOR THE YEAR 1857.

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REVISED

THE UNIVERSITY OF CHICAGO PRESS

CHICAGO, ILL.

# No. 1.—LIST OF STATIONS AND OBSERVERS, 1857.\*

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Aiken, S. C.....	33 32	81 34	565	12	John H. Cornish.
Albion, Ill.....	38 24	88 11	-----	2	Edgar P. Thompson.
Alexandria, Va.....	38 43	77 01	56	12	Benjamin Hallowell.
Alligator, Fla.....	30 12	82 37	174	10	E. R. Ives.
All Saints, S. C. (a).....	33 40	79 17	20	12	Rev. Alexander Glennie.
Amherst, Mass.....	42 22	72 34	267	12	Prof. E. S. Snell.
Angelica, N. Y.....	42 15	78 01	1,500	7	Dr. E. M. Alba.
Annapolis, Md.....	38 58	76 29	20	12	William R. Goodman.
Ann Arbor, Mich. (b).....	42 16	83 44	891	2	Prof. A. Winchell.
Appleton, Wis.....	44 10	88 35	800	12	Prof. R. Z. Mason.
Ashville, N. C.....	35 37	82 29	2,250	4	W. W. McDowell.
Ashville, Ala.....	33 52	86 20	?	12	Thomas M. Barker.
Ashland, Va (c).....	38 38	81 57	?	10	Samuel Couch.
Athens, Ga.....	33 58	83 30	850	6	Prof. John D. Easter.
Athens, Ill.....	39 52	89 56	?	11	Joel Hall.
Atsena, Fla (d).....	29 07	83 02	12	12	Hon. Augustus Steele.
Auburn, Ala.....	32 37	85 34	821	12	Prof. John Darby.
Augusta, Ga.....	33 28	81 54	1,470	11	William Haines.
Augusta, Ill.....	40 12	89 45	200	12	Dr. S. B. Mead.
Aurora, Ill.....	41 40	88 16	600	4	Andrew J. Babcock.
Austin, Texas.....	30 20	97 46	650	12	Dr. Sam'l K. Jennings & J. Van Nostrand.
Austin, Texas.....	30 15	97 47	?	?	Swante Palm.
Baldwinsville, N. Y.....	43 04	76 41	?	12	John Bowman.
Baltimore, Md.....	39 18	76 37	?	?	Prof. Alfred M. Mayer.
Batavia, Ill.....	41 52	88 20	?	10	Thompson Mead.
Battle Creek, Mich.....	42 20	85 10	750	12	Dr. W. M. Campbell.
Bay City, Wis (e).....	46 33	91 00	155	12	Edwin Ellis.
Bedford, Pa.....	40 01	78 30	?	12	Samuel Brown.
Belair, Fla.....	30 24	84 20	70	12	Benjamin F. Whitner.
Beloit, Wis.....	42 30	89 04	750	12	Prof. William Porter.
Belle Centre, Ohio.....	40 28	83 45	1,170	3	Rev. Robert Shields and J. C. Smith.
Bellefontaine, Ohio.....	40 21	83 40	1,031	4	Joseph Shaw.
Bellevue, Iowa.....	42 15	90 25	?	12	John C. Forsy.
Bellevue, Neb.....	41 08	95 50	?	6	William Hamilton.
Bellevue, Neb.....	41 08	95 50	?	1	Henry M. Burt.
Bellport, N. Y.....	40 44	72 54	?	4	Henry William Titus.
Berryville, Va.....	39 09	78 00	575	12	Miss Ellen Kownslar.
Berwick, Pa.....	41 05	76 15	588	9	John Eggert.
Beverly, N. Y. (f).....	41 22	74 00	180	10	Thomas B. Arden.
Black River, La.....	31 30	91 46	108	12	Dr. A. R. Kilpatrick.
Blackwell's Island, N. Y.....	40 45	73 57	29	11	Dr. Wm. W. Sanger.
Bladensburg, Md.....	38 57	76 58	?	10	Benjamin O. Lowndes.
Bloomfield, N. J.....	40 49	74 11	120	12	Robert L. Cooke.
Bogota, New Granada.....	4 36	74 14	8,863	1	Dr. E. Uricoschea
Border Plains, Iowa.....	42 36	94 05	?	12	William K. Goss.
Boston, Mass.....	42 22	71 03	?	4	R. T. Paine
Boston, Mass.....	42 22	71 03	?	2	E. L. Smith.
Bowling Green, Ohio.....	41 27	83 45	700	?	Dr. W. R. Peck.
Brandon, Vt.....	43 45	73 00	?	12	David Buckland.
Bridgewater, Mass.....	42 00	71 00	142	8	Leander A. Darling.
Brighton, Ill. (g).....	39 00	90 13	?	12	William V. Eldridge.
Buchanan, Min.....	47 33	92 00	?	1	Stephen Walsh.

\* For the different names by which, in some cases, the same place is designated by the observers, see General List of Stations in the introduction.

a Waccamaw.  
b University of Michigan.  
c Buffalo.

d Cedar Keys.  
e Chegoinegan Bay.

f Phillipstown.  
g Piassa Farms.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1857.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	Nm. of months observed.	NAME OF OBSERVER.
	° '	° '	Feet.		
Buffalo, N. Y.....	42 50	78 53	?	4	Elias O. Salisbury.
Burlington, Min.....	47 01	92 30	645	4	A. A. Hibbard.
Burlington, Vt.....	44 29	73 11	346	1	McK. Petty.
Burlington, N. J.....	40 00	75 12	26	12	Dr. E. R. Schmidt.
Byberry, Pa.....	40 06	74 58	?	1	John Comly.
Camanche, Iowa.....	41 48	90 45	?	2	Nathan H. Parker.
Cambridge, Mass (a).....	42 22	71 07	71	12	Prof. W. C. Bond.
Camden, S. C.....	34 17	80 33	275	12	Dr. J. A. Young
Cannelton, Ind.....	37 58	86 40	450	10	Hamilton Smith, jr.
Canton, Mass.....	42 12	71 08	90	5	D. H. Ellis.
Canton, N. Y.....	44 38	75 15	304	4	E. W. Johnson.
Cannonsburg, Pa.....	40 25	80 07	936	12	Prof. William Smith, D. D.
Cape Girardeau, Mo.....	37 20	89 34	-----	12	Rev. James Knoud.
Capon Bridge, Va.....	39 16	78 29	?	4	John J. T. Offutt, M. D.
Carlisle, Pa.....	40 12	77 11	500	6	Prof. W. C. Wilson.
Carlowville, Ala.....	32 10	87 15	300	12	Dr. H. L. Alison.
Carmel, Me.....	44 47	69 00	175	1	John J. Bell.
Carthage, Ill.....	40 23	91 17	?	8	Samuel Jacob Wallace.
Catharina Sophia, Surinam, S. A.....	5 48	56 47	?	11	C. J. Hering.
Cazenovia, N. Y.....	42 55	75 46	1,260	12	Aaron White.
Chapel Hill, N. C.....	35 54	79 17	?	12	Rev. James Phillips, D. D.
Charleston, S. C.....	32 46	80 00	30	12	Dr. Joseph Johnson.
Charleston, S. C.....	32 46	80 00	?	12	Dr. John L. Dawson.
Chestertown, Md.....	39 14	76 02	?	1	James A. Pearce.
Cheviot, Ohio.....	39 07	84 34	?	-----	Ebenezer Hannaford.
Chicago, Ill.....	41 53	87 41	600	0	G. D. Hiscox.
Chromedale, Pa.....	39 55	75 25	196	12	Joseph Edwards
Cincinnati, Ohio (b).....	39 06	84 27	150	12	George W. Harper.
Cincinnati, Ohio.....				0	Francis W. Hurtt.
Cincinnati, Ohio.....				1	Telegraph and Chronicle.
Claremont, N. H.....	43 29	72 22	536	4	F. N. Freeman.
Cleveland, Ohio.....	41 30	81 40	665	12	Gustavus A. Hyde.
Clinton, N. Y.....	43 00	75 20	500	12	Dr. H. M. Paine.
College Hill, Ohio, (Farmer's College).....	39 19	84 25	800	5	Prof. R. S. Bosworth.
Collingwood, Ohio.....	41 49	83 34	?	12	Henry Bennett.
Columbia, Ct.....	41 42	72 16	?	12	William H. Yeomans.
Columbus, Miss.....	33 30	88 29	227	12	James S. Lull.
Concord, N. H.....	43 12	71 29	374	12	Dr. Wm. Prescott and H. E. Sawyer.
Cooper, Mich.....	42 40	85 31	?	12	Mrs. Octavia C. Walker.
Copper Falls Mines, Mich.....	47 25	88 16	1,230	8	Charles S. Whittlesey.
Cornish, Me.....	43 40	70 44	800	12	G. W. Guptill.
Cornish, Me.....	43 40	70 44	?	12	Silas West.
Council City, Kansas.....	38 42	95 50	?	7	Edmund Fish.
Covert, N. Y. (c).....	42 40	76 50	700	1	John Lefferts.
Crack Whip, Va.....	39 30	78 31	1,750	7	D. H. Ellis.
Craftsbury, Vt.....	44 40	72 30	1,100	12	James A. Paddock.
Crichton's Store, Va.....	36 40	77 46	500	12	Lieut. R. F. Astrop.
Danville, Ky.....	37 40	84 30	950	11	O. Beatty.
Davidson College, N. C.....	35 30	80 54	850?	2	W. C. Kerr.
Dubuque, Iowa.....	42 30	90 52	1,258	6	Dr. Asa Horr.
Easton, Pa.....	40 43	75 16	320	12	Selden J. Coffin.
Eden, N. Y. (d).....	42 30	79 07	700	10	Anna S. Landon.
Edgefield, S. C.....	33 45	81 48	?	1	
Edgington, Ill.....	41 25	90 46	?	2	Dr. E. H. Bowman.
Edinburg, Ohio.....	41 20	81 00	520	10	Smith Sanford.
Edisto Island, S. C.....	32 34	80 18	23	1	Dr. E. N. Fuller.
Evansville, Ind.....	38 08	87 29	390	10	John F. Crisp.
Factory Mills, Ga.....	33 40	84 46	?	2	F. T. Simpson.
Fairfield, Iowa.....	41 01	91 57	940	12	J. M. Shaffer.

a Harvard University.  
b Woodward High School.

c The observations at this place are combined, in the reductions, with those at Townsendville, five miles distant.

d Brown Cottage.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1857.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fet.		
Fishkill Landing, N. Y.....	41 34	73 58	42	7	William H. Denning.
Flatbush, N. Y.....	40 37	74 01	54	12	Rev. R. D. Van Kleeck.
Fleming, Pa.....	40 55	77 53	780	12	Samuel Brugger.
Florida, Mass.....	42 42	73 10	2,500	12	L. F. Whitcomb.
Fordham, N. Y. (a).....	40 54	74 03	147	■	Prof. Claudius Pernot.
Fort Edward, N. Y.....	43 13	73 42	?	2	Prof. Solomon Sias.
Fort Gibson, Indian Territory.....	35 47	95 10	543	4	
Fort Madison, Iowa.....	40 37	91 28	?	12	Daniel McCready.
Fort Thompson, Oregon.....	42 58	108 56	-----	1	W. H. Wagner.
Fort Union, Dacotah.....	48 00	104 00	-----	4	F. G. Riter.
Franeestown, N. H.....	42 59	71 45	?	11	A. H. Bixby.
Franeestown, N. H.....	43 00	71 46	?	5	Dr. Martin N. Root.
Franklin, Ohio.....	39 30	84 10	?	■	Dr. W. L. Schenck.
Franklin, Iowa.....	42 45	92 11	?	12	Dexter and Willard W. Beal.
Frederick, Md.....	39 24	77 18	?	12	Henry E. Hanshaw.
Freehold, N. J.....	40 15	74 21	?	11	O. B. Willis.
Fremont Centre, Ill.....	42 18	88 06	736	12	Isaac H. Smith.
Gainesville, Fla.....	29 35	82 26	184	12	James B. Bailey.
Gallipolis, Ohio.....	39 00	82 01	520	11	A. P. Rodger.
Gardiner, Me.....	44 11	69 46	■	12	B. H. Gardiner.
Gaston, N. C. (b).....	36 32	77 45	?	12	Dr. George F. Moore.
Guatemala, Central America.....	14 37	30 30	4,961	12	Antonio Canudas.
Georgetown, Ct.....	41 15	73 25	300	1	Aaron B. Hull.
Georgetown, Del.....	38 43	75 22	?	■	Dr. D. W. Maud.
Germantown, Ohio.....	39 39	84 11	?	1	J. S. Binkerd.
Gettysburg, Pa.....	39 51	77 15	?	12	Prof. M. Jacobs.
Glenwood, Tenn.....	36 28	87 13	481	12	Prof. William M. Stewart.
Goldsborough, N. C.....	35 20	77 51	?	4	Rev. Daniel Morelle.
Goliad, Texas (c).....	28 30	97 15	50	1	John C. Brightman.
Grand Rapids, Mich.....	43 00	86 00	852	12	L. H. Streng.
Grand Rapids, Mich.....	43 00	86 00	852	12	Alfred O. Currier.
Granville, Ill.....	41 14	89 21	?	1	J. L. Jenkins.
Granville, Ohio.....	40 03	82 34	995	2	Prof. S. N. Sanford.
Great Falls, N. H.....	43 17	70 52	200	1	Henry E. Sawyer.
Great Salt Lake City, U. T.....	40 45	112 10	4,250?	9	H. E. Phelps.
Greene Springs, Ala.....	32 50	87 46	?	11	Henry Tutwiler.
Greensborough, Ala.....	32 40	87 34	350	12	Robert B. Waller.
Hamilton, Canada.....	43 15	79 57	?	12	Dr. W. Craigie.
Harrisburg, Pa.....	40 16	76 50	?	12	Dr. John Heisely.
Harrisburg, Pa.....	40 16	76 55	?	10	W. O. Hickok.
Hazlewood, Min.....	45 00	95 30	?	11	Rev. S. B. Riggs.
Helena, Texas.....	29 00	97 56	600	3	John C. Brightman.
Hibernia, Fla.....	30 15	81 30	15?	1	F. L. Batchelder.
Hillsborough, Ga.....	33 13	83 45	566	4	Eli S. Glover.
Hillsborough, Ohio.....	39 13	83 30	1,000	12	Joseph McD. Mathews, D. D.
Hillsborough, Ohio.....				11	C. C. Janes.
Hiram, Ohio.....	41 20	81 15	675	12	S. M. Luther.
Horta, Fayal, Azores.....	38 30	28 42	80	9	S. W. Dabney.
Houseville, N. Y.....	43 40	75 32	-----	2	Walter D. Yale.
Iowa City, Iowa.....	41 39	91 33	?	5	W. Reynolds.
Jackson, Ohio.....	39 10	82 32	666	2	Moses Gilmer.
Jacksonville, Fla.....	30 15	82 00	13	11	Dr. A. J. Baldwin.
Janesville, Wis.....	42 42	89 09	768	11	J. F. Willard.
Jefferson, Ohio.....	42 00	81 00	?	12	James D. Herrick.
Kenawha, Va.....	38 53	81 25	?	9	David L. Ruffner.
Kenosha, Wis.....	42 35	87 50	600	12	John Gridley.
Laconia, N. H. (d).....			-----	12	Josiah B. French.
Lake Village, N. H. (e).....			-----	12	Josiah B. French.
Lancaster, Ohio.....	39 40	82 40	?	4	Lewis M. Dayton.
Lapham, Min.....	46 10	96 00	850	4	E. M. Wright.

a St. John's College.

d At the outlet of Lake Winnipissiogee.

b Green Plains.

c San Antonio River, Goliad county.

e Four miles south of Laconia.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1857.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Lake Winnibigoshish, Min.....	47 30	94 40	?	4	Rev. Benjamin F. Odell.
Lake, N. Y.....	43 15	73 33	?	11	Peter Reid.
Lambertville, N. J.....	40 23	74 56	-----	10	L. H. Parsons.
Lawrence, Mass.....	42 42	71 11	?	12	John Fallon.
Lawrence, Kansas.....	38 58	95 12	800	7	G. W. Brown.
Leavenworth City, Kansas.....	39 20	94 33	1,342	2	H. D. McCarty.
Lewisburg, Pa.....	40 58	76 58	?	12	Charles S. James.
Lewisburg, Va.....	38 00	80 00	2,000	12	Dr. Thomas Patton.
Lind, Wis.....	44 20	89 00	?	4	R. H. Struthers.
Logansport, Ind.....	40 45	86 14	?	12	Charles B. Lasselle.
Londonderry, N. H.....	42 53	71 20	?	1	Robert C. Mack.
Longwood, Va.....	37 30	79 31	800	8	Thomas J. Wickline.
Lowville, N. Y.....	43 46	75 38	?	12	J. Carroll House.
McGrawville, N. Y.....	42 34	76 11	1,450	9	J. Metcalf Smith.
Madison, Ohio.....	41 49	81 10	?	11	Rev. L. S. Atkins.
Madison, Ohio.....	41 52	81 00	650	12	Miss Ardelia Cunningham.
Madison, Wis.....	43 05	89 25	892	5	Dr. A. Schue.
Madison, Wis (a).....	43 05	89 25	892	12	Prof. J. W. Sterling.
Madrid, N. Y.....	44 43	75 33	280	3	E. A. Dayton.
Manchester, N. H.....	42 59	71 28	300	12	Samuel N. Bell.
Manchester, Ill.....	39 33	90 34	683	12	John Grant.
Manhattan, Kansas.....	39 13	96 45	?	1	Isaac T. Goodnow.
Manitowoc, Wis.....	44 07	87 37	?	12	Jacob Lups.
Mapleton, Kansas.....	38 04	94 51	?	1	Dr. S. O. Himoe.
Marquette, Mich.....	46 32	87 41	630	4	Peter White.
Maquoketa, Iowa.....	42 04	90 41	?	4	E. F. Hobart.
Marysville, Cal.....	39 12	121 42	?	1	W. C. Belcher.
Marengo, Ill.....	42 14	88 38	650	12	O. P. Rogers.
Meadow Dale, Va.....	38 23	79 35	?	12	James Slaven.
Meadville, Pa.....	41 39	80 11	1,088	12	T. F. Thickstun.
Medina, Ohio.....	41 07	81 42	1,206	11	L. F. Ward.
Memphis, Tenn.....	35 08	90 00	262	4	Dr. W. J. Tuck.
Memphis, Tenn.....	35 08	90 00	262	6	Dr. Daniel F. Wright.
Menasha, Wis.....	44 13	88 18	?	7	Col. D. Underwood.
Mendon, Mass.....	42 06	72 33	?	12	Dr. John George Metcalf.
Mexico, N. Y.....	43 27	76 14	423	1	J. B. French.
Michigan City, Ind.....	41 41	86 53	622	12	C. S. Woodard.
Milford, Del.....	38 55	75 27	25	1	Richard A. Martin.
Millersburg, Ky.....	38 20	84 00	804	5	Rev. George S. Savage, M. D.
Milwaukee, Wis.....	43 04	87 59	658	12	F. C. Pomeroy.
Milwaukee, Wis.....	43 04	87 57	593	12	Dr. C. Winkler.
Milwaukee, Wis.....				4	J. A. Lapham.
Mirador, Mexico.....	19 50	96 25	3,500	12	Carl Sartorius.
Monroe, Mich.....	41 56	83 22	590	11	Miss Helen I. Whelpley.
Monson, Me.....	45 11	69 35	?	12	Benjamin F. Wilbur.
Montreal, Canada.....	45 30	73 36	57	12	Dr. A. Hall.
Montrose, Va.....	38 07	76 54	200	8	H. H. Fauntleroy.
Moose Factory, Hud. Bay Ter.....	51 15	80 45	-----	4	J. Mackenzie.
Morrisania, N. Y. (b).....	40 53	74 01	150	12	Joseph Zaepffel.
Morrisville, Pa.....	40 12	74 53	30	12	Ebenezer Hance.
Moss Grove, Pa.....	41 40	79 51	?	2	Francis Schreiner.
Mossy Creek, Va.....	38 20	79 05	?	10	Jed. Hotchkiss.
Mount Joy, Pa.....	40 08	76 35	?	5	Miss Mary E. Hoffer.
Mount Pleasant, S. C.....	32 47	79 55	20	2	Dr. E. N. Fuller.
Mount Union, Ohio.....	41 20	81 01	?	1	Newton Anthony.
Mount Vernon, Iowa.....	42 00	91 00	?	2	Prof. B. Wilson Smith.
Murfreesborough, N. C.....	36 30	77 06	?	12	Rev. A. McDowell.
Murrysville, Pa.....	40 28	79 35	960	9	Thomas H. Stewart.
Muscatine, Iowa.....	41 26	91 05	586	12	T. S. Parvin.
Mustapha, Va.....	39 20	81 41	?	5	James Frazer.
Nantucket, Mass.....	41 16	70 06	30	12	Hon. William Mitchell.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1857.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Nazareth, Pa. ....	40 43	75 21	?	12	H. A. Brickenstein.
New Albany, Ind. ....	38 17	85 45	"	7	C. Barnes.
Newark, N. J. ....	40 45	74 10	30	12	W. A. Whitehead.
Newark, Del. ....	39 38	75 47	120	12	Thomas J. Craven and Mrs. E. D. Porter.
New Bedford, Mass. ....	41 39	70 56	90	12	Samuel Rodman.
New Braunfels, Texas. ....	29 42	98 15	"	11	Rev. J. L. Forke.
New Buffalo, Mich. ....	41 45	86 46	661	6	J. B. Crosby.
Newburyport, Mass. ....	42 47	70 52	46	12	Dr. H. C. Perkins.
New Harmony, Ind. ....	38 08	87 50	320	12	John Chappellsmith.
New Lisbon, Ohio. ....	40 45	80 46	?	12	J. F. Benner.
New London, Ct. ....	41 21	72 03	90	12	Rev. T. Edwards, D. D.
New London, Wis. ....	44 21	88 45	?	12	J. Everett Breed.
New Orleans, La. ....				3	Dr. E. H. Barton.
New Orleans, La. ....	29 57	90 00	?	4	Lewes B. Taylor.
New York city, N. Y. (a) ....	40 43	74 05	159	12	Prof. O. W. Morris.
Nichols, N. Y. ....	42 00	76 32	?	12	R. Howell.
Norristown, Pa. ....	40 08	75 19	153	12	Rev. J. Grier Balston.
North Attleborough, Mass. ....	41 59	71 22	175	3	Henry Rice.
North Barnstead, N. H. ....	43 38	71 27	?	12	R. F. Hanscom.
North Whitehall, Pa. ....	40 40	75 26	250	12	Edward Kohler.
Norway, Wis. ....	42 50	88 10	753	3	John E. Himoe.
Norwich, Vt. ....	43 42	72 20	?	12	Prof. A. Jackman.
Norwich, Ct. ....	41 32	72 03	50	12	N. Scholfield.
Oakland, Md. ....	39 40?	79 00	"	1	L. R. Cofran.
Oberlin, Ohio. ....	41 20	82 15	800	6	Prof. George N. Allen.
Oberlin, Ohio. ....	41 20	82 15	800	7	J. H. Fairchild.
Ogdensburg, N. Y. ....	44 43	75 26	?	12	William E. Guest.
Omaha, Neb. ....	41 15	96 10	?	7	William N. Byers.
Oregon City, Oregon ....				9	G. H. Atkinson.
Oswego, N. Y. ....	43 28	77 34	232	12	William S. Malcolm.
Ottawa, Ill. ....	41 20	88 47	500	12	Dr. J. O. Harris.
Ovid, N. Y. ....	42 41	76 52	800	12	J. W. Chickering.
Palmyra, Mo. ....					G. P. Cornings.
Paradise, Pa. ....	40 00	76 08		12	Jacob Frantz.
Paris, Ky. ....	38 16	84 07	810	12	Dr. L. G. Ray.
Pekin, Ill. ....	40 36	89 45	?	12	J. H. Riblet.
Penn Yan, N. Y. ....	42 42	77 11	740	12	Dr. H. P. Sartwell.
Peoria, Ill. ....	40 36	89 30	?	12	Dr. Frederick Brendel.
Perrysburg, Ohio. ....	41 39	83 40	?	12	D. K. Hollenbeck.
Perry, Me. ....	45 00	67 06	100	12	William D. Dana.
Philadelphia, Pa. ....	39 57	75 11	60	12	Prof. James A. Kirkpatrick.
Philomath, Ga. ....	33 45	83 15	?	1	James M. Reid.
Pittsburg, Pa., [Marine Hospital] ....	40 30	80 00	?	5	William Martin.
Pittsburg, Pa., [Oakland Station] ....	40 32	80 02	1,026	12	W. W. Wilson.
Plainfield, Mass. ....	42 30	72 56	?	7	Francis Shaw.
Plainville, N. Y. ....	43 00	77 15	?	6	J. H. Norton.
Platteville, Wis. ....	42 45	91 00	"	12	Dr. J. L. Pickard.
Pleasant Plain, Iowa. ....	41 07	91 54	?	12	Townsend McConnel.
Pocopson, Pa. ....	39 54	75 37	218	12	Fenelon Darlington.
Pomfret, Ct. ....	41 52	72 23	596	12	Rev. D. Hunt.
Pompey, N. Y. ....	42 52	76 09	1,737	3	S. Marshall Ingalls.
Poplar Grove, Va. ....	38 20	81 21	?	9	James E. Kendall.
Port Gibson, Miss. (b) ....	31 51	91 01	100	4	Prof. J. Boyd Elliott.
Port Huron, Mich. ....	42 53	82 24	606	8	James Allen.
Portland, Me. ....	43 39	70 15	87	12	Henry Willis.
Port of Spain, Trinidad, W. I. ....	10 39	61 34	16	2	Geological Surveyors.
Portsmouth, Va. ....	36 50	76 19	34	12	Prof. N. B. Webster.
Portsmouth, Ohio. ....	38 50	82 49	468	4	J. H. Poe.
Pottsville, Pa. ....	40 41	76 09	?	1	Rev. B. R. Smyser.
Prescott, Wis. ....	44 56	92 40	800	3	S. L. Hillier.
Princeton, Mass. ....	42 28	71 53	1,113	6	John Brooks.

a Deaf and Dumb Institute.

b Elliott Academy.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1857.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Princeton, Min.....	45 50	93 45	?	12	O. E. Garrison.
Providence, R. I.....	41 49	71 25	120	12	Prof. A. Caswell.
Racine, Wis.....	42 49	87 40	?	6	W. J. Durham.
Red River Settlement, H. B. Terr'y..	50 00	85 03	-----	9	Donald Gunn.
Richmond, Mass.....	42 23	73 20	1,190	■	William Bacon.
Richmond, Ind.....	39 47	84 47	800	12	Joseph Moore.
Ridge, Md.....	38 05	76 18	?	6	T. G. Staggs.
Rigolet, Labrador.....	54 00	55 00	-----	2	Henry Connolly.
Riley, Ill.....	42 08	88 33	650	12	E. Babcock.
Ripley, Ohio.....	38 47	83 31	-----	4	J. Ammen.
Rochester, N. Y.....	43 08	77 51	-----	12	William Harkness.
Rochester, N. Y.....	43 08	77 51	516	12	F. B. Palmer.
Romeo, Mich.....	42 44	83 00	730	3	Seth L. Andrews, M. D.
Rose Hill, Va.....	38 00	76 57	250	12	George W. Upshaw.
Rossville, Iowa.....	43 10	91 21	1,400	2	Carlisle D. Beeman.
Rougemont, Va.....	38 05	78 21	450	12	George C. Dickinson.
Rupert, Vt.....	43 15	73 11	750	12	Joseph Parker.
Ruthven, Va.....	37 21	77 33	?	12	Julian C. Ruffin.
Sacramento, Cal.....	38 35	121 40	49	12	Dr. Thomas M. Logan.
Sag Harbor, N. Y.....	41 00	72 20	40	12	Ephraim N. Byram.
St. Augustine, Fla.....	29 48	81 35	8	12	Dr. P. B. Mauran.
St. Croix, (Falls of,) Wis.....	45 30	92 40	660?	1	Marine T. W. Chandler.
St. George's, Bermuda.....	32 23	64 40	123	10	Royal Engineers.
St. John's, Newfoundland.....	47 35	52 38	?	12	John Delany, jr.
St. Johnsbury, Vt.....	44 25	72 00	540	11	Franklin Fairbanks.
St. Joseph, Mo.....	39 40	94 40	-----	7	Edward B. Neely.
St. Louis, Mo.....	38 37	90 16	461	12	Dr. A. Wislizenus.
St. Martin, Canada.....	45 32	73 36	118	12	Dr. Charles Smallwood, LL. D.
Salem, Va.....	39 20	80 01	1,100	6	J. Carson Wells.
Salem, Oregon.....	44 55	122 45	?	■	?
Salt Ponds, Fla. (a).....	24 33	81 48	4	12	William C. Dennis.
San Francisco, Cal.....	37 48	122 23	150	12	Dr. W. O. Ayres.
Saratoga, N. Y.....	43 06	74 00	960	12	Walter H. Riker.
Savannah, Ga.....	32 05	81 07	42	12	Dr. John F. Posey.
Savannah, Ohio.....	41 12	82 31	?	12	Dr. John Ingram.
Saybrook, Ct.....	41 18	72 20	10	12	James Rankin.
Sennett, N. Y.....	43 00	76 55	?	1	Henry B. Fellows.
Sergeantsville, N. J.....	40 29	75 03	?	12	John T. Sergeant.
Shamokin, Pa. (b).....	40 45	76 31	700	12	P. Friel.
Shelburne, N. H.....	44 23	71 06	700	10	F. Odell.
Shelburn, Vt.....	44 23	73 00	150	12	George Bliss.
Shelby Bay, Bermuda.....	32 28	64 32	?	1	James B. Arnold.
Sidney, Ohio.....	40 21	84 11	?	9	Joseph Shaw.
Sioux City, Iowa.....	42 31	96 25	?	8	Dr. J. J. Saville.
Sistersville, Va.....	39 34	80 56	540	8	E. D. Johnson.
Smithfield, Va.....	36 50	76 41	100	12	Dr. John R. Purdie.
Somerset, Pa.....	40 02	79 02	1,997	1	George Mowry.
South Pass, Ill.....	37 28	89 14	?	1	Frank Baker.
Southwick, Mass.....	42 02	72 10	265	4	Amasa Holcomb.
Sparta, Ga.....	33 17	83 09	550	12	Dr. E. M. Pendleton.
Spencertown, N. Y.....	42 19	73 41	800	12	A. W. Morehouse.
Springdale, Ky.....	38 07	85 34	570	12	Mrs. Lawrence Young.
Springfield, Mass.....	-----	-----	-----	-----	F. A. Brewer.
Springfield, Mo.....	37 12	93 12	-----	7	J. A. Stephens.
Stanbridge, Canada East.....	45 08	73 00	?	12	J. C. Baker.
Steuben, Me.....	44 44	67 58	50	12	J. D. Parker.
Stratford, N. H.....	44 08	71 34	1,000	3	B. Gould Brown.
Sykesville, Md. (c).....	39 23	76 57	700	12	Miss Harriott M. Baer.
Tarentum, Pa.....	40 37	79 19	950	12	John H. Baird.
The Rock, Ga.....	32 52	84 23	833	12	Dr. James Anderson.
Toronto, Canada.....	43 39	79 21	108	12	Magnetic Observatory.

a Key West

b Lancaster Colliery.

c Schellman Hills, Schellman Hall.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1857.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fet.		
Townsendville, N. Y. (a) .....	42 37	76 53	1,000	10	John Lefferts.
Trinity, La. ....	31 37	91 47	68	7	Dr. Edward Merrill.
Troy, N. Y. ....	42 44	73 36	58	2	Prof. Dascom Greene.
Union Hill, Texas .....	30 30	96 31	540	10	Dr. W. H. Gantt.
Upper Alton, Ill. ....	38 55	90 10	?	4	Miss Anna James.
Urbana, Ohio .....	40 06	83 43	1,015	12	Prof. M. G. Williams.
Utica, N. Y. ....	43 07	75 15	500	6	Dr. L. A. Tourtellot.
Vera Cruz, Mexico .....	19 12	96 09	26	9	Dr. G. Berendt.
Walashaw, Minn. ....	44 30	92 15	850	1	Spencer L. Hillier.
Wallingford, Ct. ....	41 26	72 50	133	12	B. F. Harrison.
Walnut Grove Villa, Tenn. (b) .....	36 00	82 53	1,350	1	James B. Bean.
Wampsville, N. Y. ....	43 04	75 50	500	12	Dr. Stillman Spooner.
Warrenton, N. C. ....	36 30	78 15	?	11	Dr. W. M. Johnston.
Warrington, Fa. ....	30 20	87 16	12	11	Joseph Fry.
Warsaw, Ill. ....	40 20	91 31	?	12	Benjamin Whitaker.
Washington, D. C. ....	38 56	76 58	?	1	E. G. Arnold.
Washington, D. C. ....	38 53	77 01	30	10	Smithsonian Institution.
Washington, D. C., (near) .....				4	J. Wiessner.
Washington, Texas .....	30 26	96 15	?	12	B. H. Rucker.
Waterford, N. Y. ....	42 48	73 41	?	12	John C. House.
Waukesha, Wis. ....	42 50	88 12	833	7	L. C. Slye, M. D.
Waukesha, Wis. ....	42 50	88 11	812	5	Prof. S. A. Bean.
Welchfield, Ohio. ....	41 23	81 12	1,115	10	B. F. Abell.
Wellsville, N. Y. ....	42 07	78 06	1,480	10	H. M. Sheerar.
West Bedford, Ohio. ....	40 18	82 01	876	3	H. D. McCarty.
Westtown, Pa. ....	39 57	75 34	550	6	Samuel Alsop.
West Concord, N. Y. ....	43 00	79 00	2,000	8	Lewis Woodward.
West Enfield, N. H. ....	43 30	72 00	?	11	Nathaniel Purmot.
West Fairlee, Vt. ....	43 55	72 15	?	12	L. W. Bliss.
Westfield, Mass. ....	42 06	72 48	?	12	Rev. Emerson Davis, D. D.
West Haverford, Pa. ....	40 00	75 21	?	11	Dr. Paul Swift.
West Salem, Ill. ....	38 30	88 00	?	12	Henry Titze.
West Urbana, Ill. ....	40 09	88 17	550	?	Dr. John Swain.
Weymouth, Mass. ....	42 10	71 00	150	12	Dr. N. Quincy Tirrell.
Wheaton, Ill. ....	41 49	88 06	682	1	J. H. Collier.
Whitemarsh Island, Ga. ....	32 04	81 05	18	11	R. T. Gibson.
Williamstown, Mass. ....	42 43	73 13	720	11	J. McGee.
Winchester, Va. ....	39 15	78 10	?	12	John W. Marvin.
Windham, Ohio. ....	41 10	81 05	?	11	Samuel W. Treat.
Windsor, Nova Scotia. ....	44 59	64 07	200	6	Rev. J. M. Hensley.
Winnebago, Ill. ....	42 17	89 11	?	10	J. W. Tolman.
Wirt Court-House, Va. ....	39 05	81 26	?	12	J. W. Hough.
Wolfville, Nova Scotia (c) .....	45 06	64 25	95	12	A. P. S. Stuart.
Woodstock, Vt. ....	43 36	72 35	650	12	Charles Marsh.
Worcester, Mass. ....	42 16	71 48	536	12	John S. Sargent.
Zanesville, Ohio. ....	39 58	82 01	700	2	Dr. J. G. F. Holston.
Zebulon, Ga. ....	33 07	84 26	?	12	Mrs. J. T. Arnold.

a Lodi.

b Greenville.

c Horton.



## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.73	8	9 a. m.	<i>b</i> 30.10	31	9 p. m.	29.16
Montreal .....	30.03	26	7 a. m.	30.65	19	9 p. m.	29.62
St. John's (c) .....	29.57	27	7 a. m.	30.47	6	7 a. m.	<i>d</i> 28.50
St. Martin .....	29.91	26	7 a. m.	30.45	10	2 p. m.	29.51
Toronto (a) .....	29.74	28	6 a. m.	30.16	10	2 p. m.	29.21
Wolfville .....	29.82	31	7 a. m.	30.65	22	9 p. m.	28.99
Maine .....	29.60	26	2 p. m.	30.28	22	2 p. m.	28.88
Carmel .....	29.84	26	2 p. m.	30.37	19	7 a. m.	<i>e</i> 29.17
Gardiner .....	29.86	26	2 p. m.	30.51	19	9 p. m.	29.12
Portland .....	29.83	31	7 a. m.	30.49	22	2 p. m.	29.15
Steuben .....	29.64	18	7 a. m.	30.58	19	2 p. m.	28.95
New Hampshire .. Concord .....	29.77	26	Noon.	30.30	19	Sunset.	29.28
Shelburn (a) .....	29.70	26	7 a. m.	30.27	19	2 p. m.	29.10
Vermont .....	29.66	26	7 a. m.	30.34	19	9 p. m.	29.08
Shelburne .....	29.83	26	7 a. m.	30.45	19	2 p. m.	29.00
Massachusetts .. Amherst .....	29.88	26	1 p. m.	30.53	19	1 p. m.	29.04
Bridgewater (a) .....	29.97	26	2 p. m.	30.66	19	2 p. m.	29.14
Cambridge .....	29.81	26	2 p. m.	30.47	19	2 p. m.	29.19
Canton .....	29.97	26	2 p. m.	30.71	19	7 a. m.	28.98
Nantucket .....	29.95	26	2 p. m.	30.63	19	2 p. m.	29.03
New Bedford .....	29.99	26	7 a. m.	30.70	19	2 p. m.	29.23
Newburyport .....	29.84	26	2 p. m.	30.52	19	2 p. m.	28.98
North Attleborough .....	29.91	26	2 p. m.	30.50	19	2 p. m.	29.24
Westfield .....	29.33	26	7 a. m.	29.91	3	2 p. m.	28.83
Williamstown .....	29.46	26	7 a. m.	30.21	19	2 p. m.	28.66
Worcester .....	29.81	26	Sunrise.	30.53	19	1 p. m.	28.94
Rhode Island .. Providence (a) .....	29.96	25	9 p. m.	30.57	19	2 p. m.	29.07
Connecticut .. Norwiche .....	29.35	26	2 p. m.	30.07	19	2 p. m.	28.51
Pomfret .....	29.92	26	7 a. m.	<i>f</i> 30.60	19	2 p. m.	29.07
Wallingford .....	30.07	26	2 p. m.	30.72	19	7 a. m.	29.22
New York .....	29.48	25	9 p. m.	29.91	10	2 p. m.	28.92
Blackwell's Island .....	28.61	26	7 a. m.	29.10	3	2 p. m.	28.11
Buffalo .....	30.24	26	7 a. m.	30.80	19	7 a. m.	29.50
Cazenovia .....	29.91	26	7 a. m.	30.60	19	2 p. m.	29.14
Fishkill Landing (g) .....	30.24	■	7 a. m.	30.85	10	9 p. m.	28.97
Flatbush .....	28.63	26	7 a. m.	29.62	10	9 p. m.	28.69
Fordham .....	29.75	26	7 a. m.	29.05	3	7 a. m.	28.21
Lowville .....	30.08	26	7 a. m.	30.24	■	2 p. m.	29.23
McGrawville .....	29.39	26	7 a. m.	30.69	19	2 p. m.	29.29
Mexico .....	28.95	25	9 p. m.	29.87	3	2 p. m.	28.85
New York city .....	29.31	25	Sunset.	29.40	10	2 p. m.	28.43
Oswego .....	29.61	28	7 a. m.	<i>h</i> 29.66	3	2 p. m.	28.84
Ovid .....	29.74	26	7 a. m.	29.99	31	9 p. m.	29.12
Penn Yan (a) .....	29.57	26	7 a. m.	30.42	19	2 p. m.	28.91
Rochester .....	29.36	26	7 a. m.	30.50	3	2 p. m.	<i>j</i> 29.10
Sag Harbor .....	29.08	26	7 a. m.	29.93	19	2 p. m.	28.71
Saratoga (i) .....	29.53	26	7 a. m.	30.69	19	2 p. m.	29.49
Spencertown .....	29.89	26	7 a. m.	<i>k</i> 30.04	3	2 p. m.	29.02
Troy .....	30.03	26	7 a. m.	<i>f</i> 30.52	19	7 a. m.	29.15
Utica .....	30.03	26	7 a. m.	30.58	19	7 a. m.	29.32
New Jersey .....	30.03	26	2 p. m.	30.63	19	7 a. m.	29.23
Bloomfield .....	30.03	26	7 a. m.	30.60	19	7 a. m.	29.28
Burlington .....	29.04	26	7 a. m.	29.23	19	7 a. m.	<i>e</i> 28.75
Lambertville (a) .....	29.97	26	7 a. m.	30.63	19	7 a. m.	29.26
Newark (a) .....	28.89	25	9 p. m.	29.28	10	2 p. m.	28.47
Pennsylvania .. Berwick (g) .....	29.25	26	7 a. m.	29.78	3	2 p. m.	<i>e</i> 28.73
Byberry .....	29.95	26	7 a. m.	30.51	19	7 a. m.	29.19
Cannonsburg .....							
Carlisle .....							
Chromedale .....							

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height on the 28th at 9 a. m.

*c* Observations taken at 7 a. m. and 2 p. m.

*d* Same height at 2 p. m. on the 7th.

*e* Same height at 2 p. m. on the 19th.

*f* Same height at 2 p. m. on the 26th.

*g* Not corrected for temperature.

*h* Same height at sunrise on the 28th.

*i* Aneroid.

*j* Same height at 2 p. m. and 9 p. m. on the 10th.

*k* Same height at 7 a. m. on the 28th.

## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania ----- Easton -----	29.79	26	7 a. m.	30.39	19	7 a. m.	29.12
Gettysburg -----	29.55	26	7 a. m.	30.09	19	7 a. m.	29.02
Harrisburg [Heisely] -----	29.86	26	7 a. m.	30.40	19	7 a. m.	29.34
Lewisburg -----	29.63	26	7 a. m.	30.17	3	2 p. m.	29.11
Morrisville -----	30.19	26	7 a. m.	30.82	19	7 a. m.	29.42
Nazareth -----	29.51	26	7 a. m.	30.12	19	2 p. m.	28.84
Norristown -----	30.00	26	7 a. m.	30.64	19	7 a. m.	29.27
Philadelphia -----	29.86	26	7 a. m.	30.50	3	2 p. m.	29.22
Pittsburg, [Wilson] -----	29.04	25	9 p. m.	29.42	10	2 p. m.	28.58
Delaware ----- Newark -----	29.87	26	7 a. m.	30.49	19	7 a. m.	29.20
Maryland ----- Annapolis -----	30.16	26	7 a. m.	30.69	19	7 a. m.	29.48
Frederick -----	29.86	26	7 a. m.	30.43	19	7 a. m.	29.29
Ridge (a) -----	30.11	26	7 a. m.	30.67	3	2 p. m.	29.56
Dist. of Columbia. Washington, [Smithsonian Institution] -----	30.18	26	7 a. m.	30.75	19	9 a. m.	29.51
Virginia ----- Alexandria -----	30.14	26	7 a. m.	30.68	19	7 a. m.	29.54
Portsmouth -----	30.12	26	2 p. m.	30.68	19	7 a. m.	29.44
Rose Hill -----	30.08	26	7 a. m.	30.67	19	7 a. m.	29.50
Ruthven -----	29.75	26	7 a. m.	30.35	18	9 p. m.	29.19
North Carolina ----- Chapel Hill -----	29.59	26	2 p. m.	29.97	10	9 p. m.	29.14
Goldsborough (a) -----	30.11	26	7 a. m.	30.64	10	9 p. m.	29.63
Murfreesborough -----	29.63	26	7 a. m.	30.13	10	9 p. m.	29.21
Warrenton -----	29.70	26	7 a. m.	30.21	10	9 p. m.	29.17
South Carolina ----- Ali Saints -----	30.12	26	2 p. m.	30.53	18	2 p. m.	29.44
Camden -----	30.03	26	7 a. m.	30.44	18	7 a. m.	29.56
Charleston -----	30.26	26	7 a. m.	30.62	18	2 p. m.	29.68
Charleston, [Dawson] -----				30.62			29.68
Edisto Island -----	30.18	26	9 a. m.	30.56	18	9 a. m.	29.53
Georgia ----- Savannah -----	30.02	26	7 a. m.	30.54	18	7 a. m.	29.62
Sparta -----	29.58	26	7 a. m.	29.77	18	7 a. m.	29.11
The Rock -----	29.41	26	7 a. m.	29.72	30	2 p. m.	<sup>b</sup> 29.05
Florida ----- Atsena -----	29.94	26	9 p. m.	30.23	18	7 a. m.	29.58
Jacksonville -----	30.26	26	7 a. m.	30.59	18	7 a. m.	29.71
St. Augustine (a) -----	30.30	26	2 p. m.	30.56	18	7 a. m.	29.73
Salt Ponds (c) -----	29.86	26	2 p. m.	30.10	31	7 a. m.	29.65
Warrington -----	30.19	19	7 a. m.	30.42	30	9 p. m.	29.79
Alabama ----- Auburn -----	29.50	26	7 a. m.	29.77	30	2 p. m.	29.09
Greensborough -----	29.81	8	7 a. m.	30.15	30	2 p. m.	29.29
Mississippi ----- Columbus -----	30.04	26	9 p. m.	30.45	30	2 p. m.	29.49
Port Gibson -----	30.11	19	7 a. m.	30.45	30	7 a. m.	29.72
Texas ----- New Braunfels -----	29.16	18	7 a. m.	29.70	2	7 a. m.	28.82
Washington -----	29.70	18	7 a. m.	30.32	27	9 p. m.	28.91
Tennessee ----- Glenwood -----	29.78	8	7 a. m.	30.24	30	9 p. m.	29.31
Walnut Grove -----	28.57	8	7 a. m.	28.89	30	9 p. m.	28.21
Kentucky ----- Millersburg -----	29.43	8	7 a. m.	29.84	31	7 a. m.	<sup>b</sup> 29.10
Paris -----	29.35	8	7 a. m.	29.82	10	2 p. m.	<sup>b</sup> 28.93
Springdale -----	29.61	8	7 a. m.	30.51	31	7 a. m.	<sup>d</sup> 29.17
Ohio ----- Cincinnati, [Harper] -----	29.66	8	7 a. m.	30.09	31	2 p. m.	29.25
Cincinnati, [Hurt] -----	29.32	25	7 a. m.	29.78	31	9 p. m.	28.71
Cleveland (e) -----	29.26	25	9 p. m.	29.52	31	2 p. m.	28.68
College Hill -----	29.23	8	7 a. m.	29.65	10	2 p. m.	28.77
Germantown -----	29.37	8	7 a. m.	29.78	31	7 a. m.	<sup>d</sup> 28.90
Granville -----	29.10	8	7 a. m.	29.50	31	2 p. m.	28.61
Hillsborough -----	29.00	8	7 a. m.	29.44	31	2 p. m.	28.54
Oberlin -----	29.54	15	9 p. m.	29.61	31	2 p. m.	28.73
Urbana -----	28.89	8	7 a. m.	29.31	31	2 p. m.	28.42
West Bedford (a) -----	28.66	16	7 a. m.	28.94	3	7 a. m.	28.05
Zanesville -----	29.32	8	7 a. m.	29.72	10	2 p. m.	28.85

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Same height at 9 p. m. on the 30th.

c For changes from the usual hours of observations, &c., see notes to table of the thermometer for this month. Not corrected for temperature.

d Same height at 2 p. m. on the 31st.

e Observations interrupted from the 8th to the 23d of the month. Aneroid barometer.



## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Michigan.....Battle Creek.....	29.24	8	7 a. m.	29.61	31	7 a. m.	28.69
.....Copper Falls Mines.....	28.62	5	2 p. m.	28.98	31	2 p. m.	27.99
Indiana.....Michigan City.....	29.47	8	6 a. m.	29.88	31	6 a. m.	28.96
.....New Harmony.....	29.91	8	7 a. m.	30.41	30	9 p. m.	29.41
.....Richmond.....	29.14	8	7 a. m.	29.53	31	7 a. m.	28.67
.....Romeo (a).....	29.11	8	7 a. m.	29.48	31	2 p. m.	28.52
Illinois.....Chicago.....	29.56	8	7 a. m.	30.05	7	9 p. m.	29.03
.....Manchester (a).....	29.05	8	7 a. m.	29.57	20	1 p. m.	28.60
Missouri.....St. Louis.....	29.82	18	2 p. m.	30.35	30	2 p. m.	29.35
Wisconsin.....Appleton.....	29.19	7	7 a. m.	29.63	31	7 a. m.	<i>b</i> 28.68
.....Beloit.....	29.39	7	9 p. m.	29.86	20	7 a. m.	28.86
.....Kenosha (c).....	29.62?	7	9 p. m.	30.09	20	7 a. m.	29.15
.....Madison, [Sterling].....	29.17	7	9 p. m.	29.65	20	7 a. m.	28.65
.....Manitowoc (d).....	29.91	7	9 p. m.	30.29	31	7 a. m.	<i>b</i> 29.22
.....Milwaukee, [Winkler].....	29.45	7	9 p. m.	29.88	31	7 a. m.	28.94
.....Prescott.....	29.50	7	7 a. m.	30.03	31	7 a. m.	28.51
.....Racine (e).....	29.38	7	2 p. m.	29.88	2	9 p. m.	<i>f</i> 28.94
.....Waukesha.....	28.92	7	7 a. m.	<i>g</i> 29.33	20	2 p. m.	28.40
Iowa.....Muscatine.....	29.70	7	2 p. m.	30.16	18	7 a. m.	<i>h</i> 29.00
California.....San Francisco (i).....	30.15	27	9 p. m.	30.40	3	2 p. m.	29.76
.....Sacramento.....	30.21	27	9 p. m.	30.48	3	2 p. m.	29.79
Mexico.....Mirador (a).....	22.69						
West Indies.....Port of Spain, Trinidad.....	29.94	23	9 p. m.	29.98	3	2 p. m.	29.85
.....St. George's, Bermuda (j).....	29.93	27	9½ a. m.	30.32	4	3½ p. m.	29.59
Central America.....Gautemala (k).....	25.31	?	9 a. m.	25.43	?	3 p. m.	25.15
South America.....Catharina Sophia, Surinam (l).....	29.64	19	2 p. m.	<i>m</i> 29.69	3	6 p. m.	29.56
Azores.....Horta, Fayal.....	30.25	20	7 a. m.	30.59	4	2 p. m.	<i>n</i> 29.85

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height at 2 p. m. on the 31st.

*c* Very incomplete.

*d* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month. Not corrected for temperature.

*e* Not corrected for temperature.

*f* Same height at 2 p. m. on the 20th.

*g* Same height at 9 p. m. on the 7th.

*h* Same height at 2 p. m. and 9 p. m. on the 19th.

*i* Aneroid.

*j* Observations taken at 3¼ a. m., 9¼ a. m., 3¼ p. m., and 9¼ p. m.

*k* Observations taken at 5 a. m., 9 a. m., 3 p. m., and 10 p. m.

*l* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month. Aneroid.

*m* Same height at 6 p. m. on the 24th.

*n* Same height at 9 p. m. on the 4th.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton (a).....	29.71	10	9 p. m.	30.30	24	9 p. m.	29.20
Montreal.....	30.04	11	9 p. m.	30.75	24	9 p. m.	29.45
St. John's (b).....	29.74	13	7 a. m.	30.35	26	2 p. m.	29.10
St. Martin.....	29.91	12	7 a. m.	30.76	14	2 p. m.	29.21
Toronto (a).....	29.74	10	10 p. m.	30.35	24	2 p. m.	29.22
Wolfville.....	29.95	12	7 a. m.	30.94	25	9 p. m.	29.20
Maine.....Gardiner.....	29.97	12	2 p. m.	30.78	25	2 p. m.	29.39
Portland.....	29.98	12	7 a. m.	30.75	28	2 p. m.	29.36
Steuben.....	30.06	12	7 a. m.	30.90	28	2 p. m.	29.38
New Hampshire—Concord.....	29.80	12	7 a. m.	c 30.58	28	2 p. m.	29.21
Vermont.....Norwich.....	29.79	12	7 a. m.	30.55	28	7 a. m.	29.23
Shelburn.....	29.74	12	7 a. m.	c 30.60	28	7 a. m.	29.01
Massachusetts—Amherst.....	29.93	12	7 a. m.	30.69	28	7 a. m.	29.37
Bridgewater (a).....	30.03	12	7 a. m.	30.81	28	1 p. m.	29.50
Cambridge.....	30.12	12	7 a. m.	30.93	28	2 p. m.	29.53
Canton.....	29.96	12	2 p. m.	30.69	28	2 p. m.	29.40
Nantucket.....	30.21	12	7 a. m.	30.94	28	2 p. m.	29.65
New Bedford.....	30.09	12	2 p. m.	30.87	28	2 p. m.	29.53
Newburyport.....	30.14	12	7 a. m.	31.00	25	2 p. m.	29.57
North Attleborough.....	29.99	12	7 a. m.	30.77	28	2 p. m.	29.43
Southwick (a).....	30.12	12	7 a. m.	30.86	28	7 a. m.	29.66
Westfield.....	30.03	12	7 a. m.	30.77	28	9 p. m.	29.48
Williamstown.....	29.39	12	7 a. m.	30.14	28	7 a. m.	28.87
Worcester.....	29.64	13	7 a. m.	30.50	25	7 a. m.	29.03
Rhode Island.....Providence.....	29.98	12	Sunrise.	30.80	28	1 p. m.	29.40
Connecticut.....Norwich.....	30.06	12	7 a. m.	30.78	28	9 p. m.	29.49
Pomfret.....	29.49	12	7 a. m.	30.23	28	7 a. m.	d 28.96
Wallingford.....	30.06	12	7 a. m.	30.80	28	9 p. m.	29.49
New York.....Blackwell's Island.....	30.19	12	7 a. m.	30.94	25	9 p. m.	29.64
Buffalo.....	29.42	10	9 p. m.	30.05	24	9 p. m.	28.98
Cazenovia.....	28.67	12	7 a. m.	29.24	28	2 p. m.	28.18
Fishkill Landing (e).....	30.35	12	7 a. m.	31.05	28	9 p. m.	29.85
Flatbush.....	30.03	12	7 a. m.	30.75	28	9 p. m.	29.48
Fordham.....	30.38	2	9 p. m.	30.87	28	9 p. m.	29.06
Lowville.....		12	7 a. m.	29.78	5	7 a. m.	28.32
McGrawville.....	28.69	12	2 p. m.	29.20	28	9 p. m.	28.26
New York city.....	30.18	12	7 a. m.	30.87	28	9 p. m.	29.68
Oswego.....	29.41	12	7 a. m.	30.05	28	2 p. m.	28.91
Ovid.....	28.99	12	7 a. m.	f 29.55	28	2 p. m.	28.52
Penn Yan (a).....	29.34	11	Sunset.	g 29.85	28	Sunset.	28.84
Rochester.....	29.56	12	7 a. m.	30.50	24	9 p. m.	29.11
Sag Harbor.....	29.91	12	2 p. m.	30.67	28	7 a. m.	29.37
Saratoga (h).....	29.67	12	7 a. m.	30.37	28	9 p. m.	i 29.10
Spencertown.....	29.46	12	7 a. m.	f 30.17	28	9 p. m.	28.90
Troy.....	30.13	12	7 a. m.	30.89	28	9 p. m.	29.63
Utica.....	29.41	16	2 p. m.	29.84	24	9 p. m.	28.98
New Jersey.....Bloomfield.....	30.02	12	7 a. m.	30.71	28	7 a. m.	29.49
Burlington.....	30.12	12	2 p. m.	30.79	28	2 p. m.	29.68
Lambertville (a).....	30.14	12	Noon.	30.82	28	7 a. m.	29.66
Newark (a).....	30.12	12	7 a. m.	30.82	28	6 p. m.	29.56
Pennsylvania.....Berwick (e).....	29.46	12	7 a. m.	c 30.00	28	9 p. m.	28.92
Cannonsburg.....	28.90	11	7 a. m.	j 29.41	20	9 p. m.	28.41
Carlisle.....	29.33	12	7 a. m.	29.90	28	9 p. m.	28.88
Chromedale.....	30.04	12	7 a. m.	30.76	28	2 p. m.	k 29.56
Easton.....	29.88	12	7 a. m.	30.52	28	9 p. m.	29.38
Gettysburg.....	29.63	12	7 a. m.	30.21	28	9 p. m.	29.14
Harrisburg, [Heisely].....	29.92	12	7 a. m.	30.52	28	9 p. m.	29.47

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Observations taken at 7 a. m. and 2 p. m.

c Same height at 2 p. m. on the 12th.

d Same height at 2 p. m. on the 28th.

e Not corrected for temperature.

f Same height at 9 p. m. on the 11th.

g Same height at sunrise on the 12th.

h Aneroid.

i Same height at 7 a. m. on the 28th.

j Same height at 7 a. m. on the 12th.

k Same height at 9 p. m. on the 28th.



## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania . . . . .							
Lewisburg . . . . .	29.70	12	7 a. m.	30.28	28	2 p. m.	29.21
Morrisville . . . . .	30.28	12	7 a. m.	30.92	28	9 p. m.	29.78
Nazareth . . . . .	29.61	12	7 a. m.	30.29	28	9 p. m.	29.12
Norristown . . . . .	30.11	12	7 a. m.	30.76	28	2 p. m.	29.58
Philadelphia . . . . .	30.03	12	7 a. m.	30.64	28	9 p. m.	29.60
Pittsburg, [Wilson] . . . . .	29.06	10	9 p. m.	29.59	28	9 p. m.	28.69
Delaware . . . . .							
Newark . . . . .	30.03	12	7 a. m.	30.61	25	2 p. m.	29.59
Maryland . . . . .							
Annapolis . . . . .	30.20	12	7 a. m.	30.78	28	9 p. m.	29.76
Frederick city . . . . .	29.91	12	7 a. m.	30.50	28	2 p. m.	29.44
Ridge (a) . . . . .	30.14	12	7½ a. m.	30.70	19	1 p. m.	29.79
Dist. of Columbia . . . . .							
Washington, [Smithsonian Institution] . . . . .	30.22	12	7 a. m.	30.84	28	9 p. m.	29.70
Virginia . . . . .							
Alexandria . . . . .	30.21	12	7 a. m.	30.80	28	2 p. m.	29.73
Portsmouth . . . . .	30.20	12	7 a. m.	30.77	28	2 p. m.	b 29.64
Rose Hill . . . . .	30.15	12	7 a. m.	30.75	28	9 p. m.	29.66
Ruthven . . . . .	29.87	11	7 a. m.	c 30.39	28	9 p. m.	29.38
North Carolina . . . . .							
Chapel Hill . . . . .	29.63	12	7 a. m.	30.07	28	7 a. m.	b 29.25
Goldsborough . . . . .	30.18	12	7 a. m.	30.71	28	9 p. m.	29.72
Murfreesborough . . . . .	29.56	12	7 a. m.	30.16	19	2 p. m.	29.23
Warrenton . . . . .	29.79	12	7 a. m.	30.23	21	7 a. m.	29.43
South Carolina . . . . .							
All Saints . . . . .	30.17	11	2 p. m.	d 30.61	28	9 p. m.	29.68
Camden . . . . .	30.06	12	7 a. m.	e 30.53	28	2 p. m.	29.58
Charleston . . . . .	30.24	11	7 a. m.	c 30.70	28	2 p. m.	29.78
Charleston, [Dawson] . . . . .				30.70			29.83
Mount Pleasant (a) . . . . .	30.20	11	8 a. m.	30.65	28	9 p. m.	29.74
Georgia . . . . .							
Savannah . . . . .	30.22	11	7 a. m.	30.61	28	2 p. m.	29.80
Sparta . . . . .	29.48	11	7 a. m.	29.85	28	2 p. m.	29.10
The Rock . . . . .	29.43	10	7 a. m.	f 29.79	28	2 p. m.	29.04
Florida . . . . .							
Atsena . . . . .	29.99	11	9 p. m.	30.26	28	9 p. m.	29.71
Jacksonville . . . . .	30.25	10	9 p. m.	30.59	28	9 p. m.	29.91
St. Augustine (a) . . . . .	30.27	11	7 a. m.	30.58	27	9 p. m.	29.89
Salt Ponds (g) . . . . .	29.80	3	2 p. m.	h 29.96	7	7 a. m.	i 29.68
Warrington . . . . .	30.16	10	7 a. m.	30.56	28	9 p. m.	29.90
Alabama . . . . .							
Auburn . . . . .	29.48	10	7 a. m.	29.86	20	2 p. m.	29.26
Greensborough . . . . .	29.77	10	7 a. m.	30.30	7	2 p. m.	29.42
Mississippi . . . . .							
Columbus . . . . .	29.96	10	7 a. m.	30.51	7	2 p. m.	29.53
Port Gibson . . . . .	30.00	10	7 a. m.	30.58	7	7 a. m.	29.65
Texas . . . . .							
New Braunfels (j) . . . . .	28.96	10	7 a. m.	29.62	6	9 p. m.	28.48
Washington . . . . .	29.44	8	7 a. m.	f 30.77	12	2 p. m.	28.98
Tennessee . . . . .							
Glenwood . . . . .	29.67	10	2 p. m.	30.33	7	2 p. m.	29.15
Kentucky . . . . .							
Paris . . . . .	29.31	10	9 p. m.	29.93	20	2 p. m.	28.82
Springdale (a) . . . . .	29.51	10	9 p. m.	30.19	7	9 p. m.	29.01
Ohio . . . . .							
Cincinnati, [Harper] . . . . .	29.59	10	2 p. m.	k 30.20	7	9 p. m.	l 29.18
Cincinnati, [Hurt] . . . . .	29.12	11	7 a. m.	29.91	7	2 p. m.	28.45
Cleveland (m) . . . . .	29.12	10	9 p. m.	29.71	7	9 p. m.	28.70
College Hill . . . . .	29.19	10	9 p. m.	29.83	20	2 p. m.	28.70
Franklin (j) . . . . .	30.02	9	2 p. m.	n 30.50	18	2 p. m.	o 29.50
Granville . . . . .	29.05	10	2 p. m.	29.63	20	2 p. m.	28.58
Hillsborough . . . . .	28.96	10	9 p. m.	29.56	7	9 p. m.	28.52
Medina (p) . . . . .	28.55	10	9 p. m.	29.15	24	2 p. m.	28.07
Oberlin . . . . .	29.20	10	9 p. m.	29.85	7	9 p. m.	28.70
Urbana . . . . .	28.84	10	2 p. m.	29.49	7	9 p. m.	28.39
West Bedford . . . . .	28.49	11	7 a. m.	28.87	20	9 p. m.	28.16
Zanesville . . . . .	29.26	10	9 p. m.	29.83	20	2 p. m.	28.07
Michigan . . . . .							
Battle Creek . . . . .	29.15	10	7 a. m.	29.84	7	9 p. m.	28.68
Copper Falls Mines . . . . .	28.55	26	2 p. m.	29.12	7	9 p. m.	27.98
Romeo (a) . . . . .	29.05	11	9 p. m.	29.68	25	1 p. m.	28.52

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Same height at 9 p. m. on the 28th.

c Same height at 7 a. m. on the 12th.

d Same height at 9 p. m. on the 11th.

e Same height at 2 p. m. on the 12th.

f Same height at 7 a. m. on the 11th.

g Not corrected for temperature. For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

A Same height at 2 p. m. on the 4th, 11th, and 12th.

i Same height at 7 a. m. on the 8th.

j Not corrected for temperature.

k Same height at 9 p. m. on the 10th.

l Same height at 2 p. m. on the 20th.

m Aneroid.

n Same height at 7 a. m. and 2 p. m. on the 11th.

o Same height at 2 p. m. on the 19th.

p Incomplete.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Indiana	Cannelton ( <i>a</i> )	29.58	10	9 p. m.	30.35	20	2 p. m.	28.95
	Michigan City	29.34	10	5 p. m.	30.08	7	5 p. m.	28.81
	New Albany ( <i>b</i> )	29.66	10	2 p. m.	30.34	7	2 p. m.	<i>c</i> 29.16
	New Harmony	29.75	10	2 p. m.	30.56	20	2 p. m.	29.22
	Richmond	29.04	10	2 p. m.	29.66	7	7 a. m.	28.43
Illinois	Chicago	29.41	10	2 p. m.	30.23	7	2 p. m.	28.73
	Manchester ( <i>b</i> )	28.83	10	7 a. m.	29.81	7	7 a. m.	28.25
	Upper Alton	29.50	10	7 a. m.	30.32	20	7 a. m.	29.05
Missouri	St. Louis	29.59	10	7 a. m.	30.47	7	7 a. m.	28.87
Wisconsin	Appleton	29.02	10	2 p. m.	29.81	7	2 p. m.	28.24
	Beloit	29.21	10	7 a. m.	30.08	7	2 p. m.	28.49
	Kenosha ( <i>d</i> )	29.42 ?	10	9 p. m.	30.15	7	2 p. m.	28.80
	Madison, [Sterling]	29.03	10	2 p. m.	29.83	7	2 p. m.	28.25
	Manitowoc ( <i>a</i> )	29.78	10	2 p. m.	30.55	7	2 p. m.	29.12
	Milwaukee, [Winkler]	29.32	10	2 p. m.	30.10	7	9 p. m.	28.75
	Prescott	29.23	10	7 a. m.	30.19	7	2 p. m.	28.64
	Racine ( <i>a</i> )	29.26	10	7 a. m.	<i>e</i> 30.00	24	2 p. m.	28.68
	Waukesha	28.80	10	7 a. m.	29.54	7	2 p. m.	28.10
Iowa	Muscatine	29.53	10	2 p. m.	30.46	7	7 a. m.	28.87
Utah	Great Salt Lake City ( <i>b</i> )	25.39	10	Sunrise.	26.04	28	9 a. m.	24.96
California	Sacramento	30.08	8	7 a. m.	30.40	15	2 p. m.	29.72
	San Francisco ( <i>f</i> )	30.04	8	7 a. m.	30.31	24	9 p. m.	29.66
Mexico	Mirador ( <i>b</i> )	22.68						
West Indies	Port of Spain, Trinidad	29.89	8	9 p. m.	29.96	23	2 p. m.	29.83
	St. George's, Bermuda ( <i>g</i> )	30.11	4	9½ a. m.	30.41	2	3½ a. m.	29.74
Central America	Guatemala	25.24		9 a. m.	25.42		3 p. m.	25.09
South America	Catharina Sophia, Surinam ( <i>b</i> )	29.61	3	2 p. m.	29.67	9	6 p. m.	29.56
Azores	Horta, Fayal	30.07	2	9 p. m.	<i>h</i> 30.46	7	2 p. m.	29.68

*a* Not corrected for temperature.*b* For changes from the usual hours of observation, &c., see notes to the table of the thermometer for this month.*c* Same height at 2 p. m. on the 20th.*d* Very incomplete.*e* Same height at 2 p. m. on the 10th.*f* Aneroid.*g* Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.*h* Same height at 7 a. m. on the 3d.



## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton (a).....	29.62	22	9 a. m.	30.00	1	9 a. m.	29.22
Montreal.....	29.87	29	9 p. m.	30.50	6	2 p. m.	29.35
St. John's (a).....	29.55	5	7 a. m.	<i>b</i> 30.10	10	2 p. m.	<i>c</i> 29.10
St. Martin.....	29.72	22	9 p. m.	30.24	19	9 p. m.	29.24
Toronto (a).....	29.60	22	6 a. m.	30.00	1	2 p. m.	29.11
Wolfville.....	29.74	9	7 a. m.	30.48	25	2 p. m.	29.20
Maine.....Gardiner.....	29.75	22	9 p. m.	<i>d</i> 30.25	6	2 p. m.	29.14
Portland.....	29.75	8	2 p. m.	30.29	6	2 p. m.	29.11
Steuben.....	29.80	13	7 a. m.	30.39	10	7 a. m.	29.10
New Hampshire—Concord.....	29.58	23	7 a. m.	30.10	6	2 p. m.	<i>e</i> 28.96
Vermont.....Norwich.....	29.58	13	7 a. m.	30.06	19	9 p. m.	28.96
Shelburn.....	29.49	8	7 a. m.	30.44	19	9 p. m.	28.71
St. Johnsbury (f).....	29.31	22	9 p. m.	29.85	19	9 p. m.	28.70
Woodstock.....	30.12	23	7 a. m.	29.60	19	9 p. m.	28.49
Massachusetts—Amherst.....	29.71	13	7 a. m.	30.23	19	9 p. m.	29.02
Bridgewater (a).....	29.77	13	7 a. m.	30.34	2	1½ p. m.	<i>g</i> 29.10
Cambridge.....	29.87	23	7 a. m.	30.43	19	9 p. m.	29.27
Canton (a).....	29.72	13	7 a. m.	30.22	20	7 a. m.	29.13
Lawrence (h).....	29.82	23	7 a. m.	30.37	20	7 a. m.	29.20
Nantucket.....	29.91	22	9 p. m.	30.57	2	2 p. m.	29.26
New Bedford.....	29.85	13	7 p. m.	30.38	19	9 p. m.	29.28
Newburyport (a).....	29.90	23	8 a. m.	30.46	19	9 p. m.	29.29
North Attleborough.....	29.70	23	7 a. m.	30.29	19	9 p. m.	29.10
Southwick.....	29.89	13	7 a. m.	30.44	19	9 p. m.	29.26
Westfield.....	29.82	13	7 a. m.	<i>i</i> 30.32	19	9 p. m.	29.18
Williamstown (a).....	29.19	13	7½ a. m.	29.70	19	9 p. m.	28.51
Worcester.....	29.45	6	2 p. m.	29.96	20	7 a. m.	<i>j</i> 29.03
Rhode Island—Providence (a).....	29.72	13	Sunrise.	30.30	19	10 p. m.	29.10
Connecticut—Norwich.....	29.81	13	7 a. m.	30.32	19	9 p. m.	29.23
Pomfret.....	29.26	23	7 a. m.	29.83	19	9 p. m.	28.67
Wallingford.....	29.83	14	7 a. m.	30.37	20	9 p. m.	29.14
New York—Blackwell's Island.....	29.98	13	7 a. m.	30.55	19	9 p. m.	29.26
Cazenovia.....	28.49	13	7 a. m.	<i>k</i> 28.91	19	2 p. m.	27.91
Fishkill Landing (l).....	30.18	8	2 p. m.	<i>i</i> 30.65	19	9 p. m.	29.47
Flatbush.....	29.80	13	7 a. m.	30.35	19	9 p. m.	29.16
Fordham.....	30.24	15	9 p. m.	30.83	1	2 p. m.	29.03
Lowville.....	28.45	22	2 p. m.	29.45	19	9 p. m.	28.36
McGrawville.....	28.52	22	9 p. m.	28.89	19	2 p. m.	28.02
New York city.....	29.96	13	7 a. m.	30.50	19	2 p. m.	29.36
Oswego.....	29.24	8	7 a. m.	29.69	19	2 p. m.	28.62
Ovid.....	28.84	8	7 a. m.	29.25	19	2 p. m.	28.30
Penn Yan (a).....	29.18	22	Sunset.	29.60	1	Sunset.	28.64
Rochester.....	29.44	22	7 a. m.	29.81	19	2 p. m.	28.99
Sag Harbor.....	29.68	13	2 p. m.	30.27	19	9 p. m.	29.05
Saratoga (f).....	29.44	22	9 p. m.	30.00	19	9 p. m.	28.75
Spencertown.....	29.24	13	2 p. m.	29.75	19	9 p. m.	28.59
Utica.....	29.39	13	7 a. m.	29.86	19	9 p. m.	28.72
New Jersey—Bloomfield.....	29.78	13	7 a. m.	30.32	19	2 p. m.	29.13
Burlington.....	29.90	13	7 a. m.	30.40	19	2 p. m.	29.35
Lambertville (a).....	29.92	13	2 p. m.	30.44	19	2 p. m.	29.34
Newark (a).....	29.91	13	7 a. m.	30.43	1	9 p. m.	<i>e</i> 29.41
Pennsylvania—Berwick (l).....	29.02	8	7 a. m.	<i>m</i> 29.67	19	2 p. m.	28.50
Cannonsburg.....	28.79	22	7 a. m.	<i>n</i> 29.13	1	2 p. m.	28.35
Carlisle.....	29.15	13	7 a. m.	29.59	19	2 p. m.	28.57

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer.

*b* Same height at 9 p. m. on the 4th, 2 p. m. and 9 p. m. on the 6th, and 7 a. m. on the 9th.

*c* Same height at 2 p. m. on the 25th, 2 p. m. on the 23d, 7 a. m. on the 27th, and 7 a. m. on the 28th.

*d* Same height at 7 a. m. on the 23d.

*e* Same height at 9 p. m. on the 19th.

Aneroid.

*g* Same height at 7 p. m. on the 2d.

*h* For the last 26 days of the month only.

*i* Same height at 9 p. m. on the 22d.

*j* Same height at 2 p. m. on the 20th.

*k* Same height at 2 p. m. and 9 p. m. on the 22d.

*l* Not corrected for temperature.

*m* Same height at 2 p. m. on the 8th, and 7 a. m. on the 13th.

*n* Same height at 7 a. m. on the 30th.

## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Chromedale.....	29.83	13	7 a. m.	30.36	19	2 p. m.	29.27
.....Easton.....	29.67	13	7 a. m.	30.18	19	2 p. m.	28.98
.....Gettysburg.....	29.44	8	7 a. m.	29.88	1	2 p. m.	28.84
.....Harrisburg, [Heisely].....	29.73	13	7 a. m.	30.21	19	2 p. m.	29.13
.....Harrisburg, [Hickok] (a).....	29.70	13	7 a. m.	30.19	19	2 p. m.	29.08
.....Lewisburg.....	29.50	13	7 a. m.	29.99	19	2 p. m.	28.87
.....Merrisville.....	30.06	8	7 a. m.	b 30.50	1	9 p. m.	c 29.55
.....Nazareth (d).....	29.39	13	7 a. m.	29.94	19	2 p. m.	28.70
.....Norristown.....	28.86	13	7 a. m.	30.49	19	2 p. m.	29.19
.....Philadelphia.....	29.84	13	7 a. m.	30.30	19	2 p. m.	29.23
.....Pittsburg, [Wilson].....	28.94	8	7 a. m.	e 29.29	1	2 p. m.	28.38
Delaware.....Newark, [Craven] (d).....	29.81	13	7 a. m.	30.28	1	9 p. m.	29.28
Maryland.....Annapolis.....	30.03	13	7 a. m.	30.53	1	2 p. m.	29.49
.....Frederick.....	29.74	13	7 a. m.	30.23	1	2 p. m.	29.15
.....Ridge (d).....	29.91	8	7 a. m.	30.41	1	9 p. m.	29.34
Dist. of Columbia.....Washington, [Smithsonian Inst.].....	30.04	13	7 a. m.	30.54	1	2 p. m.	29.44
Virginia.....Alexandria.....	30.01	13	7 a. m.	30.48	1	2 p. m.	29.42
.....Portsmouth.....	30.00	8	7 a. m.	f 30.45	1	9 p. m.	29.32
.....Rose Hill.....	29.96	8	7 a. m.	30.45	1	2 p. m.	29.34
.....Ruthven (d).....	29.70	8	7 a. m.	30.14	1	9 p. m.	29.05
North Carolina.....Chapel Hill.....	29.48	13	7 a. m.	29.79	1	9 p. m.	28.96
.....Goldsborough.....	30.01	13	7 a. m.	30.37	1	9 p. m.	29.39
.....Murfreesborough.....	29.06	13	7 a. m.	29.90	1	9 p. m.	28.89
.....Warrenton.....	29.59	13	7 a. m.	29.97	1	9 p. m.	28.98
South Carolina.....All Saints.....	30.03	22	9 p. m.	30.29	1	9 p. m.	29.53
.....Camden.....	29.93	22	7 a. m.	30.20	1	9 p. m.	29.41
.....Charleston.....	30.10	22	9 p. m.	g 30.32	1	9 p. m.	29.65
.....Charleston, [Dawson].....				30.43			29.75
.....Mount Pleasant (d).....	30.07	23	7 a. m.	30.32	1	9 p. m.	29.60
Georgia.....Athens (d).....	29.33	22	7 a. m.	29.58	18	9 p. m.	29.09
.....Savannah.....	30.08	23	7 a. m.	30.31	1	9 p. m.	29.68
.....Sparta.....	29.39	31	2 p. m.	29.60	1	2 p. m.	29.06
.....The Rock.....	29.34	7	2 p. m.	29.52	18	9 p. m.	29.13
Florida.....Atsena.....	29.86	23	7 a. m.	h 30.06	1	9 p. m.	29.02
.....Jacksonville.....	30.14	7	7 a. m.	30.35	1	2 p. m.	29.78
.....St. Augustine.....	30.11	2	9 p. m.	30.35	1	2 p. m.	29.28
.....Salt Ponds (i).....	29.72	7	2 p. m.	29.88	8	7 a. m.	29.57
.....Warrington.....	30.08	7	7 a. m.	30.27	5	7 a. m.	29.83
Alabama.....Auburn.....	29.40	7	7 a. m.	29.59	5	2 p. m.	29.11
.....Greensborough.....	29.69	12	7 a. m.	29.92	5	7 a. m.	29.38
Mississippi.....Columbus.....	29.90	12	7 a. m.	30.21	4	9 p. m.	29.61
.....Port Gibson.....	29.97	12	7 a. m.	30.26	4	9 p. m.	29.71
Louisiana.....New Orleans (d).....	30.34	7	7 a. m.	30.55	5	2 p. m.	?
Texas.....New Braunfels (j).....	28.95	12	7 a. m.	29.42	4	9 p. m.	28.62
.....Washington.....	29.27	12	7 a. m.	30.15	27	2 p. m.	29.05
Tennessee.....Glenwood.....	29.63	12	7 a. m.	30.07	20	2 p. m.	29.25
Kentucky.....Paris (d).....	29.23	12	7 a. m.	29.57	1	2 p. m.	28.83
.....Springdale (d).....	29.45	12	7 a. m.	29.82	20	2 p. m.	29.05
Ohio.....Cincinnati, [Harper].....	29.55	12	7 a. m.	29.85	1	7 a. m.	29.23
.....Cincinnati, [Hurt] (k).....	28.97	2	7 a. m.	29.39	6	2 p. m.	28.61
.....Cleveland (l).....	29.05	8	7 a. m.	29.35	1	2 p. m.	28.58
.....Hillsborough.....	28.88	12	2 p. m.	29.21	1	2 p. m.	28.45
.....Medina.....	28.76	22	7 a. m.	29.27	1	7 a. m.	28.28
.....Oberlin.....	29.15	22	7 a. m.	m 29.47	1	2 p. m.	28.42

a For the last 20 days of the month only.

b Same height at 2 p. m. on the 5th, and 7 a. m. and 2 p. m. on the 13th.

c Same height at 2 p. m. on the 19th.

d For changes from the usual hours of observation, &amp;c., see notes to

table of the thermometer for this month.

e Same height at 9 p. m. on the 12th.

f Same height at 7 a. m. on the 13th.

g Same height at 7 a. m. on the 31st.

h Same height at 7 a. m. on the 24th.

i For changes from the usual hours of observation, &amp;c., see notes to table of the thermometer for this month. Not corrected for temperature.

j Not corrected for temperature.

k Very incomplete.

l Aneroid.

m Same height at 7 a. m. on the 30th.



## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
Ohio . . . . . Urbana . . . . .	28.79	12	2 p. m.	1	2 p. m.
West Bedford . . . . .	28.26	2	2 p. m.	20	9 p. m.
Michigan . . . . . Battle Creek . . . . .	29.13	12	9 p. m.	1	7 a. m.
Copper Falls Mines . . . . .	28.65	25	2 p. m.	20	2 p. m.
Romeo . . . . .	29.01	30	7 a. m.	1	7 a. m.
Indiana . . . . . Cannelton (a) . . . . .	29.47	12	7 a. m.	20	9 p. m.
Evansville (b) . . . . .	29.40	12	2 p. m.	20	2 p. m.
Michigan City . . . . .	29.55	2	2 p. m.	20	2 p. m.
New Albany (c) . . . . .	29.61	12	2 p. m.	1	2 p. m.
New Harmony . . . . .	29.76	12	7 a. m.	20	2 p. m.
Richmond (e) . . . . .	29.03	30	7 a. m.	1	7 a. m.
Illinois . . . . . Batavia (f) . . . . .	29.62	30	9 p. m.	10	7 a. m.
Chicago . . . . .	29.44	12	7 a. m.	20	2 p. m.
Manchester (c) . . . . .	28.88	12	7 a. m.	20	2 p. m.
Missouri . . . . . St. Louis . . . . .	29.63	12	7 a. m.	20	2 p. m.
Wisconsin . . . . . Appleton . . . . .	29.04	2	7 a. m.	4	9 p. m.
Beloit . . . . .	29.23	2	7 a. m.	20	2 p. m.
Kenosha (g) . . . . .	29.49	2	7 a. m.	1	7 a. m.
Madison, [Sterling] . . . . .	29.05	2	7 a. m.	20	2 p. m.
Manitowoc (a) . . . . .	29.79	2	7 a. m.	20	2 p. m.
Milwaukee, [Winkler] . . . . .	29.33	2	7 a. m.	4	9 p. m.
Prescott . . . . .	29.25	11	7 a. m.	17	9 a. m.
Racine (a) . . . . .	29.24	12	7 a. m.	18	7 a. m.
Waukesha . . . . .	28.81	2	7 a. m.	20	2 p. m.
Iowa . . . . . Muscatine . . . . .	29.72	2	7 a. m.	20	7 a. m.
Utah . . . . . Great Salt Lake City (c) . . . . .	25.67	11	Sunrise	21	3 p. m.
California . . . . . Sacramento . . . . .	30.08	1	7 a. m.	26	9 a. m.
San Francisco (b) . . . . .	30.08	1	7 a. m.	26	9 p. m.
Mexico . . . . . Mirador (c) . . . . .	22.68				
West Indies . . . . . St. George's, Bermuda (k) . . . . .	29.98	13	9½ a. m.	2	3½ p. m.
Central America . . . . . Guatemala . . . . .	25.23		9 a. m.		3 p. m.
Azores . . . . . Horta, Fayal . . . . .	30.01	2	9 p. m.	14	2 p. m.

a Not corrected for temperature.

b Aneroid.

c For changes from the usual hours of observation, &amp;c., see notes to table of the thermometer for this month.

d Same height at 2 p. m. on the 12th.

e Incomplete.

f Observations taken at 7 a. m., 9 a. m., noon, 4 p. m., and 9 p. m. Aneroid.

g Observations taken at 7 a. m.

h Same height at 2 p. m. on the 20th.

i Same height at 7 a. m. on the 25th.

j Same height at 9 a. m. on the 11th.

k Observations taken at 9½ a. m. and 3½ p. m.

l Same height at 7 a. m. on the 3d.

## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.53	30	9 a. m.	29.96	15	9 a. m.	28.95
Montreal .....	29.82	30	7 a. m.	30.32	15	7 a. m.	29.15
St. John's (a) .....	29.71	5	7 a. m.	b 30.15	22	7 a. m.	c 29.30
St. Martin .....	29.69	30	9 p. m.	30.18	15	7 a. m.	28.95
Toronto (a) .....	29.53	8	10 p. m.	30.01	15	2 p. m.	28.94
Wolville .....	29.70	4	7 a. m.	30.30	23	2 p. m.	29.21
Maine .....	29.70	30	9 p. m.	30.43	15	7 a. m.	29.08
Gardiner .....	29.68	8	7 a. m.	30.20	14	9 p. m.	29.02
Portland .....	29.76	8	7 a. m.	30.34	17	2 p. m.	29.17
Steuben .....	29.51	8	7 a. m.	30.03	14	9 p. m.	28.77
New Hampshire .. Concord .....	29.48	8	7 a. m.	29.98	14	9 p. m.	28.88
Vermont .....	29.40	30	2 p. m.	30.10	14	7 a. m.	28.61
Norwich .....	29.21	30	9 p. m.	29.76	15	7 a. m.	28.52
St. Johnsbury (d) .....	29.61	8	7 a. m.	30.12	14	9 p. m.	28.98
Massachusetts .. Amherst .....	29.70	8	7 a. m.	30.24	14	9 p. m.	28.97
Bridgewater (a) .....	29.81	8	7 a. m.	30.35	14	9 p. m.	29.08
Cambridge .....	29.73	8	7 a. m.	30.28	14	9 p. m.	28.95
Lawrence .....	29.83	8	7 a. m.	30.32	14	2 p. m.	29.12
Nantucket .....	29.77	8	7 a. m.	30.27	14	2 p. m.	29.04
New Bedford .....	29.83	8	7 a. m.	30.40	11	7 a. m.	29.15
Newburyport (a) .....	29.82	30	7 a. m.	30.32	14	2 p. m.	29.24
Southwick (a) .....	29.75	30	9 p. m.	30.25	14	2 p. m.	29.18
Westfield .....	29.14	29	7 a. m.	29.77	14	9 p. m.	28.52
Williamstown .....	29.35	30	2 p. m.	29.91	14	2 p. m.	28.73
Worcester .....	29.64	30	10 p. m.	30.22	14	1 p. m.	28.97
Rhode Island .. Providence (a) .....	29.79	8	7 a. m.	30.30	14	2 p. m.	29.08
Connecticut .....	29.73	30	9 p. m.	30.24	14	2 p. m.	29.05
New London .....	29.23	30	9 p. m.	29.73	14	2 p. m.	28.51
Norwich .....	29.73	30	9 p. m.	30.26	14	2 p. m.	29.13
Pomfret .....	29.98	3	7 a. m.	30.40	20	2 p. m.	29.27
Wallingford .....	29.25	2	9 p. m.	29.68	15	7 a. m.	28.71
New York .....	28.45	7	7 a. m.	28.87	15	2 p. m.	27.94
Blackwell's Island .....	30.08	3	7 a. m.	e 30.55	14	9 p. m.	f 29.55
Buffalo .....	29.70	3	7 a. m.	30.21	20	2 p. m.	29.14
Cazenovia .....		30	2 p. m.	29.40	18	7 a. m.	28.42
Fishkill Landing .....	28.44	3	7 a. m.	28.82	15	2 p. m.	28.02
Flatbush .....	29.86	3	7 a. m.	30.37	20	2 p. m.	29.21
Lowville .....	29.17	30	2 p. m.	29.64	15	7 a. m.	28.58
McGrawville .....	28.76	9	7 a. m.	29.42	14	9 p. m.	28.26
New York city .....	29.14	30	2 p. m.	29.52	15	2 p. m.	28.64
Oswego (a) .....	29.37	3	7 a. m.	29.80	15	7 a. m.	28.15
Ovid .....	29.59	30	9 p. m.	30.11	21	7 a. m.	29.02
Penn Yan .....	29.41	3	2 p. m.	g 29.85	14	9 p. m.	28.80
Rochester .....	29.25	3	2 p. m.	29.76	6	2 p. m.	28.76
Sag Harbor .....	29.30	7	7 a. m.	29.75	14	9 p. m.	28.77
Saratoga (d) .....	29.67	7	7 a. m.	30.21	20	2 p. m.	29.06
Spencertown .....	29.70	3	7 a. m.	30.30	25	2 p. m.	29.24
Utica .....	29.85	3	2 p. m.	30.34	20	2 p. m.	29.29
New Jersey .....	29.81	3	7 a. m.	30.30	20	9 p. m.	29.20
Bloomfield .....	29.19	3	7 a. m.	i 29.88	21	7 a. m.	28.68
Burlington .....	28.71	3	7 a. m.	29.09	5	9 p. m.	28.38
Lambertville (a) .....	29.05	3	7 a. m.	29.56	6	7 a. m.	28.64
Newark (a) .....	29.73	3	7 a. m.	30.27	20	2 p. m.	29.12
Pennsylvania .. Berwick (a) .....	29.57	3	7 a. m.	30.06	20	2 p. m.	29.06
Cannonsburg .....	29.34	3	7 a. m.	29.85	6	7 a. m.	28.93
Carlisle .....	29.64	3	7 a. m.	30.15	21	7 a. m.	29.25
Chromedale .....	29.60	3	7 a. m.	30.12	6	7 a. m.	j 29.20
Easton .....							
Gettysburg .....							
Harrisburg, [Heisley] .....							
Harrisburg, [Hickok] .....							

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Same height at 7 a. m. on the 7th.

c Same height at 2 and 9 p. m. on the 22d, at 7 a. m., 2 p. m., and 9 p. m. on the 24th, at 7 a. m., 2 p. m., and 9 p. m. on the 25th.

d Aneroid.

e Same height at 2 p. m. on the 3d.

f Same height at 2 p. m. and 9 p. m. on the 20th.

g Same height at 7 a. m., 2 p. m., and 9 p. m. on the 30th.

h Not corrected for temperature.

i Same height at 2 p. m. on the 3d, at 7 a. m., 2 p. m., and 9 p. m. on the 30th.

j Same height at 7 a. m. on the 21st.



## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania ----- Lewisburg -----	29.43	3	7 a. m.	29.98	6	7 a. m.	28.99
----- Morrisville -----	29.95	3	7 a. m.	30.50	20	2 p. m.	29.37
----- Murrys ville -----	28.69	2	9 p. m.	29.08	15	7 a. m.	28.33
----- Nazareth -----	29.32	3	7 a. m.	<i>a</i> 29.77	20	2 p. m.	28.75
----- Norristown -----	29.78	3	7 a. m.	30.32	20	2 p. m.	29.19
----- Philadelphia -----	29.73	3	7 a. m.	30.24	20	2 p. m.	29.16
----- Pittsburg, [Wilson] -----	28.82	2	9 p. m.	29.24	5	9 p. m.	28.58
Delaware ----- Newark ( <i>b</i> ) -----	29.65	30	7 a. m.	30.14	20	2 p. m.	29.16
Maryland ----- Annapolis -----	29.92	3	7 a. m.	30.43	6	2 p. m.	29.51
----- Frederick city -----	29.63	3	7 a. m.	30.17	6	7 a. m.	29.18
----- Ridge ( <i>b</i> ) -----	29.84	3	7 a. m.	<i>c</i> 30.33	15	2 p. m.	29.40
Dist of Columbia. Washington, [Smithsonian Institut'n] -----	29.93	3	7 a. m.	30.47	15	2 p. m.	29.54
Virginia ----- Alexandria -----	29.91	3	7 a. m.	30.41	21	7 a. m.	29.53
----- Crack Whip -----	28.23	3	7 a. m.	28.60	6	7 a. m.	27.86
----- Portsmouth -----	29.90	3	7 a. m.	30.44	6	2 p. m.	29.36
----- Rose Hill -----	29.85	3	7 a. m.	30.37	15	2 p. m.	29.37
----- Ruthven -----	29.59	3	7 a. m.	30.07	15	2 p. m.	29.17
North Carolina. ----- Chapel Hill -----	29.38	3	7 a. m.	29.76	21	9 p. m.	29.05
----- Goldsborough -----	29.88	3	7 a. m.	30.36	21	2 p. m.	29.49
----- Murfreesborough -----	29.33	3	7 a. m.	29.74	27	2 p. m.	28.99
----- Warrenton -----	29.49	3	7 a. m.	29.97	6	2 p. m.	<i>d</i> 29.12
South Carolina. ----- All Saints -----	29.91	3	7 a. m.	30.31	21	2 p. m.	29.44
----- Camden -----	29.82	3	7 a. m.	30.25	21	2 p. m.	29.39
----- Charleston -----	29.98	3	7 a. m.	30.33	21	2 p. m.	29.56
----- Charleston, [Dawson] -----				30.38			29.66
Georgia ----- Athens -----	29.20	3	7 a. m.	29.58	21	2 p. m.	28.80
----- Savannah -----	29.97	3	7 a. m.	30.27	21	2 p. m.	29.58
----- The Rock -----	29.22	3	7 a. m.	29.49	21	2 p. m.	<i>e</i> 28.93
Florida ----- Atsena -----	29.77	8	2 p. m.	<i>f</i> 29.96	12	9 p. m.	29.45
----- Jacksonville -----	30.04	7	9 p. m.	30.28	12	9 p. m.	29.70
----- St. Augustine -----	30.01	8	7 a. m.	30.27	12	9 p. m.	29.64
----- Salt Ponds ( <i>g</i> ) -----	29.66	14	2 p. m.	<i>h</i> 29.77	13	7 a. m.	29.48
Alabama ----- Auburn -----	29.29	3	7 a. m.	29.52	19	9 p. m.	29.04
----- Greensborough -----	29.59	3	7 a. m.	29.80	18	2 p. m.	29.31
Mississippi ----- Columbus -----	29.78	3	7 a. m.	30.03	5	2 p. m.	29.45
----- Port Gibson -----	29.88	6	7 a. m.	30.12	18	7 a. m.	29.62
Louisiana ----- New Orleans ( <i>b</i> ) -----	30.25	14	7 a. m.	30.55	5	2 p. m.	<i>i</i>
Texas ----- New Braufels ( <i>g</i> ) -----	28.87	14	7 a. m.	29.28	17	9 p. m.	28.47
----- Washington -----	29.22	7	7 a. m.	29.96	23	2 p. m.	28.99
Tennessee ----- Glenwood -----	29.52	3	7 a. m.	29.77	18	7 a. m.	29.11
Kentucky ----- Millersburg -----	29.35	12	7 a. m.	<i>i</i> 29.57	5	2 p. m.	29.10
----- Paris -----	29.11	2	9 p. m.	29.45	18	7 a. m.	28.77
----- Springdale ( <i>b</i> ) -----	29.35	2	2 p. m.	29.64	18	7 a. m.	28.96
Ohio ----- Cincinnati, [Harper] -----	29.45	2	2 p. m.	29.78	18	7 a. m.	29.10
----- Cincinnati, [Hurt] -----	28.88	2	7 a. m.	29.46	7	2 p. m.	28.52
----- Cleveland ( <i>j</i> ) -----	28.95	2	9 p. m.	29.34	5	2 p. m.	<i>k</i> 28.64
----- College Hill -----	29.02	3	7 a. m.	29.36	18	7 a. m.	28.69
----- Hillsborough -----	28.78	2	9 p. m.	29.13	5	2 p. m.	<i>l</i> 28.44
----- Medina -----	28.66	2	9 p. m.	29.09	5	7 a. m.	<i>d</i> 28.25
----- Oberlin -----	29.03	2	9 p. m.	29.47	15	7 a. m.	28.56
----- Urbana -----	28.66	2	2 p. m.	29.07	15	7 a. m.	<i>m</i> 28.43
Michigan ----- Battle Creek -----	29.03	2	7 a. m.	29.44	26	2 p. m.	28.73
----- Copper Falls Mines -----	28.64	1	2 p. m.	<i>n</i> 29.10	16	7 a. m.	28.15
Indiana ----- Cannelton ( <i>g</i> ) -----	29.32	3	7 a. m.	<i>o</i> 29.62	18	7 a. m.	29.03
----- Evansville ( <i>j</i> ) -----	29.31	2	2 p. m.	29.57	18	7 a. m.	28.95
----- Michigan City -----	29.22	2	7 a. m.	29.59	26	2 p. m.	28.91

*a* Same height at 9 p. m. on the 30th.*b* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.*c* Same height at 2 p. m. on the 3d.*d* Same height at 3 p. m. on the 15th.*e* Same height at 9 p. m. on the 21st.*f* Same height at 9 p. m. on the 8th.*g* Not corrected for temperature.*h* Same height at 2 p. m. on the 15th and 25th.*i* Same height at 2 p. m. on the 12th.*j* Aneroid.*k* Same height at 7 a. m. on the 15th.*l* Same height at 7 a. m. on the 18th.*m* Same height at 2 p. m. on the 26th.*n* Same height at 2 p. m. on the 22d and 9 p. m. on the 1st.*o* Same height at 9 p. m. on the 2d.

## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Indiana ----- New Albany -----	29.49	2	7 a. m.	29.80	18	7 a. m.	29.06
----- New Harmony -----	29.64	2	7 a. m.	29.95	18	7 a. m.	29.25
----- Richmond -----	28.90	2	2 p. m.	29.24	5	2 p. m.	28.49
Illinois ----- Batavia (a) -----	29.60	2	4 p. m.	29.95	16	4 p. m.	29.32
----- Chicago -----	29.32	2	7 a. m.	29.73	4	9 p. m.	28.98
----- Manchester (b) -----	28.77	2	7 a. m.	29.07	4	9 p. m.	28.44
----- Upper Alton -----	29.45	2	2 p. m.	29.91	7	2 p. m.	29.06
----- West Urbana -----	29.20	2	7 a. m.	29.54	4	9 p. m.	28.91
Missouri ----- Cape Girardeau (b) -----	29.66	2	Sunrise.	c 29.88	17	9 p. m.	29.22
----- Palmyra (b) -----	29.36	2	Sunrise.	c 29.71	7	3 p. m.	29.00
----- St. Louis -----	29.53	2	7 a. m.	29.86	4	9 p. m.	29.19
Wisconsin ----- Appleton -----	28.96	2	7 a. m.	29.36	4	9 p. m.	28.56
----- Beloit -----	29.16	2	7 a. m.	29.51	4	9 p. m.	28.78
----- Kenosha (d) -----	29.43	2	7 a. m.	29.80	4	9 p. m.	29.07
----- Madison, [Schue] -----	29.27	2	2 p. m.	29.58	4	9 p. m.	28.90
----- Madison, [Sterling] -----	28.95	2	7 a. m.	29.35	4	9 p. m.	28.55
----- Manitowoc (e) -----	29.70	2	7 a. m.	30.11	4	9 p. m.	29.33
----- Milwaukee, [Winkler] -----	29.23	2	7 a. m.	29.65	4	9 p. m.	28.84
----- Racine (e) -----	29.16	2	2 p. m.	f 29.51	4	9 p. m.	28.80
----- Waukesha, [Bean] -----	29.05	10	7 a. m.	29.61	2	2 p. m.	28.34
Iowa ----- Muscatine -----	29.50	2	7 a. m.	29.87	4	2 p. m.	29.13
Utah ----- Great Salt Lake City (b) -----	25.65	5	3 p. m.	26.02	16	9 p. m.	25.25
California ----- Sacramento -----	29.98	1	7 a. m.	30.20	30	9 p. m.	29.80
----- San Francisco (g) -----	29.99	1	7 a. m.	30.20	25	7 a. m.	29.79
Mexico ----- Mirador (b) -----	22.64						
West Indies ----- St. George's, Bermuda (h) -----	29.86	4	9½ a. m.	30.15	20	9½ p. m.	29.46
Central America ----- Guatemala -----	25.22		10 p. m.	25.34		3 p. m.	25.10
South America ----- Catherine Sophia, Surinam (b & g) -----	29.62	13	2 p. m.	29.69	8	6 p. m.	29.55
Azores ----- Horta, Fayal -----	29.97	11	9 p. m.	30.33	3	7 a. m.	29.43

a Observations taken at 7 a. m., 9 a. m., noon, 4 p. m., and 9 p. m.  
Aneroid.

b For changes from the usual hours of observation, &c., see notes to  
table of the thermometer for this month.

Same height at 9 a. m. on the 2d.

d Observations taken at 7 a. m.

e Not corrected for temperature.

f Same height at 9 p. m. on the 1st.

g Aneroid.

h Observations taken at 9½ a. m. and 3½ p. m.



## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.58	12	9 a. m.	29.87	15	9 a. m.	29.22
Montreal .....	29.84	1	7 a. m.	30.26	10	7 a. m.	29.48
St. Martin .....	29.60	1	7 a. m.	30.02	10	7 a. m.	29.32
St. John's (a) .....	29.61	2	7 a. m.	30.00	11	2 p. m.	<i>b</i> 29.21
Toronto (a) .....	29.53	12	6 a. m.	29.86	5	6 a. m.	29.22
Windsor .....	29.91	1	7 a. m.	30.48	11	7 a. m.	29.48
Wolfville .....	29.71	1	7 a. m.	30.41	10	9 p. m.	29.18
Maine .....	29.78	1	7 a. m.	30.24	10	2 p. m.	<i>c</i> 29.41
Gardiner .....	29.77	1	7 a. m.	30.24	10	9 p. m.	29.40
Portland .....	29.85	1	2 p. m.	30.40	10	9 p. m.	<i>d</i> 29.52
Steuben .....	29.77	1	7 a. m.	30.06	10	2 p. m.	29.20
New Hampshire .. Concord .....	29.60	1	7 a. m.	29.99	10	2 p. m.	29.39
Shelburne .....	29.73	18	7 a. m.	29.87	10	2 p. m.	29.20
Vermont .....	29.57	18	7 a. m.	30.21	29	2 p. m.	29.28
Norwich (e) .....	29.72	1	7 a. m.	29.72	10	2 p. m.	28.86
Shelburn .....	29.27	1	7 a. m.	30.19	10	2 p. m.	29.31
St. Johnsbury (f) .....	29.70	1	7 a. m.	30.31	10	9 p. m.	29.37
Massachusetts .. Amherst .....	29.72	1	7 a. m.	30.42	10	2 p. m.	29.48
Bridgewater (a) .....	29.89	1	7 a. m.	30.41	10	2 p. m.	29.41
Cambridge .....	29.82	1	7 a. m.	30.41	15	9 p. m.	29.53
Lawrence .....	29.92	1	7 a. m.	30.37	15	9 p. m.	29.51
Nantucket .....	29.85	1	7 a. m.	30.44	10	2 p. m.	29.49
New Bedford .....	29.92	1	7 a. m.	30.40	10	2 p. m.	29.63
Newburyport (a) .....	29.91	1	7 a. m.	30.27	10	2 p. m.	<i>g</i> 29.45
Southwick (a) .....	29.78	1	7 a. m.	29.89	21	2 p. m.	29.07
Westfield .....	29.39	1	7 a. m.	30.24	20	1 p. m.	29.38
Worcester .....	29.74	1	6 a. m.	30.37	20	2 p. m.	29.48
Rhode Island .. Providence (a) .....	29.86	1	7 a. m.	30.28	15	9 p. m.	<i>i</i> 29.48
Connecticut .. New London (e) .....	29.80	1	7 a. m.	29.79	20	2 p. m.	28.95
Norwich .....	29.80	1	7 a. m.	30.32	20	2 p. m.	29.42
Pomfret .....	29.80	1	7 a. m.	30.41	20	7 a. m.	29.41
Wallingford .....	29.91	1	7 a. m.	?	?	?	?
New York .. Blackwell's Island .....	29.29	?	?	28.81	15	2 p. m.	28.11
Buffalo .....	28.41	1	7 a. m.	30.60	20	7 a. m.	<i>k</i> 29.80
Cazenovia .....	30.18	1	7 a. m.	30.23	15	2 p. m.	29.36
Fishkill Landing (j) .....	29.73	1	7 a. m.	29.35	15	2 p. m.	28.70
Flatbush .....	28.49	8	2 p. m.	28.79	15	2 p. m.	28.17
Lowville .....	29.89	1	7 a. m.	30.39	15	2 p. m.	29.48
McGrawville .....	29.20	12	7 a. m.	29.54	15	2 p. m.	28.80
New York city .....	28.81	1	7 a. m.	29.10	15	2 p. m.	28.42
Oswego .....	29.19	8	2 p. m.	29.47	15	2 p. m.	28.80
Ovid .....	29.60	27	2 p. m.	29.78	1	7 a. m.	29.37
Penn Yan (a) .....	29.65	1	2 p. m.	30.12	20	2 p. m.	29.25
Rochester .....	29.47	1	7 a. m.	29.99	6	2 p. m.	29.12
Sag Harbor .....	29.24	1	7 a. m.	29.80	15	9 p. m.	28.87
Saratoga (f) .....	29.37	1	7 a. m.	29.74	16	2 p. m.	28.96
Spencertown .....	29.80	1	7 a. m.	30.20	5	2 p. m.	29.48
Utica .....	29.74	1	7 a. m.	30.19	15	2 p. m.	29.35
Waterford .....	29.80	1	7 a. m.	30.27	15	9 p. m.	29.45
New Jersey .. Bloomfield .....	29.74	1	7 a. m.	30.27	20	7 a. m.	29.53
Burlington .....	29.89	1	2 p. m.	30.34	20	7 a. m.	29.52
Lambertville (a) .....	29.85	1	7 a. m.	29.58	15	2 p. m.	28.88
Newark (a) .....	29.23	1	7 a. m.	28.92	4	9 p. m.	28.26
Pennsylvania .. Berwick (j) .....	28.70	13	7 a. m.	29.46	15	2 p. m.	28.69
Cannonsburg .....	29.07	1	7 a. m.	30.23	20	7 a. m.	29.38
Carlisle .....	29.76	1	7 a. m.	30.05	15	2 p. m.	29.22
Chromedale .....	29.58	1	7 a. m.				
Easton .....							

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height at 9 p. m. on the 11th.

*c* Same height at 9 p. m. on the 10th.

*d* Same height at 7 a. m. on the 30th.

*e* Incomplete.

*f* Aneroid.

*g* Same height at 2 p. m. on the 15th.

*h* Same height at 1 p. m. on the 1st.

*i* Same height at 9 p. m. on the 20th.

*j* Not corrected for temperature.

*k* Same height at 2 p. m. on the 20th.

*l* Same height at 7 a. m. on the 12th.

*m* Same height at 7 a. m. on the 9th.

## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania	Gettysburg	29.36	1	7 a. m.	29.76	15	2 p. m.	28.98
	Harrisburg, [Heisely]	29.65	1	7 a. m.	30.08	15	2 p. m.	29.30
	Harrisburg, [Hickok]	29.60	1	7 a. m.	30.04	15	2 p. m.	29.24
	Lewisburg	29.45	1	7 a. m.	29.85	15	2 p. m.	29.06
	Morrisville	29.95	1	7 a. m.	30.46	24	2 p. m.	29.40
	Murrysville	28.69	8	7 a. m.	<i>a</i> 28.93	4	9 p. m.	28.33
	Nazareth ( <i>b</i> )	29.37	1	7 a. m.	29.80	15	2 p. m.	28.99
	Norristown	29.81	7	7 a. m.	30.30	15	2 p. m.	29.42
	Philadelphia	29.83	1	7 a. m.	30.19	15	2 p. m.	<i>c</i> 29.40
	Pittsburg, [Wilson]	28.91	17	2 p. m.	29.13	4	9 p. m.	28.50
Delaware	Newark	29.73	1	7 a. m.	30.17	16	7 a. m.	29.11
Maryland	Annapolis	29.92	1	7 a. m.	30.33	15	2 p. m.	29.55
	Frederick	29.64	1	7 a. m.	30.05	15	2 p. m.	29.25
	Ridge ( <i>b</i> )	29.83	1	7 a. m.	30.22	15	1 p. m.	29.42
Dist. of Columbia	Washington, [Smithsonian Institution]	29.93	1	7 a. m.	30.36	15	2 p. m.	29.51
Virginia	Alexandria	29.90	1	7 a. m.	30.28	15	2 p. m.	29.54
	Crack Whip	28.30	1	7 a. m.	28.55	4	9 p. m.	27.97
	Portsmouth	29.90	1	7 a. m.	30.27	15	2 p. m.	29.52
	Rose Hill	29.86	1	7 a. m.	30.24	15	2 p. m.	29.39
	Ruthven	29.59	1	7 a. m.	30.02	15	2 p. m.	29.22
North Carolina	Chapel Hill	29.39	1	7 a. m.	29.63	15	2 p. m.	29.11
	Murfreesborough	29.22	13	7 a. m.	29.60	15	2 p. m.	28.83
	Warrenton	29.49	1	7 a. m.	29.82	15	2 p. m.	29.19
South Carolina	All Saints	29.89	9	7 a. m.	<i>e</i> 30.11	19	7 a. m.	29.63
	Camden	29.79	9	7 a. m.	30.06	15	2 p. m.	29.57
	Charleston, [Johnson]	29.98	1	7 a. m.	30.19	19	2 p. m.	29.69
	Charleston, [Dawson]				30.29			29.88
Georgia	Athens	29.19	1	7 a. m.	29.46	4	7 a. m.	28.85
	Savannah	29.96	8	9 p. m.	30.15	18	9 p. m.	29.70
	The Rock	29.17	9	7 a. m.	29.36	4	7 a. m.	28.86
Florida	Atsena	29.81	24	7 a. m.	29.93	18	9 p. m.	29.61
	Jacksonville	30.02	24	7 a. m.	30.17	18	2 p. m.	29.79
	St. Augustine	30.07	24	7 a. m.	30.24	19	2 p. m.	29.87
	Salt Ponds ( <i>d</i> )	29.65	13	2 p. m.	29.77	4	7 a. m.	29.57
	Warrington	29.93	9	7 a. m.	<i>f</i> 30.11	3	9 p. m.	29.58
Alabama	Auburn	29.26	9	7 a. m.	29.51	3	9 p. m.	29.00
	Greensborough	29.54	9	7 a. m.	29.75	3	9 p. m.	29.14
Mississippi	Columbus	29.71	20	7 a. m.	29.98	3	9 p. m.	29.41
Texas	New Braunfels ( <i>d</i> )	28.70	19	7 a. m.	29.02	29	9 p. m.	<i>g</i> 28.49
	Washington	29.17	30	7 a. m.	29.39	21	7 a. m.	28.95
Tennessee	Glenwood	29.45	20	7 a. m.	29.69	4	7 a. m.	28.94
Kentucky	Millersburg	29.21	9	2 p. m.	29.38	5	2 p. m.	28.80
	Paris	29.06	8	7 a. m.	29.30	4	2 p. m.	28.58
	Springdale ( <i>b</i> )	29.29	8	7 a. m.	29.55	3	2 p. m.	28.84
	Cincinnati, [Harper]	29.41	12	7 a. m.	29.65	4	2 p. m.	28.91
Ohio	Cincinnati, [Hurt]	28.79	12	7 a. m.	29.27	14	9 p. m.	28.26
	Cleveland ( <i>h</i> )	28.94	12	7 a. m.	29.20	4	9 p. m.	28.60
	College Hill	29.00	12	7 a. m.	29.22	4	2 p. m.	28.48
	Hillsborough	28.76	8	7 a. m.	28.99	4	2 p. m.	28.30
	Medina	28.67	12	7 a. m.	28.96	4	2 p. m.	28.30
	Oberlin	29.02	12	7 a. m.	29.31	4	2 p. m.	28.61
	Urbana	28.64	12	9 p. m.	28.92	4	2 p. m.	28.19
	Battle Creek	29.02	11	7 a. m.	29.34	4	9 p. m.	28.61
	Copper Falls Mines	28.68	19	9 p. m.	29.13	9	2 p. m.	28.23
	Evansville ( <i>h</i> )	29.29	7	2 p. m.	<i>i</i> 29.47	4	7 a. m.	28.79
Indiana	Michigan City	29.19	17	7 a. m.	29.49	14	2 p. m.	28.84

*a* Same height at 7 a. m. on the 13th.*b* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.*c* Same height at 7 a. m. on the 20th.*d* Not corrected for temperature.*e* Same height at 2 p. m. on the 13th.*f* Same height at 2 p. m. on the 9th.*g* Same height at 2 and 9 p. m. on the 30th.*h* Aneroid.*i* Same height at 9 p. m. on the 20th.



## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Indiana -----							
New Albany -----	29.44	11	7 a. m.	29.67	4	2 p. m.	28.81
New Harmony -----	29.56	20	7 a. m.	29.81	4	2 p. m.	29.03
Richmond -----	28.87	12	7 a. m.	29.10	4	2 p. m.	28.35
Illinois -----							
Batavia ( <i>a</i> ) -----	29.67	20	12 m.	30.00	30	9 p. m.	<i>b</i> 29.40
Chicago -----	29.08	17	7 a. m.	<i>c</i> 29.65	11	7 a. m.	28.89
Manchester ( <i>d</i> ) -----	28.71	20	7 a. m.	29.03	30	1 p. m.	28.36
Upper Alton -----	29.37	20	7 a. m.	29.69	30	2 p. m.	28.99
West Urbana -----	29.15	19	9 p. m.	29.43	4	2 p. m.	28.75
Missouri -----							
Cape Girardeau ( <i>d</i> ) -----	29.49	22	9 a. m.	29.71	12	3 p. m.	29.28
Palmyra ( <i>d</i> ) -----	29.41	20	9 a. m.	29.66	13	9 p. m.	28.98
St. Joseph ( <i>d</i> ) -----	29.00	21	9 a. m.	29.35	31	Sunrise.	28.54
St. Louis -----	29.44	20	2 p. m.	29.72	30	2 p. m.	29.02
Wisconsin -----							
Appleton -----	28.92	17	7 a. m.	29.34	9	2 p. m.	28.60
Beloit -----	29.07	17	7 a. m.	29.43	14	7 a. m.	28.70
Kenosha, ( <i>e</i> ) -----	29.41	16	7 a. m.	29.74	13	7 a. m.	29.03
Madison, [Schue] ( <i>f</i> ) -----	29.25	17	7 a. m.	<i>g</i> 29.55	31	7 a. m.	28.90
Madison, [Sterling] -----	28.91	16	7 a. m.	29.34	14	7 a. m.	28.50
Manitowoc ( <i>f</i> ) -----	29.67	17	7 a. m.	30.05	14	7 a. m.	<i>h</i> 29.31
Milwaukee, [Winkler] -----	29.21	11	7 a. m.	29.61	26	2 p. m.	28.82
Racine ( <i>f</i> ) -----	29.09	10	9 p. m.	29.46	14	7 a. m.	28.75
Waukesha, [Bean] ( <i>i</i> ) -----	29.08	11	2 p. m.	<i>j</i> 29.47	1	7 a. m.	28.35
Iowa -----							
Fairfield -----	29.08	1	7 a. m.	29.45	30	2 p. m.	28.62
Mount Vernon -----	28.39	17	7 a. m.	28.96	25	7 a. m.	27.91
Muscatine -----	29.44	16	2 p. m.	<i>k</i> 29.75	14	2 p. m.	29.06
Utah -----							
Great Salt Lake City ( <i>d</i> ) -----	25.62	25	9 a. m.	25.90	7	Sunrise.	25.15
California -----							
Sacramento -----	29.94	21	2 p. m.	30.14	5	2 p. m.	29.71
San Francisco ( <i>l</i> ) -----	29.98	21	2 p. m.	30.19	25	9 p. m.	29.82
Mexico -----							
Mirador ( <i>d</i> ) -----	22.68						
Vera Cruz ( <i>d</i> ) -----	29.82	21	10 p. m.	30.02	1	7 p. m.	29.56
West Indies -----							
St. George's, Bermuda ( <i>m</i> ) -----	29.93	26	9½ p. m.	30.09			
Central America -----							
Guatemala -----	25.21		10 p. m.	25.29		3 p. m.	25.08
South America -----							
Catharina Sophia, Surinam ( <i>d</i> & <i>l</i> ) -----	29.64	12	6 a. m.	<i>n</i> 29.71	5	2 p. m.	29.54
Azores -----							
Horta, Fayal -----	29.85	17	9 p. m.	30.11	4	7 a. m.	29.56

*a* Observations taken at 7 and 9 a. m., noon, and 4 and 9 p. m. Aneroid.  
*b* Same height at 7 a. m., 9 a. m., 12 m., and 4 and 9 p. m. on the 31st.  
*c* Same height at 7 a. m. on the 18th.  
*d* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.  
*e* Observations taken at 7 a. m. and 9 p. m.  
*f* Not corrected for temperature.  
*g* Same height at 2 p. m. on the 20th and 21st.

*h* Same height at 7 a. m. on the 27th.  
*i* Observations taken at 7 a. m. and 2 p. m.  
*j* Same height at 7 a. m. on the 20th.  
*k* Same height at 9 p. m. on the 19th, and 7 a. m. on the 20th.  
*l* Aneroid.  
*m* Same height at 3½ a. m. on the 27th.  
*n* Same height at 6 a. m. and 2 p. m. on the 13th.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.46	25	9 a. m.	29.74	11	9 a. m.	29.03
Montreal .....	29.71	16	7 a. m.	30.44	12	7 a. m.	29.16
St. John's (a) .....	29.29	20	2 p. m.	29.77	15	2 p. m.	28.90
St. Martin .....	29.57	28	7 a. m.	29.83	11	9 p. m.	28.94
Toronto (a) .....	29.43	15	6 a. m.	<i>b</i> 29.69	11	2 p. m.	28.97
Windsor .....	29.72	19	9 p. m.	30.09	12	2 p. m.	29.37
Wolfville .....	29.55	19	9 p. m.	30.02	12	2 p. m.	29.08
Maine .....							
Gardiner .....	29.62	17	9 p. m.	29.87	12	7 a. m.	29.14
Portland .....	29.64	17	9 p. m.	29.89	12	7 a. m.	29.10
Steuben .....	29.70	18	7 a. m.	<i>c</i> 30.00	12	7 a. m.	29.20
New Hampshire .. Concord .....	29.42	9	7 a. m.	29.65	12	7 a. m.	28.88
Shelburne .....	29.61	10	7 a. m.	29.85	12	7 a. m.	29.12
Vermont .....							
Norwich .....	29.47	16	7 a. m.	29.68	11	9 p. m.	28.97
Shelburn .....	29.50	16	2 p. m.	29.75	11	9 p. m.	28.80
St. Johnsbury (d) .....	29.12	20	2 p. m.	29.37	12	7 a. m.	28.57
Massachusetts .....							
Amherst .....	29.58	10	2 p. m.	29.86	11	9 p. m.	29.03
Cambridge .....	29.76	10	7 a. m.	30.01	12	7 a. m.	29.28
Lawrence .....	29.69	9	2 p. m.	29.98	12	7 a. m.	29.14
Nantucket .....	29.80	10	2 p. m.	30.02	11	9 p. m.	29.36
New Bedford .....	29.73	9	7 a. m.	<i>e</i> 29.94	11	9 p. m.	29.26
Newburyport .....	29.80	10	2 p. m.	30.04	11	9 p. m.	29.27
Westfield .....	29.70	9	7 a. m.	<i>f</i> 29.89	11	2 p. m.	29.23
Williamstown .....	29.08	9	7 a. m.	29.30	11	9 p. m.	28.58
Worcester .....	29.28	8	2 p. m.	29.50	22	2 p. m.	29.03
Rhode Island .. Providence (a) .....	29.59	8	10 p. m.	<i>g</i> 29.81	11	10 p. m.	29.09
Connecticut .. New London (h) .....	29.74	8	9 p. m.	30.18	11	9 p. m.	29.23
Norwich .....	29.69	10	9 p. m.	29.92	11	9 p. m.	29.20
Pomfret .....	29.16	15	2 p. m.	29.42	11	9 p. m.	28.69
Wallingford .....	29.70	9	7 a. m.	<i>e</i> 29.91	11	9 p. m.	29.16
New York .....							
Blackwell's Island .....	29.82	15	7 a. m.	30.05	11	2 p. m.	29.33
Cazenovia .....	28.39	15	7 a. m.	<i>i</i> 28.63	11	9 p. m.	27.87
Flatbush .....	29.63	9	9 p. m.	29.87	11	2 p. m.	29.18
Lowville .....		15	9 p. m.	29.28	11	9 p. m.	28.36
McGrawville .....	28.41	15	2 p. m.	28.59	11	2 p. m.	27.97
New York city .....	29.85	24	7 a. m.	29.97	11	9 p. m.	29.33
Oswego .....	29.10	15	7 a. m.	29.46	11	9 p. m.	28.53
Ovid .....	28.71	24	7 a. m.	28.95	11	2 p. m.	28.14
Penn Yan .....	29.11	25	Sunset.	29.39	11	2 p. m.	28.57
Rochester .....	29.27	24	7 a. m.	29.52	11	2 p. m.	28.67
Sag Harbor .....	29.53	8	9 p. m.	29.71	11	7 a. m.	29.28
Saratoga (d) .....	29.40	28	9 p. m.	29.60	11	2 p. m.	<i>j</i> 28.80
Spencertown .....	29.12	15	2 p. m.	29.32	11	9 p. m.	28.54
Utica .....	29.24	15	7 a. m.	29.48	11	9 p. m.	28.66
Waterford .....	29.66	9	7 a. m.	29.87	11	9 p. m.	29.09
New Jersey .....							
Bloomfield .....	29.63	15	7 a. m.	29.85	11	9 p. m.	29.11
Burlington .....	29.63	15	7 a. m.	29.84	11	2 p. m.	29.19
Lambertville (a) .....	29.81	15	7 a. m.	<i>k</i> 29.97	11	2 p. m.	29.35
Newark (a) .....	29.74	15	7 a. m.	29.97	11	9 p. m.	29.33
Pennsylvania .....							
Berwick .....	29.10	24	7 a. m.	29.32	11	2 p. m.	28.60
Cannonsburg .....	28.64	24	7 a. m.	<i>l</i> 28.89	7	2 p. m.	28.03
Carlisle .....	29.00	24	2 p. m.	<i>m</i> 29.29	11	2 p. m.	28.55
Chromedale .....	29.67	24	7 a. m.	29.90	11	2 p. m.	29.17
Easton .....	29.48	20	7 a. m.	29.68	11	2 p. m.	29.00
Gettysburg .....	29.27	24	7 a. m.	29.54	11	2 p. m.	28.78
Harrisburg, [Heisely] .....	29.56	24	7 a. m.	29.81	11	2 p. m.	29.09
Harrisburg, [Hickok] .....	29.51	24	7 a. m.	29.79	11	2 p. m.	29.01

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height at 6 a. m. on the 24th.

*c* Same height at 2 p. m. on the 18th.

*d* Aneroid.

*e* Same height at 2 p. m. on the 9th.

*f* Same height at 9 p. m. on the 8th and 9th.

*g* Same height at 6 a. m. and 1 p. m. on the 9th.

*h* Incomplete.

*i* Same height at 7 a. m. on the 24th.

*j* Same height at 9 p. m. on the 11th.

*k* Same height at 7 a. m. on the 16th.

*l* Same height at 7 a. m. on the 25th.

*m* Same height at 9 p. m. on the 24th.



## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania — Lewisburg .....	29.36	24	7 a. m.	29.62	11	2 p. m.	28.80
Morrisville .....	29.85	24	7 a. m.	30.06	11	2 p. m.	29.35
Murrysville .....	28.63	24	7 a. m.	28.89	11	7 a. m.	28.20
Nazareth (a) .....	29.23	15	7 a. m.	29.45	11	2 p. m.	28.73
Norristown .....	29.72	15	7 a. m.	30.07	11	2 p. m.	29.16
Philadelphia .....	29.81	24	2 p. m.	29.89	11	2 p. m.	29.18
Pittsburg, [Wilson] .....	28.79	24	7 a. m.	<i>b</i> 29.03	11	7 a. m.	28.36
Delaware — Newark .....	29.64	21	9 p. m.	<i>c</i> 29.86	11	2 p. m.	29.12
Maryland — Annapolis .....	29.84	24	7 a. m.	30.13	11	2 p. m.	29.38
Frederick .....	29.66	24	7 a. m.	29.85	11	2 p. m.	29.11
Ridge (a) .....	29.75	24	2 p. m.	29.99	11	2 p. m.	29.32
Dist. of Columbia — Washington, [Smithsonian Institution] .....	29.84	25	7 a. m.	30.07	11	2 p. m.	29.38
Virginia — Alexandria .....	29.81	24	7 a. m.	30.09	11	2 p. m.	29.38
Berryville .....	29.27	24	7 a. m.	29.55	11	7 a. m.	28.84
Crack Whip .....	28.28	24	7 a. m.	28.49	11	2 p. m.	27.89
Portsmouth .....	29.86	24	7 a. m.	<i>d</i> 30.07	11	2 p. m.	29.45
Rose Hill .....	29.78	24	7 a. m.	30.04	11	2 p. m.	29.35
Ruthven (a) .....	29.55	24	7 a. m.	29.75	29	2 p. m.	<i>e</i> 29.36
North Carolina — Chapel Hill .....	29.34	24	9 p. m.	29.53	11	9 p. m.	29.09
Murfreesborough .....	29.04	24	7 a. m.	29.31	11	2 p. m.	28.75
Warrenton .....	29.43	25	7 a. m.	29.65	11	2 p. m.	29.11
South Carolina — All Saints .....	29.88	24	2 p. m.	30.03	11	2 p. m.	29.59
Camden .....	29.77	24	7 a. m.	29.96	11	2 p. m.	29.47
Charleston .....	29.97	24	9 p. m.	30.11	11	2 p. m.	29.70
Charleston, [Dawson] .....				30.25			29.83
Georgia — Athens .....	29.19	15	7 a. m.	29.36	11	2 p. m.	28.96
Savannah .....	29.95	14	7 a. m.	30.10	11	2 p. m.	29.65
The Rock .....	29.18	23	7 a. m.	29.30	11	2 p. m.	28.96
Florida — Jacksonville .....	30.01	14	7 a. m.	30.21	11	2 p. m.	29.76
St. Augustine .....	30.08	14	7 a. m.	30.26	11	2 p. m.	29.84
Salt Ponds (f) .....	29.70	14	2 p. m.	29.81	3	7 a. m.	29.57
Warrington .....	29.94	9	2 p. m.	<i>g</i> 30.08	11	9 p. m.	29.74
Alabama — Auburn .....	29.27	15	7 a. m.	29.46	11	2 p. m.	29.10
Greensborough .....	29.56	15	7 a. m.	29.52	11	2 p. m.	29.40
Mississippi — Columbus .....	29.74	15	7 a. m.	29.89	11	2 p. m.	29.61
Texas — New Braunfels (f) .....	29.63	17	7 a. m.	28.83	7	9 p. m.	28.50
Washington .....	29.13	11	9 p. m.	<i>h</i> 29.26	17	7 a. m.	29.01
Tennessee — Glenwood .....	29.45	23	7 a. m.	29.64	10	9 p. m.	29.27
Kentucky — Paris .....	29.06	24	2 p. m.	29.36	11	7 a. m.	28.82
Springdale (a) .....	29.29	23	5 a. m.	29.51	11	5 a. m.	29.05
Ohio — Cincinnati, [Harper] .....	29.38	23	7 a. m.	<i>i</i> 29.59	10	9 p. m.	29.13
Cleveland (j) .....	28.88	25	7 a. m.	29.12	11	7 a. m.	28.54
College Hill .....	28.96	24	7 a. m.	29.20	10	9 p. m.	28.71
Hillsborough .....	28.74	24	7 a. m.	28.98	11	7 a. m.	28.47
Medina .....	28.61	25	7 a. m.	28.89	11	7 a. m.	28.29
Oberlin .....	28.96	24	7 a. m.	29.22	11	7 a. m.	28.61
Urbana (k) .....	28.54	7	7 a. m.	<i>l</i> 28.73	11	7 a. m.	28.32
Michigan — Battle Creek .....	28.94	25	7 a. m.	29.23	16	2 p. m.	28.69
Copper Falls Mines .....	28.55	25	7 a. m.	28.86	19	7 a. m.	28.10
Indiana — Evansville (j) .....	29.29	23	2 p. m.	<i>m</i> 29.46	1	7 a. m.	<i>n</i> 29.10
Michigan City .....	29.72	23	7 a. m.	29.33	1	7 a. m.	28.81
New Albany .....	29.38	23	7 a. m.	29.58	12	2 p. m.	<i>o</i> 29.21
New Harmony .....	29.54	24	7 a. m.	29.72	12	2 p. m.	29.28
Richmond .....	28.84	25	7 a. m.	29.04	10	9 p. m.	28.58
Illinois — Batavia (j) .....	29.70	5	9 a. m.	<i>p</i> 29.90	1	6 a. m.	<i>q</i> 29.40

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height at 7 a. m. on the 26th.

*c* Same height at 7 a. m. on the 24th.

*d* Same height at 2 p. m. and 9 p. m. on the 24th.

*e* Same height at 2 p. m. on the 30th.

*f* Not corrected for temperature.

*g* Same height at 2 p. m. on the 15th.

*h* Same height at 9 p. m. on the 24th.

*i* Same height at 7 a. m. on the 25th.

*j* Aneroid.

*k* For the first 20 days of the month only.

*l* Same height at 9 p. m. on the 14th.

*m* Same height at 2 p. m. on the 24th.

*n* Same height at 9 p. m. on the 10th.

*o* Same height at 9 p. m. on the 13th.

*p* Same height at 12 m. on the 5th.

*q* Same height at 9 a. m., 12 m., and 4 p. m. on the 1st.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	WAVE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
Illinois.....Chicago.....	29.21	5	2 p. m.	<i>a</i> 29.46	11	2 p. m.	28.91
.....Manchester ( <i>b</i> ).....	28.65	5	1 p. m.	28.89	7	9 p. m.	<i>c</i> 28.41
.....Upper Alton.....	29.34	22	7 a. m.	29.55	7	2 p. m.	29.11
.....West Urbana.....	29.10	24	9 p. m.	29.36	16	2 p. m.	28.83
Missouri.....Cape Girardeau ( <i>d</i> ).....	29.49	22	9 a. m.	29.71	12	3 p. m.	29.28
.....Palmyra ( <i>d</i> ).....	29.26	5	9 a. m.	<i>e</i> 29.49	7	3 p. m.	28.95
.....St. Joseph ( <i>d</i> ).....	28.87	21	Sunrise.	29.42	8	3 p. m.	28.56
.....St. Louis.....	29.41	29	7 a. m.	29.63	12	2 p. m.	<i>f</i> 29.18
Wisconsin.....Appleton.....	28.81	5	2 p. m.	<i>g</i> 29.05	19	9 p. m.	28.52
.....Beloit.....	28.99	5	2 p. m.	29.26	12	7 a. m.	28.66
.....Kenosha ( <i>h</i> ).....	29.30	24	2 p. m.	<i>a</i> 29.55	1	7 a. m.	29.02
.....Madison, [Sterling].....	28.85	25	7 a. m.	29.18	7	2 p. m.	28.46
.....Manitowoc ( <i>b</i> ).....	29.56	25	7 a. m.	29.84	19	2 p. m.	29.23
.....Milwaukee, [Winkler].....	29.11	25	7 a. m.	29.38	12	2 p. m.	28.81
Iowa.....Fairfield.....	29.08	7	7 a. m.	29.75	12	2 p. m.	28.81
.....Muscatine.....	29.41	5	7 a. m.	<i>i</i> 29.69	7	9 p. m.	29.14
Utah...Great Salt Lake City ( <i>d</i> ).....	25.69	16	9 a. m.	<i>j</i> 25.93	6	9 p. m.	25.31
California.....Sacramento.....	29.85	9	2 p. m.	30.05	12	9 p. m.	29.64
.....San Francisco.....	29.91	10	2 p. m.	30.09	13	9 p. m.	29.71
Mexico...Mirador ( <i>d</i> ).....	22.60						
.....Vera Cruz ( <i>d</i> ).....	29.82	21	10 p. m.	29.80	7	6 p. m.	29.64
West Indies.....St. George's, Bermuda ( <i>k</i> ).....	29.94	20	9½ p. m.	30.15	5	9½ a. m.	29.39
Central America.....Gautemala.....	25.20		9 a. m.	25.29		3 p. m.	25.10
South America.....Catharina Sophia, Surinam ( <i>l</i> ).....	29.63	21	6 p. m.	29.71	11	6 p. m.	29.55
Azores.....Horta, Fayal.....	29.87	8	2 p. m.	<i>m</i> 30.28	3	9 p. m.	29.43
New Grenada.....Bogota ( <i>d</i> ).....	22.13	21	10 a. m.	22.20	10	4 p. m.	22.05

*a* Same height at 7 a. m. on the 25th.*b* Not corrected for temperature.*c* Same height at 7 a. m. on the 12th.*d* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.*e* Same height at 9 a. m. on the 30th.*f* Same height at 9 p. m. on the 12th.*g* Same height at 9 p. m. on the 24th.*h* Observations taken at 7 a. m.*i* Same height at 2 p. m. on the 5th.*j* Same height at 9 p. m. on the 8th.*k* Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.*l* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month. Aneroid.*m* Same height at sunrise on the 17th.



## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.67	9	9 a. m.	<i>b</i> 29.88	19	9 p. m.	29.36
Montreal .....	29.90	10	7 a. m.	30.17	19	9 p. m.	29.55
St. John's (a) .....	29.48	24	7 a. m.	29.84	7	9 p. m.	28.95
St. Martin .....	29.76	2	2 p. m.	30.00	20	2 p. m.	29.43
Toronto (a) .....	29.59	10	6 a. m.	<i>c</i> 29.83	20	2 p. m.	29.25
Wolfville .....	29.57	10	7 a. m.	30.06	21	2 p. m.	29.12
Maine .....	29.79	10	7 a. m.	30.04	20	9 p. m.	<i>d</i> 29.51
Portland .....	29.91	10	7 a. m.	30.19	4	7 a. m.	29.54
Steuben .....	29.91	10	7 a. m.	30.10	7	9 p. m.	29.59
New Hampshire .. Concord .....	29.60	10	7 a. m.	29.87	21	7 a. m.	29.26
Shelburne .....	29.80	10	7 a. m.	30.09	20	2 p. m.	<i>e</i> 29.52
Vermont .....	29.65	10	7 a. m.	29.92	20	2 p. m.	29.31
Shelburn .....	29.76	10	2 p. m.	30.03	21	2 p. m.	29.34
St. Johnsbury (f) .....	29.36	26	7 a. m.	29.57	20	2 p. m.	29.00
Massachusetts .. Amherst .....	29.76	9	9 p. m.	30.07	21	2 p. m.	29.38
Boston (a) .....		1	Sunrise.	29.92			
Cambridge .....	29.95	10	7 a. m.	30.21	21	2 p. m.	29.61
Lawrence .....	29.88	10	7 a. m.	30.14	21	2 p. m.	29.53
Nantucket .....	29.98	10	7 a. m.	30.24	21	9 p. m.	29.66
New Bedford .....	29.92	10	9 p. m.	30.17	21	9 p. m.	29.57
Newburyport (a) .....	29.99	9	9 p. m.	30.20	21	9 p. m.	29.65
Princeton .....	28.88	3	2 p. m.	29.33	23	2 p. m.	28.53
Westfield .....	29.87	10	7 a. m.	30.18	21	2 p. m.	29.52
Williamstown .....	29.27	10	7 a. m.	29.54	20	2 p. m.	28.91
Worcester .....	29.44	10	7 a. m.	29.74	21	7 a. m.	29.04
Rhode Island .. Providence (a) .....	29.79	10	6 a. m.	30.07	21	1 p. m.	29.45
Connecticut .. Norwiche .....	29.86	10	9 p. m.	30.14	21	2 p. m.	29.54
Pomfret .....	29.39	10	7 a. m.	29.66	21	2 p. m.	29.06
Wallingford .....	29.87	10	7 a. m.	30.16	21	2 p. m.	29.50
New York .. Blackwell's Island .....	29.98	10	7 a. m.	30.29	21	2 p. m.	29.60
Cazenovia .....	28.58	10	7 a. m.	28.80	21	7 a. m.	28.23
Flatbush .....	29.78	10	7 a. m.	30.06	21	2 p. m.	29.43
Lowville .....		9	2 p. m.	29.34	21	7 a. m.	28.77
McGrawville .....	28.55	10	7 a. m.	28.76	21	2 p. m.	28.26
New York city .....	29.94	26	7 a. m.	30.17	20	2 p. m.	29.55
Oswego .....	29.30	10	7 a. m.	29.53	21	7 a. m.	28.93
Ovid .....	28.87	10	7 a. m.	29.09	21	7 a. m.	<i>g</i> 28.55
Penn Yan (a) .....	29.31	26	2 p. m.	29.51	20	Sunset.	<i>h</i> 29.02
Rochester .....	29.43	10	7 a. m.	29.69	21	7 a. m.	29.08
Sag Harbor .....	29.67	10	7 a. m.	29.97	21	2 p. m.	29.32
Saratoga (f) .....	29.66	10	7 a. m.	29.90	21	2 p. m.	<i>i</i> 29.30
Spencertown .....	29.29	10	7 a. m.	29.56	21	7 a. m.	28.93
Waterford .....	29.82	10	7 a. m.	30.10	20	2 p. m.	29.45
New Jersey .. Bloomfield .....	29.83	26	7 a. m.	30.12	20	9 p. m.	29.37
Burlington .....	29.78	10	7 a. m.	30.05	21	9 p. m.	29.44
Lambertville .....	29.97	10	7 a. m.	30.23	21	2 p. m.	29.64
Newark (a) .....	29.91	10	7 a. m.	30.21	20	6 p. m.	29.60
Pennsylvania .. Berwick .....	29.28	10	7 a. m.	<i>j</i> 29.59	21	2 p. m.	28.86
Cannonsburg .....	28.77	10	2 p. m.	<i>j</i> 28.97	20	9 p. m.	28.48
Chromedale .....	29.83	10	7 a. m.	30.11	21	2 p. m.	29.45
Easton .....	29.48	10	7 a. m.	29.76	21	2 p. m.	29.13
Gettysburg .....	29.43	10	7 a. m.	<i>k</i> 29.69	21	2 p. m.	<i>e</i> 29.10
Harrisburg, [Heisely] .....	29.72	10	2 p. m.	29.97	21	7 a. m.	29.39
Harrisburg, [Hickok] .....	29.67	10	7 a. m.	29.95	20	9 p. m.	29.34
Lewisburg .....	29.52	10	7 a. m.	29.78	20	2 p. m.	29.21
Morrisville .....	29.99	10	2 p. m.	30.25	21	2 p. m.	29.63
Murrysville .....	28.77	10	7 a. m.	28.98	20	2 p. m.	28.50

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height at 9 a. m. on the 10th and 11th.

*c* Same height at 2 p. m. on the 9th.

*d* Same height at 2 p. m. on the 20th and 21st.

*e* Same height at 9 p. m. on the 20th.

*f* Aneroid.

*g* Same height at 2 p. m. on the 20th.

*h* Same height at sunrise on the 21st.

*i* Same height at 9 p. m. on the 21st.

*j* Same height at 7 a. m. on the 11th.

*k* Same height at 2 p. m. on the 11th.

## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania — Nazareth (a) —	29.39	10	7 a. m.	29.69	21	2 p. m.	29.03
Norristown —	29.86	10	7 a. m.	30.17	20	9 p. m.	29.45
Philadelphia —	29.84	10	7 a. m.	30.07	21	2 a. m.	29.47
Pittsburg, [Wilson] (b) —	28.91	10	7 a. m.	29.12	20	9 p. m.	28.65
West Chester —	29.38	10	7 a. m.	c 29.62	21	2 p. m.	29.04
Delaware — Newark —	29.78	10	7 a. m.	30.04	21	2 p. m.	29.44
Maryland — Annapolis —	29.94	10	7 a. m.	30.23	21	2 p. m.	29.66
Chestertown —	30.01	10	7 a. m.	30.28	20	2 p. m.	29.55
Frederick —	29.71	10	7 a. m.	29.96	21	2 p. m.	29.36
Dist. of Columbia. Washington, [Smithsonian Institution] —	29.95	10	7 a. m.	30.25	21	2 p. m.	d 29.39
Virginia — Alexandria —	29.96	10	7 a. m.	e 30.19	21	2 p. m.	29.64
Berryville —	29.42	10	7 a. m.	29.66	21	2 p. m.	29.10
Crack Whip —	28.42	10	2 p. m.	28.64	21	7 a. m.	28.12
Portsmouth —	29.96	26	9 p. m.	30.23	21	2 p. m.	29.55
Rose Hill —	29.93	26	7 a. m.	30.17	21	7 a. m.	f 29.59
Ruthven —	29.66	26	9 p. m.	29.90	21	2 p. m.	29.35
North Carolina — Asheville (a) —	27.70	26	7 a. m.	27.90	1	2 p. m.	27.48
Chapel Hill —	29.42	26	2 p. m.	29.63	21	2 p. m.	29.16
Murfreesborough —	29.14	26	9 p. m.	29.33	21	2 p. m.	28.85
Warrenton —	29.54	27	7 a. m.	29.79	21	2 p. m.	29.25
South Carolina — All Saints —	29.94	26	9 p. m.	30.18	1	7 a. m.	g 29.70
Camden —	29.83	26	9 p. m.	30.08	1	2 p. m.	h 29.57
Charleston, [Dawson] —				30.38			29.91
Charleston, [Johnson] —	30.04	27	7 a. m.	30.27	1	2 p. m.	h 29.80
Georgia — Athens (a) —	29.25	27	7 a. m.	29.46	1	2 p. m.	29.01
Savannah —	30.01	26	9 p. m.	30.22	2	2 p. m.	29.77
The Rock —	29.24	11	7 a. m.	i 29.38	21	2 p. m.	29.06
Florida — Atsena —	29.88	30	2 p. m.	30.02	3	7 a. m.	j 29.66
Jacksonville —	30.03	12	7 a. m.	k 30.21	1	2 p. m.	29.75
St. Augustine —	30.12	27	7 a. m.	30.31	2	7 a. m.	l 29.87
Salt Ponds (m) —	29.70	30	2 p. m.	29.83	4	7 a. m.	29.40
Warrington —	30.00	11	7 a. m.	30.13	3	2 p. m.	29.84
Alabama — Auburn —	29.32	12	7 a. m.	29.48	1	2 p. m.	29.14
Greensborough (a) —	29.63	12	7 a. m.	29.76	2	2 p. m.	29.50
Mississippi — Columbus —	29.80	6	7 a. m.	n 29.96	16	2 p. m.	o 29.64
Texas — New Braunfels (m) —	29.61	6	7 a. m.	28.82	20	9 p. m.	p 28.50
Tennessee — Glenwood —	29.54	7	7 a. m.	29.71	21	2 p. m.	29.35
Kentucky — Paris —	29.15	6	7 a. m.	29.30	20	2 p. m.	28.90
Springdale (a) —	29.39	6	7 a. m.	q 29.58	20	2 p. m.	29.16
Ohio — Bowling Green (a) —	29.18	6	2 p. m.	r 29.42	21	Sunrise.	28.90
Cincinnati, [Harper] —	29.47	7	7 a. m.	29.67	20	9 p. m.	29.24
Cleveland (s) —	28.92	11	7 a. m.	29.19	20	9 p. m.	28.72
Hillsborough —	29.84	11	7 a. m.	29.05	20	2 p. m.	28.55
Medina —	28.78	10	9 p. m.	28.95	20	9 p. m.	28.50
Oberlin —	29.10	10	7 a. m.	29.29	20	2 p. m.	28.78
Michigan — Battle Creek —	29.09	5	2 p. m.	29.30	20	2 p. m.	28.85
Copper Falls Mines —	28.78	2	2 p. m.	29.09	8	2 p. m.	t 28.49
New Buffalo (a) —	29.31	5	7 a. m.	u 29.53	20	1 p. m.	d 29.09
Indiana — Evansville —	28.82	7	7 a. m.	28.98	20	9 p. m.	28.67
Michigan City —	29.24	5	2 p. m.	29.47	20	2 p. m.	29.04
New Harmony —	29.64	6	7 a. m.	29.81	20	2 p. m.	29.40
Richmond —	28.95	10	7 a. m.	29.11	20	2 p. m.	28.67

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Incomplete.

c Same height at 2 p. m. on the 10th.

d Same height at 9 p. m. on the 20th.

e Same height at 7 a. m. on the 26th.

f Same height at 2 p. m. on the 21st.

g Same height at 7 a. m. on the 2d and 9 p. m. on the 1st.

h Same height at 9 p. m. on the 1st.

i Same height at 7 a. m. on the 13th and 13th, at 9 p. m. on the 25th, at 7 a. m. on the 26th, at 7 a. m., 3 p. m., and 9 p. m. on the 27th, and at 7 a. m. on the 28th.

j Same height at 7 a. m. on the 24th.

k Same height at 7 a. m. on the 27th and 28th.

l Same height at 2 p. m. and 9 p. m. on the 2d.

m Not corrected for temperature.

n Same height at 7 a. m. on the 7th.

o Same height at 9 p. m. on the 16th.

p Same height at 2 p. m. and 9 p. m. on the 24th.

q Same height at 9 p. m. on the 10th.

r Same height at sunrise on the 11th.

s Aneroid.

t Same height at 7 a. m. on the 19th.

u Same height at 1 p. m. on the 5th.



## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Illinois ----- Batavia ( <i>a</i> ) -----	29.87	9	12 m.	<i>b</i> 30.05	21	6 a. m.	29.67
----- Manchester ( <i>c</i> ) -----	28.75	6	7 a. m.	28.96	16	9 p. m.	28.56
----- West Urbana -----	29.22	6	2 p. m.	29.41	20	2 p. m.	29.02
Missouri ----- Cape Girardeau ( <i>c</i> ) -----	29.57	6	9 a. m.	29.77	20	9 p. m.	<i>d</i> 29.38
----- Palmyra ( <i>c</i> ) -----	29.37	5	3 p. m.	29.59	20	3 p. m.	29.19
----- Springfield ( <i>c</i> ) -----	28.64	6	3 p. m.	28.81	20	9 p. m.	28.49
----- St. Joseph ( <i>c</i> ) -----	29.05	3	9 a. m.	29.28	19	9 p. m.	28.87
----- St. Louis -----	29.52	8	7 a. m.	29.71	20	2 p. m.	29.33
Wisconsin ----- Appleton -----	28.97	2	9 p. m.	29.20	15	7 a. m.	28.55
----- Beloit -----	29.16	5	7 a. m.	29.40	19	2 p. m.	28.95
----- Kenosha ( <i>e</i> ) -----	29.50	5	7 a. m.	29.68	14	7 a. m.	29.31
----- Madison, [Sterling] -----	29.04	10	9 p. m.	29.25	16	2 p. m.	28.79
----- Manitowoc ( <i>f</i> ) -----	29.66	5	7 a. m.	29.94	19	2 p. m.	29.42
----- Milwaukee, [Winkler] -----	29.27	5	7 a. m.	29.49	19	2 p. m.	29.06
----- Waukesha -----	29.15	3	7 a. m.	29.36	20	9 p. m.	28.80
Iowa ----- Dubuque -----	29.29	5	7 a. m.	29.56	17	7 a. m.	29.10
----- Fairfield -----	29.17	3	7 a. m.	29.38	16	9 p. m.	28.98
----- Muscatine -----	29.48	3	7 a. m.	29.71	31	2 p. m.	<i>g</i> 29.28
Kansas ----- Lawrence -----	29.06	3	7 a. m.	29.28	19	9 p. m.	28.89
Utah ----- Great Salt Lake City ( <i>c</i> ) -----	25.60	17	9 a. m.	<i>h</i> 25.74	4	3 p. m.	<i>i</i> 25.40
California ----- Sacramento -----	29.82	3	7 a. m.	30.01	24	9 p. m.	29.66
----- San Francisco ( <i>a</i> ) -----	29.56	3	7 a. m.	30.07	24	9 p. m.	29.73
Mexico ----- Mirador ( <i>c</i> ) -----	22.68						
----- Vera Cruz ( <i>c</i> ) -----	29.85	31	10 p. m.	29.80	7	6 p. m.	29.64
West Indies ----- St. George's, Bermuda ( <i>j</i> ) -----	30.09	6	9½ a. m.	30.25	1	3½ p. m.	29.65
Central America ----- Guatemala -----	25.21		10 p. m.	25.34		3 p. m.	25.08
South America ----- Catharina Sophia, Surinam ( <i>k</i> ) -----	29.64	14	2 p. m.	<i>l</i> 29.70	3	6 p. m.	<i>m</i> 29.56
Azores ----- Horta, Fayal -----	30.06	21	2 p. m.	30.20	3	7 a. m.	<i>n</i> 29.82

*a* Aneroid.*b* Same height at 12 m. on the 10th.*c* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.*d* Same height at 9 a. m. on the 21st.*e* Observations taken at 7 a. m.*f* Not corrected for temperature.*g* Same height at 9 p. m. on the 31st.*h* Same height at sunrise on the 21st.*i* Same height at 3 p. m. on the 13th.*j* Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.*k* For changes from the usual hours of observations, &c., see notes to table of the thermometer for this month. Aneroid.*l* Same height at 7 a. m. on the 26th, 6 p. m. on the 29th, 6 a. m. and 6 p. m. on the 30th, and 6 a. m. on the 31st.*m* Same height at 6 p. m. on the 4th and 2 p. m. and 6 p. m. on the 7th.*n* Same height at 2 p. m. on the 3d.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.67	25	9 a. m.	<i>b</i> 29.90	23	9 a. m.	<i>c</i> 29.30
Montreal .....	29.87	9	7 a. m.	30.19	28	2 p. m.	29.53
St. John's (a) .....	29.45	29	2 p. m.	<i>d</i> 29.80	15	9 p. m.	29.02
St. Martin .....	29.70	31	9 p. m.	30.05	28	2 p. m.	29.34
Toronto (a) .....	29.59	26	6 a. m.	29.85	27	10 p. m.	29.18
Wolfville .....	29.56	22	7 a. m.	29.95	15	2 p. m.	<i>e</i> 29.20
Maine .....							
Gardiner .....	29.74	26	7 a. m.	30.01	11	7 a. m.	29.30
Portland .....	29.88	26	7 a. m.	30.18	11	7 a. m.	29.35
Steuben .....	29.88	20	2 p. m.	30.15	11	7 a. m.	<i>f</i> 29.41
New Hampshire .. Concord (g) .....	29.64	26	7 a. m.	29.89	29	2 p. m.	29.29
Shelburne .....	29.76	7	7 a. m.	30.02	11	7 a. m.	29.34
Vermont .....							
Shelburn .....	29.72	26	7 a. m.	30.07	11	7 a. m.	29.25
St. Johnsbury (h) .....	29.29	26	7 a. m.	29.62	11	7 a. m.	28.86
Norwich (g) .....	29.63	7	7 a. m.	29.90	11	7 a. m.	29.21
Massachusetts .. Amherst .....	29.77	25	9 p. m.	30.08	11	7 a. m.	<i>i</i> 29.41
Cambridge .....	29.92	26	7 a. m.	30.22	11	7 a. m.	29.42
Lawrence .....	29.83	26	7 a. m.	30.16	11	7 a. m.	29.35
Nantucket .....	30.03	26	7 a. m.	30.28	11	7 a. m.	29.56
New Bedford .....	29.87	26	7 a. m.	30.15	11	7 a. m.	29.40
Newburyport .....	29.93	25	7 a. m.	30.24	11	7 a. m.	29.40
Princeton .....	28.84	26	7 a. m.	29.15	11	7 a. m.	28.38
Westfield .....	29.84	26	7 a. m.	30.14	11	7 a. m.	29.46
Williamstown (g) .....	29.27	26	7 a. m.	29.59	11	7 a. m.	28.91
Worcester .....	29.46	26	7 a. m.	29.73	28	7 a. m.	29.06
Rhode Island .... Providence (a) .....	29.77	7	6 a. m.	<i>j</i> 30.03	11	6 a. m.	29.31
Connecticut .....							
Norwich .....	29.84	26	7 a. m.	30.12	11	2 p. m.	29.51
Pomfret .....	29.37	26	7 a. m.	29.67	11	7 a. m.	28.91
Wallingford .....	29.85	26	7 a. m.	30.18	11	7 a. m.	29.44
New York .....							
Bellport .....	29.23	26	7 a. m.	29.47	11	7 a. m.	<i>k</i> 28.93
Blackwell's Island .....	29.99	26	7 a. m.	30.30	23	2 p. m.	29.66
Cazenovia .....	28.55	25	7 a. m.	<i>l</i> 28.82	10	9 p. m.	28.20
Flatbush .....	29.77	26	7 a. m.	30.09	23	2 p. m.	29.47
Lowville .....		26	7 a. m.	29.38	28	7 a. m.	28.78
McGrawville .....	28.55	12	7 a. m.	28.89	23	2 p. m.	28.25
New York city .....	29.94	26	7 a. m.	30.25	23	2 p. m.	29.65
Oswego .....	29.28	26	7 a. m.	29.51	28	7 a. m.	28.90
Ovid .....	28.91	25	2 p. m.	29.23	28	7 a. m.	28.49
Penn Yan (a) .....	29.40	26	Sunrise.	29.72	10	Sunset.	29.04
Rochester .....	29.42	26	7 a. m.	29.67	28	7 a. m.	29.00
Sag Harbor .....	29.64	26	7 a. m.	29.95	11	7 a. m.	29.22
Saratoga (h) .....	29.64	26	7 a. m.	29.90	23	9 p. m.	<i>m</i> 29.30
Spencertown .....	29.37	26	7 a. m.	29.73	11	7 a. m.	29.00
Waterford .....	29.80	26	7 a. m.	30.12	23	2 p. m.	29.47
New Jersey .....							
Bloomfield .....	29.90	26	7 a. m.	30.24	11	7 a. m.	29.57
Burlington .....	29.78	26	7 a. m.	30.10	11	2 p. m.	<i>k</i> 29.52
Lambertville .....	29.95	26	7 a. m.	30.22	10	9 p. m.	<i>n</i> 29.60
Newark (a) .....	29.95	26	7 a. m.	30.23	23	9 p. m.	29.64
Pennsylvania .. Berwick .....	29.16	25	7 a. m.	29.51	10	9 p. m.	28.80
Cannonsburg .....	28.79	26	7 a. m.	29.04	27	9 p. m.	28.48
Chromedale .....	29.83	26	7 a. m.	30.17	10	9 p. m.	29.51
Easton .....	29.48	26	7 a. m.	29.81	10	9 p. m.	29.15
Gettysburg .....	29.44	26	7 a. m.	29.73	10	9 p. m.	29.09
Harrisburg, [Heisely] .....	29.74	26	7 a. m.	30.02	10	9 p. m.	29.40
Harrisburg, [Hickok] .....	29.69	26	7 a. m.	30.01	10	9 p. m.	29.34
Lewisburg .....	29.52	25	7 a. m.	29.84	10	9 p. m.	29.10

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height at 9 p. m. on the 25th and 9 a. m. on the 26th.

*c* Same height at 9 p. m. on the 27th and 9 a. m. on the 28th.

*d* Same height at 9 p. m. on the 29th.

*e* Same height at 7 a. m. on the 20th.

*f* Same height at 2 p. m. on the 11th.

*g* Incomplete.

*h* Aneroid.

*i* Same height at 9 p. m. on the 23d.

*j* Same height at 1 p. m. on the 7th.

*k* Same height at 9 p. m. on the 10th.

*l* Same height at 2 p. m. on the 25th.

*m* Same height at 2 p. m. on the 23d.

*n* Same height at 7 a. m. on the 11th.



## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania	Morrisville	29.98	26	7 a. m.	30.30	10	9 p. m.	<i>a</i> 29.70
	Mount Joy ( <i>b</i> )	29.69	26	7 a. m.	29.97	23	2 p. m.	29.40
	Murrysville	28.82	25	7 a. m.	29.09	10	9 p. m.	28.52
	Nazareth ( <i>c</i> )	29.37	25	2 p. m.	29.68	23	2 p. m.	29.08
	Norristown	29.88	26	7 a. m.	30.22	10	9 p. m.	29.53
	Philadelphia	29.81	31	9 p. m.	30.04	10	9 p. m.	29.54
	Pittsburg, [Wilson] ( <i>c</i> )	28.88	25	7 a. m.	29.13	27	9 p. m.	28.58
	West Chester	29.38	26	7 a. m.	29.69	10	9 p. m.	29.09
Delaware	Newark ( <i>d</i> )	29.77	26	7 a. m.	30.10	10	9 p. m.	29.49
Maryland	Annapolis	29.99	26	7 a. m.	30.28	10	9 p. m.	29.70
	Frederick	29.72	26	7 a. m.	30.01	10	9 p. m.	29.38
Dist. of Columbia	Washington, [Smithsonian Institution]	30.00	26	7 a. m.	30.31	10	9 p. m.	29.71
Virginia	Alexandria	29.98	26	7 a. m.	30.27	10	9 p. m.	29.66
	Berryville	29.44	25	7 a. m.	29.72	10	9 p. m.	29.17
	Crack Whip ( <i>d</i> )	28.23	31	9 p. m.	28.64	23	7 a. m.	28.20
	Portsmouth	30.00	26	9 p. m.	30.30	11	2 p. m.	29.70
	Rose Hill	29.94	26	7 a. m.	30.24	10	9 p. m.	29.64
	Ruthven ( <i>d</i> )	29.68	26	7 a. m.	29.94	23	2 p. m.	29.44
North Carolina	Ashville ( <i>d</i> )	27.84	8	7 a. m.	28.00	22	9 p. m.	27.66
	Chapel Hill	29.52	26	7 a. m.	29.77	10	2 p. m.	29.22
	Murfreesborough	29.12	25	7 a. m.	29.29	15	2 p. m.	28.93
	Warrenton	29.54	8	7 a. m.	29.79	10	9 p. m.	29.34
South Carolina	All Saints	29.95	26	7 a. m.	<i>e</i> 30.14	29	2 p. m.	29.78
	Camden	29.86	14	7 a. m.	30.07	29	2 p. m.	29.69
	Charleston, [Dawson]				30.37			30.04
	Charleston, [Johnson]	30.06	31	9 p. m.	30.23	23	2 p. m.	29.89
Georgia	Savannah	30.04	25	9 p. m.	30.21	29	2 p. m.	29.87
	The Rock	29.26	7	7 a. m.	<i>f</i> 29.38	1	7 a. m.	<i>g</i> 29.13
Florida	Arsena	29.88	25	7 a. m.	30.10	20	2 p. m.	<i>h</i> 29.75
	Jacksonville	30.08	13	7 a. m.	<i>i</i> 30.22	22	2 p. m.	<i>j</i> 29.93
	St. Augustine	30.17	13	7 a. m.	30.35	29	2 p. m.	30.00
	Salt Ponds ( <i>b</i> )	29.74	25	2 p. m.	<i>k</i> 29.88	23	7 a. m.	29.58
	Warrington	30.03	14	7 a. m.	<i>l</i> 30.20	11	2 p. m.	29.90
	Auburn ( <i>c</i> )	29.33	13	9 p. m.	<i>m</i> 29.48	1	2 p. m.	29.21
	Greensborough ( <i>c</i> )	29.58?	16	7 a. m.	29.72	10	2 p. m.	29.46
Mississippi	Columbus	29.82	14	7 a. m.	29.99	10	2 p. m.	29.65
Texas	New Braunfels ( <i>b</i> )	28.58	29	7 a. m.	28.80	11	7 a. m.	<i>n</i> 28.49
	Washington	29.57	18	7 a. m.	29.75	11	2 p. m.	<i>o</i> 29.39
Tennessee	Glenwood	29.56	31	7 a. m.	29.74	10	2 p. m.	29.34
Kentucky	Paris	29.18	31	7 a. m.	29.39	27	2 p. m.	28.95
	Springdale ( <i>d</i> )	29.42	31	7 a. m.	29.64	10	9 p. m.	29.18
Ohio	Bowling Green ( <i>d</i> )	29.29	25	2 p. m.	29.47	27	9 p. m.	28.84
	Cincinnati, [Harper]	29.47	31	7 a. m.	29.72	11	9 p. m.	29.16
	Cleveland ( <i>p</i> )	29.01	31	9 p. m.	29.23	22	2 p. m.	28.72
	Hillsborough	28.87	31	7 a. m.	29.12	10	9 p. m.	28.60
	Medina	28.77	31	9 p. m.	29.04	22	2 p. m.	28.43
	Urbana ( <i>c</i> )	28.86	31	9 p. m.	29.09	27	9 p. m.	28.57
Michigan	Battle Creek	29.10	25	7 a. m.	29.33	27	9 p. m.	28.73
	Copper Falls Mines	28.64	8	2 p. m.	29.07	27	9 p. m.	28.33
	New Buffalo ( <i>d</i> )	29.32	20	7 a. m.	29.54	27	9 p. m.	28.98
Indiana	Evansville	28.80	31	7 a. m.	29.00	10	9 p. m.	28.58
	Michigan City	29.24	20	7 a. m.	29.45	27	2 p. m.	28.92
	New Harmony	29.64	31	2 p. m.	29.82	27	2 p. m.	29.38
	Richmond	28.97	31	7 a. m.	29.16	10	2 p. m.	28.74

*a* Same height at 7 a. m. on the 11th.*b* Not corrected for temperature.*c* Incomplete.*d* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.*e* Same height at 9 p. m. on the 25th.*f* Same height at 9 p. m. on the 7th, at 7 a. m. and 9 p. m. on the 8th, and at 7 a. m. on the 14th, 26th, and 31st.*g* Same height at 9 p. m. on the 1st and 4th, at 7 a. m. on the 5th, and at 9 p. m. on the 9th.*h* Same height at 9 p. m. on the 20th and 21st.*i* Same height at 2 p. m. on the 13th and at 7 a. m. on the 14th and 25th.*j* Same height at 2 p. m. on the 23d.*k* Same height at 2 p. m. on the 28th.*l* Same height at 2 p. m. and 9 p. m. on the 19th.*m* Same height at 7 a. m. on the 15th.*n* Same height at 9 p. m. on the 11th.*o* Same height at 2 p. m. on the 12th.*p* Aneroid.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
Illinois.....	Batavia ( <i>a</i> & <i>g</i> ).....	29.87	8	4 p. m.	<i>b</i> 29.95	1	9 p. m.	<i>c</i> 29.77
	Manchester ( <i>d</i> ).....	28.77	18	1 p. m.	28.98	27	7 a. m.	28.55
	West Urbana.....	29.22	31	7 a. m.	29.62	27	2 p. m.	28.96
Missouri.....	Cape Girardeau ( <i>d</i> ).....	29.61	31	9 a. m.	29.81	10	3 p. m.	29.39
	Palmyra ( <i>d</i> ).....	29.48	18	9 a. m.	29.63	27	Sunrise	29.12
	Springfield ( <i>d</i> ).....	28.66	18	3 p. m.	28.85	11	9 p. m.	28.51
	St. Joseph ( <i>d</i> ).....	29.06	29	9 a. m.	29.33	11	9 p. m.	28.80
	St. Louis.....	29.53	24	7 a. m.	29.74	27	7 a. m.	29.30
Wisconsin.....	Appleton.....	28.94	19	9 p. m.	29.18	22	7 a. m.	28.62
	Beloit.....	29.18	20	7 a. m.	29.41	27	2 p. m.	28.79
	Kenosha ( <i>e</i> & <i>g</i> ).....	29.48	8	2 p. m.	29.70	22	7 a. m.	<i>f</i> 29.21
	Madison, [Sterling].....	29.09	14	7 a. m.	29.75	21	9 p. m.	28.70
	Manitowoc ( <i>g</i> ).....	29.73	5	2 p. m.	30.02	27	2 p. m.	29.33
	Milwaukee, [Winkler].....	29.27	20	7 a. m.	29.52	27	2 p. m.	28.88
	Waukesha.....	29.13	20	7 a. m.	29.39	27	9 p. m.	28.83
	Dubuque.....	29.31	19	7 a. m.	29.58	27	7 a. m.	29.01
Iowa.....	Fairfield.....	29.18	19	7 a. m.	29.40	11	9 p. m.	28.84
	Muscatine.....	29.45	19	7 a. m.	29.67	27	9 p. m.	29.20
	Lawrence.....	29.07	29	7 a. m.	29.32	11	2 p. m.	<i>h</i> 28.89
Utah.....	Great Salt Lake City ( <i>i</i> ).....	25.67	29	3 p. m.	25.88	31	3 p. m.	25.37
California.....	Sacramento.....	29.84	29	7 a. m.	30.06	11	9 p. m.	29.66
	San Francisco ( <i>j</i> ).....	29.92	29	2 p. m.	30.11	12	9 p. m.	29.72
Mexico.....	Mirador ( <i>d</i> ).....	22.68						
	Vera Cruz ( <i>d</i> ).....	29.89	27	10 p. m.	30.04	12	4 p. m.	29.76
Central America.....	Guatemala.....	25.24		9 a. m.	25.35		3 p. m.	25.12
West Indies.....	St. George's, Bermuda ( <i>k</i> ).....	30.00	8	9½ a. m.	30.19	30	3½ a. m.	29.85
South America.....	Catharina Sophia, Surinam ( <i>l</i> ).....	29.67	28	2 p. m.	<i>m</i> 29.75	3	2 p. m.	29.60
Azores.....	Horta, Fayal.....	29.99	17	7 a. m.	<i>n</i> 30.14	24	7 a. m.	29.50

*a* Observations taken at 6 a. m., 9 a. m., 12 m., 4 p. m., and 9 p. m. Mean at 9 a. m., 29.35. Aneroid.

*b* Same height at 9 p. m. on the 8th; at 6 a. m., 9 a. m., 12 m., 4 p. m., and 9 p. m. on the 9th; at 6 a. m., 9 a. m., and 12 m. on the 10th; at 6 a. m., 9 a. m., 12 m., 4 p. m., and 9 p. m. on the 19th; at 6 a. m., 9 a. m., 4 p. m., and 9 p. m. on the 20th; at 6 a. m. on the 21st; at 12 m., 4 p. m., and 9 p. m. on the 30th; and at 6 p. m., 9 p. m., 12 m., 4 p. m., and 9 p. m. on the 31st.

*c* Same height at 6 a. m. and 9 a. m. on the 2d; at 9 p. m. on the 11th; at 6 a. m., 9 a. m., 12 m., 4 p. m., and 9 p. m. on the 12th; and at 6 a. m. on the 13th.

*d* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*e* Observations taken at 7 a. m.

*f* Same height at 7 a. m. on the 27th.

*g* Not corrected for temperature.

*h* Same height at 2 p. m. on the 12th.

*i* Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 29.81.

*j* Aneroid.

*k* Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

*l* Aneroid. For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*m* Same height at 6 p. m. on 28th, and at 6 a. m. and 2 p. m. on the 29th.

*n* Same height at 9 p. m. on the 16th and 17th.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a).....	29.78	7	9 a. m.	30.08	17	9 a. m.	29.44
Montreal.....	29.98	7	7 a. m.	30.40	16	9 p. m.	29.36
St. John's (a).....	29.38	22	9 p. m.	29.87	16	9 p. m.	28.82
St. Martin.....	29.80	7	9 p. m.	30.18	11	7 a. m.	29.45
Toronto (a).....	29.71	7	2 p. m.	30.07	17	2 p. m.	29.25
Windsor.....	29.95	8	7 a. m.	30.31	23	2 p. m.	29.27
Wolfville.....	29.70	22	7 a. m.	30.09	23	2 p. m.	29.07
Maine .. Gardiner.....	29.84	8	7 a. m.	30.21	23	2 p. m.	29.38
Portland.....	29.99	8	7 a. m.	30.40	17	9 p. m.	29.51
Steuben.....	29.94	8	7 a. m.	30.36	23	2 p. m.	29.48
New Hampshire .. Concord.....	29.69	8	7 a. m.	30.10	17	9 p. m.	29.21
Shelburne.....	29.86	8	7 a. m.	30.23	17	9 p. m.	29.42
Vermont .. Norwich (a).....	29.73	4	7 a. m.	30.01	17	9 p. m.	29.31
Shelburn.....	29.79	8	7 a. m.	30.27	23	2 p. m.	29.22
St. Johnsbury (b).....	29.41	8	7 a. m.	29.80	23	7 a. m.	28.90
Massachusetts .. Amherst.....	29.84	8	7 a. m.	30.26	17	9 p. m.	29.36
Boston (a).....	-----	8	Sunrise.	30.47	17	10 p. m.	29.60
Cambridge.....	30.03	8	7 a. m.	30.45	17	9 p. m.	29.56
Lawrence.....	29.90	8	7 a. m.	30.37	17	9 p. m.	29.49
Nantucket.....	30.08	8	7 a. m.	30.43	23	7 a. m.	29.57
New Bedford.....	29.99	8	7 a. m.	30.36	23	7 a. m.	29.48
Newburyport.....	30.05	8	7 a. m.	30.47	17	9 p. m.	29.57
Princeton.....	28.95	8	7 a. m.	29.34	23	7 a. m.	28.51
Westfield.....	29.96	8	7 a. m.	30.39	17	9 p. m.	29.56
Williamstown.....	29.38	8	7 a. m.	29.77	17	9 p. m.	28.91
Worcester.....	29.51	8	2 p. m.	29.80	23	7 a. m.	29.11
Rhode Island..... Providence (a).....	29.87	8	1 p. m.	30.17	17	10 p. m.	29.39
Connecticut .. Norwich.....	29.96	8	7 a. m.	30.28	23	7 a. m.	29.54
Pomfret.....	29.47	8	7 a. m.	29.85	17	9 p. m.	29.08
Wallingford.....	29.97	8	7 a. m.	30.37	17	9 p. m.	29.51
New York .. Bellport.....	29.34	8	7 a. m.	29.64	23	7 a. m.	29.03
Blackwell's Island.....	30.10	8	7 a. m.	30.45	17	9 p. m.	29.72
Canton.....	29.50	8	7 a. m.	29.86	17	2 p. m.	29.10
Cazenovia.....	28.68	8	7 a. m.	28.98	17	2 p. m.	28.29
Flatbush.....	29.88	8	7 a. m.	30.24	17	9 p. m.	29.51
Lowville.....	-----	8	7 a. m.	29.54	17	2 p. m.	28.85
McGrawville.....	28.64	7	9 p. m.	28.90	17	9 p. m.	28.32
New York city.....	30.04	10	9 p. m.	30.43	13	7 a. m.	29.54
Oswego.....	29.40	8	7 a. m.	c 29.72	17	2 p. m.	28.97
Ovid.....	28.98	8	7 a. m.	29.30	17	2 p. m.	28.60
Penn Yan (a).....	29.58	1	Sunset.	29.91	17	Sunset.	29.19
Rochester, [Harkness].....	29.48	-----	-----	29.81	-----	-----	29.09
Rochester, [Palmer].....	29.53	7	7 a. m.	29.86	17	2 p. m.	29.06
Sag Harbor.....	29.76	8	2 p. m.	30.08	23	7 a. m.	29.32
Saratoga (b).....	29.73	8	7 a. m.	30.10	23	7 a. m.	29.30
Spencertown.....	29.47	8	7 a. m.	29.92	17	9 p. m.	29.00
Waterford.....	29.92	8	7 a. m.	30.32	17	9 p. m.	29.45
New Jersey .. Bloomfield.....	30.03	8	7 a. m.	30.41	17	9 p. m.	29.64
Burlington.....	29.90	8	7 a. m.	30.22	23	7 a. m.	29.57
Lambertville (a).....	30.15	8	7 a. m.	d 30.33	23	7 a. m.	29.72
Newark (a).....	30.04	8	7 a. m.	30.36	23	7 a. m.	29.67
Pennsylvania..... Cannonsburg.....	29.90	8	7 a. m.	29.14	19	9 p. m.	28.63
Chromedale.....	29.95	8	7 a. m.	30.28	22	9 p. m.	29.61
Easton.....	29.59	8	7 a. m.	29.94	23	7 a. m.	29.25
Gettysburg.....	29.55	8	7 a. m.	29.86	17	9 p. m.	e 29.23
Harrisburg, [Heisely].....	29.85	8	7 a. m.	30.17	17	9 p. m.	29.55
Harrisburg, [Hickok].....	29.80	8	7 a. m.	f 30.10	14	9 p. m.	29.47
Lewisburg.....	29.64	8	7 a. m.	30.00	17	2 p. m.	29.31

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Aneroid.

c Same height at 9 p. m. on the 7th.

d Same height at 2 and 9 p. m. on the 8th.

e Same height at 9 p. m. on the 22d.

f Same height at 7 a. m. on the 9th.

## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....							
Morrisville.....	30.11	8	7 a. m.	30.43	17	9 p. m.	29.74
Mount Joy (a).....	29.79	8	7 a. m.	30.10	23	7 a. m.	29.46
Murrysville.....	28.92	8	7 a. m.	29.14	11	9 p. m.	28.66
Nazareth (b).....	29.54	8	7 a. m.	29.87	23	7 a. m.	29.17
Norristown.....	30.00	8	7 a. m.	c 30.29	17	9 p. m.	29.64
Philadelphia.....	29.94	8	7 a. m.	30.24	23	7 a. m.	29.63
Pittsburg, [Martin].....	29.05	8	7 a. m.	29.23	17	9 p. m.	28.76
Pittsburg, [Wilson].....	28.97	8	7 a. m.	29.21	19	9 p. m.	28.72
West Chester.....	29.49	8	7 a. m.	29.80	17	9 p. m.	d 29.16
Delaware.....							
Newark.....	29.91	8	7 a. m.	30.24	22	9 p. m.	29.61
Maryland.....							
Annapolis.....	30.09	8	7 a. m.	30.42	14	2 p. m.	e 29.81
Frederick.....	29.83	8	7 a. m.	30.16	22	9 p. m.	29.54
Virginia.....							
Alexandria.....	30.05	9	7 a. m.	30.29	22	9 p. m.	29.78
Berryville.....	29.53	8	7 a. m.	29.84	22	9 p. m.	29.25
Crack Whip.....	28.52	8	2 p. m.	28.74	22	9 p. m.	28.25
Portsmouth.....	30.05	8	7 a. m.	30.31	14	7 a. m.	29.53
Rose Hill.....	30.03	8	7 a. m.	30.36	14	2 p. m.	29.71
Ruthven.....	29.75	8	7 a. m.	30.04	14	9 p. m.	29.37
North Carolina.....							
Chapel Hill.....	29.62	8	9 p. m.	29.86	13	7 a. m.	29.23
Murfreesborough.....	29.18	30	7 a. m.	29.53	13	2 p. m.	28.78
Warrenton.....	29.61	8	2 p. m.	29.89	13	2 p. m.	29.18
South Carolina.....							
All Saints.....	29.99	1	2 p. m.	g 30.20	12	2 p. m.	29.49
Camden.....	29.91	8	7 a. m.	30.15	12	9 p. m.	29.59
Charleston, [Dawson].....				30.39			29.88
Charleston, [Johnson].....	30.08	1	7 a. m.	h 30.27	12	2 p. m.	29.73
Georgia.....							
Hillsborough.....	29.46	8	7 a. m.	29.67	22	2 p. m.	29.23
Savannah.....	30.06	30	7 a. m.	30.25	12	2 p. m.	29.80
The Rock.....	29.28	9	7 a. m.	29.50	12	2 p. m.	i 29.06
Florida.....							
Atsena.....	29.89	8	7 a. m.	j 30.00	23	2 p. m.	k 29.62
Jacksonville.....	30.07	30	7 a. m.	l 30.22	20	2 p. m.	29.84
St. Augustine.....	30.16	27	7 a. m.	30.31	23	2 p. m.	29.91
Salt Ponds (a).....	29.67	17	2 p. m.	29.79	24	7 a. m.	29.44
Warrington.....	30.06	30	9 p. m.	30.23	22	2 p. m.	29.92
Alabama.....							
Auburn.....	29.37	30	7 a. m.	29.58	22	2 p. m.	29.20
Greensborough (f).....	29.65	30	7 a. m.	29.91	19	2 p. m.	m 29.52
Mississippi.....							
Columbus.....	29.89	30	7 a. m.	30.14	13	2 p. m.	29.72
Texas.....							
New Braunfels(a).....	28.71	23	7 a. m.	28.98	11	9 p. m.	n 28.52
Washington.....	29.64	29	7 a. m.	29.83	12	2 p. m.	29.49
Tennessee.....							
Glenwood.....	29.64	29	7 a. m.	29.88	19	2 p. m.	29.44
Memphis.....	29.82	29	7 a. m.	30.10	19	9 p. m.	29.63
Kentucky.....							
Paris.....	29.27	29	7 a. m.	29.48	19	2 p. m.	29.02
Springdale (f).....	29.51	29	7 a. m.	29.77	19	2 p. m.	29.26
Ohio.....							
Bowling Green (f).....	29.33	7	2 p. m.	29.59	17	Sunrise.	o 29.08
Cincinnati, [Harper].....	29.58	29	7 a. m.	29.80	19	2 p. m.	29.33
Cleveland (p).....	29.09	7	7 a. m.	29.34	17	7 a. m.	28.81
Hillsborough.....	28.96	3	7 a. m.	29.16	19	2 p. m.	28.70
Medina.....	28.88	3	7 a. m.	29.19	10	9 p. m.	28.21
Urbana.....	28.96	29	9 p. m.	29.14	17	2 p. m.	28.74
Michigan.....							
Battle Creek.....	29.20	7	7 a. m.	29.47	17	7 a. m.	28.93
Marquette.....	29.37	6	9 p. m.	29.73	24	9 p. m.	28.89
New Buffalo.....	29.40	7	7 a. m.	29.66	17	7 a. m.	29.16
Indiana.....							
Evansville.....	28.89	29	7 a. m.	29.18	12	9 p. m.	28.72

a Not corrected for temperature.

b Incomplete.

c Same height at 9 p. m. on the 5th.

d Same height at 9 p. m. on the 22d, and at 7 a. m. on the 24th.

e Same height at 9 p. m. on the 22d.

f For changes from the usual hours of observation, &amp;c., see notes to table of the thermometer for this month.

g Same height at 9 p. m. on the 8th.

h Same height at 7 a. m. on the 2d, 3d, and 4th.

i Same height at 2 p. m. on the 22d.

j Same height at 2 and 9 p. m. on the 8th; at 7 a. m. and 9 p. m. on the 17th; at 7 a. m. on the 18th; at 9 p. m. on the 23th; at 7 a. m. and 9 p. m. on the 27th; at 7 a. m. and 2 and 9 p. m. on the 28th and 29th; and at 9 p. m. on the 30th.

k Same height at 9 p. m. on the 23d.

l Same height at 2 p. m. on the 30th.

m Same height at 2 p. m. on the 20th.

n Same height at 7 a. m. on the 7th.

o Same height at 2 p. m. on the 17th.

p Aneroid.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Indiana.....	Michigan City .....	29.32	7	7 a. m.	29.56	16	9 p. m.	29.08
	New Albany .....	29.61	29	7 a. m.	29.84	13	2 p. m.	29.42
	New Harmony .....	29.73	29	7 a. m.	30.00	13	2 p. m.	29.54
Illinois.....	Athens .....	29.47	29	7 a. m.	29.79	16	2 p. m.	29.25
	Batavia (a) .....	29.95	11	2 p. m.	<i>b</i> 30.15	30	9 p. m.	29.17
	Manchester .....	28.85	29	7 a. m.	29.18	13	9 p. m.	28.64
	West Urbana .....	29.31	29	7 a. m.	29.53	17	7 a. m.	29.11
Missouri.....	Cape Girardeau (c) .....	29.69	29	9 a. m.	30.03	13	3 p. m.	29.47
	Palmyra (c) .....	29.43			?			?
	Springfield (c) .....	28.71			?			?
	St. Joseph (c) .....	29.12	29	9 a. m.	29.48	16	9 p. m.	28.84
	St. Louis .....	29.61	29	7 a. m.	30.22	13	2 p. m.	29.39
Wisconsin.....	Appleton .....	29.01	8	7 a. m.	29.89	24	2 p. m.	28.66
	Beloit .....	29.24	29	7 a. m.	29.49	16	9 p. m.	28.96
	Kenosha .....	29.54	7	7 a. m.	29.81	16	9 p. m.	29.28
	Madison, [Sterling] .....	29.06	29	7 a. m.	29.35	16	9 p. m.	28.78
	Manitowoc (d) .....	29.81	6	7 a. m.	30.12	17	7 a. m.	29.51
	Milwaukee, [Winkler] .....	29.34	11	7 a. m.	29.61	17	7 a. m.	29.03
	Waukesha .....	29.16	24	7 a. m.	29.54	11	2 p. m.	28.89
Iowa.....	Dubuque .....	29.41	29	7 a. m.	29.74	16	9 p. m.	29.11
	Fairfield .....	29.24	29	7 a. m.	29.65	16	2 p. m.	28.97
	Muscatine .....	29.54	29	7 a. m.	29.84	17	7 a. m.	<i>e</i> 29.30
Kansas.....	Lawrence .....	29.15	28	7 a. m.	29.50	16	2 p. m.	28.87
Utah.....	Great Salt Lake City (c) .....	25.71	21	9 p. m.	25.95	15	9 a. m.	25.41
California.....	Sacramento .....	29.92	26	7 a. m.	30.12	14	9 p. m.	29.71
	San Francisco (a) .....	29.96	26	7 a. m.	30.14	13	9 p. m.	29.69
Mexico.....	Mirador (c) .....	22.76						
	Vera Cruz (c) .....	29.90	25	10 p. m.	29.98	12	3½ p. m.	29.74
Central America.....	Guatemala .....	25.22			25.30			25.11
South America.....	Catharina Sophia, Surinam (a & c) .....	29.67	7	6 p. m.	29.75	1	2 p. m.	<i>f</i> 29.61
Azores.....	Horta, Fayal .....	29.90	30	9 p. m.	30.25	14	9 p. m.	<i>g</i> 29.61

*a* Aneroid.*b* Same height at 9 p.m. on the 6th, and at 7 a.m. and 2 p.m. on the 7th.*c* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.*d* Not corrected for temperature.*e* Same height at 2 p.m. on the 16th and 17th, and 9 p.m. on the 16th.*f* Same height at 6 p. m. on the 16th, and 2 p. m. on the 27th.*g* Same height at 2 p. m. on the 14th, and 7 a. m. on the 6th.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton (a) .....	29.71	4	9 a. m.	29.98	16	9 a. m.	29.30
Montreal .....	29.95	3	7 a. m.	30.40	16	7 a. m.	29.40
St. John's (a) .....	29.61	3	7 a. m.	30.07	30	2 p. m.	29.12
St. Martin .....	29.84	3	7 a. m.	<i>b</i> 30.22	16	7 a. m.	29.31
Toronto (a) .....	29.67	22	6 a. m.	29.99	16	6 a. m.	29.29
Windsor .....	29.93	19	7 a. m.	30.37	30	7 a. m.	29.29
Wolfville .....	29.70	24	7 a. m.	30.27	17	7 a. m.	29.09
Maine .....							
Gardiner .....	29.79	3	7 a. m.	<i>c</i> 30.18	17	7 a. m.	29.14
Portland .....	29.91	23	7 a. m.	30.37	26	2 p. m.	29.17
Steuben .....	29.88	23	7 a. m.	30.37	16	7 a. m.	29.26
New Hampshire .. Claremont .....	28.93	23	7 a. m.	30.38	26	2 p. m.	28.25
Concord .....	29.61	23	7 a. m.	30.04	26	2 p. m.	28.81
Shelburne .....	29.78	4	7 a. m.	30.17	16	7 a. m.	29.14
Vermont .....							
Norwich (d) .....	29.66	24	7 a. m.	30.05	27	2 p. m.	28.98
St. Johnsbury .....	29.31	22	9 p. m.	29.75	16	9 p. m.	28.70
Shelburn .....	29.58	22	9 p. m.	30.00	26	7 a. m.	28.90
Massachusetts .. Amherst .....	29.74	23	7 a. m.	30.19	26	2 p. m.	28.85
Bridgewater (a) .....	29.79	23	7 a. m.	30.23	26	2 p. m.	28.88
Cambridge .....	29.94	23	7 a. m.	30.40	26	7 a. m.	29.14
Lawrence .....	29.87	23	7 a. m.	30.31	26	2 p. m.	29.09
Nantucket .....	29.96	23	7 a. m.	30.43	26	2 p. m.	29.12
New Bedford .....	29.89	23	7 a. m.	30.32	26	2 p. m.	28.95
Newburyport .....	29.97	23	7 a. m.	30.43	20	2 p. m.	29.10
Princeton .....	28.84	23	7 a. m.	29.24	26	2 p. m.	27.95
Westfield .....	29.88	23	7 a. m.	30.27	26	2 p. m.	29.02
Williamstown .....	29.27	23	7 a. m.	29.64	26	2 p. m.	28.48
Worcester .....	29.49	18	7 a. m.	29.85	16	9 p. m.	28.56
Rhode Island .. Providence (a) .....	29.78	23	Sunrise.	30.20	26	1 p. m.	28.88
Connecticut .....							
New London (d) .....	29.97	1	7 a. m.	30.51	16	7 a. m.	29.32
Norwich .....	29.86	23	7 a. m.	30.25	27	7 a. m.	29.17
Pomfret .....	29.39	16	2 p. m.	29.82	26	2 p. m.	28.43
Wallingford .....	29.86	23	7 a. m.	30.29	16	9 p. m.	29.17
New York .....							
Bellport .....	29.20	23	7 a. m.	29.62	26	2 p. m.	28.46
Blackwell's Island .....	29.98	22	9 p. m.	30.38	26	2 p. m.	29.11
Canton .....	29.47	4	7 a. m.	<i>e</i> 29.78	16	7 a. m.	28.97
Cazenovia .....	28.58	2	9 p. m.	<i>f</i> 28.88	26	7 a. m.	28.10
Flatbush .....	29.87	23	9 p. m.	30.32	26	7 a. m.	28.96
Lowville .....		22	2 p. m.	29.50	16	7 a. m.	28.65
Madrid .....	29.71	3	7 a. m.	30.05	16	7 a. m.	29.23
New York city .....	29.95	23	7 a. m.	30.35	26	7 a. m.	29.08
Oswego .....	29.32	22	7 a. m.	29.64	26	2 p. m.	28.86
Ovid .....	28.90	22	7 a. m.	29.22	16	7 a. m.	28.45
Penn Yan (a) .....	29.48	10	Sunrise.	29.82	26	2 p. m.	<i>g</i> 29.04
Pompey .....	28.23	22	9 p. m.	28.58	16	7 a. m.	27.68
Rochester, [Harkness] .....	29.45			29.78			29.01
Rochester, [Palmer] .....	29.48	11	9 p. m.	29.77	16	7 a. m.	29.04
Sag Harbor .....	29.67	23	7 a. m.	30.12	26	2 p. m.	28.75
Saratoga (h) .....	29.58	23	7 a. m.	<i>i</i> 30.00	26	2 p. m.	28.95
Spencertown .....	29.31	23	7 a. m.	29.67	26	2 p. m.	28.53
Waterford .....	29.85	23	7 a. m.	30.23	26	2 p. m.	29.11
New Jersey .....							
Bloomfield .....	29.92	23	7 a. m.	30.33	26	7 a. m.	28.98
Burlington (d) .....	29.79	22	7 a. m.	30.19	26	2 p. m.	29.03
Lambertville (a) .....	29.93	22	9 p. m.	30.32	26	7 a. m.	29.05
Newark (a) .....	29.93	23	7 a. m.	30.30	26	9 p. m.	29.10
Pennsylvania .. Cannonsburg .....	28.82	22	7 a. m.	29.17	16	7 a. m.	28.40
Chromedale .....	29.84	22	7 a. m.	30.24	26	7 a. m.	28.98
Easton .....	29.50	23	7 a. m.	29.88	26	7 a. m.	28.67
Gettysburg .....	29.53	22	7 a. m.	29.86	16	7 a. m.	<i>j</i> 28.98

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height at 9 p. m. on the 3d.

*c* Same height at 7 a. m. and 2 p. m. on the 23d.

*d* Incomplete.

*e* Same height at 9 p. m. on the 5th.

*f* Same height at 7 a. m. on the 22d.

*g* Same height at sunset on the 26th.

*h* Aneroid.

*i* Same height at 9 p. m. on the 22d.

*j* Same height at 2 p. m. on the 16th.



## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	Inches.				Inches.
Pennsylvania					
Harrisburg, [Heisely]	29.76	22	7 a. m.	30.14	26 2 p. m.
Harrisburg, [Hickok]	29.72	22	7 a. m.	30.11	26 7 a. m.
Lewisburg	29.56	22	7 a. m.	29.93	26 7 a. m.
Morrisville	30.03	22	7 a. m.	30.42	26 7 a. m.
Mount Joy (a)	29.68	22	2 p. m.	30.05	26 7 a. m.
Murrysville	28.85	18	7 a. m.	b 29.15	16 7 a. m.
Nazareth (c)	29.35	23	7 a. m.	29.80	26 7 a. m.
Norristown	29.88	22	7 a. m.	30.31	26 7 a. m.
Philadelphia	29.83	22	7 a. m.	30.20	26 7 a. m.
Pittsburg, [Martin]	28.99	22	7 a. m.	d 29.28	16 7 a. m.
Pittsburg, [Wilson] (e)	28.85	1	7 a. m.	29.12	25 2 p. m.
West Chester (e)	29.35	20	9 p. m.	29.07	25 9 p. m.
Delaware					
Newark	29.81	22	7 a. m.	30.21	26 7 a. m.
Maryland					
Annapolis	30.02	22	7 a. m.	30.43	26 7 a. m.
Frederick	29.74	22	7 a. m.	30.17	26 7 a. m.
Dist of Columbia					
Washington, [Smithsonian Institut'n]	30.05	22	7 a. m.	30.48	26 7 a. m.
Virginia					
Alexandria	30.00	22	7 a. m.	30.40	26 7 a. m.
Berryville	29.45	22	7 a. m.	29.79	26 7 a. m.
Crack Whip (f)	28.45	18	2 p. m.	28.65	16 2 p. m.
Portsmouth	29.96	22	7 a. m.	30.41	26 2 p. m.
Rose Hill	29.95	22	7 a. m.	30.40	26 7 a. m.
Ruthven (f)	29.75	22	7 a. m.	30.10	16 7 a. m.
North Carolina					
Chapel Hill	29.55	22	7 a. m.	29.94	16 7 a. m.
Murfreesborough	29.27	22	7 a. m.	29.78	16 7 a. m.
Warrenton	29.54	22	2 p. m.	29.95	26 2 p. m.
South Carolina					
All Saints	29.94	22	2 p. m.	30.36	15 2 p. m.
Camden	29.86	22	7 a. m.	30.25	15 7 a. m.
Charleston, [Dawson]				30.50	
Charleston, [Johnson]	30.01	22	2 p. m.	30.41	10 7 a. m.
Georgia					
Hillsborough	29.41	22	7 a. m.	29.72	15 2 p. m.
Savannah	29.98	22	9 p. m.	30.34	9 2 p. m.
The Rock	29.24	18	2 p. m.	29.49	15 2 p. m.
Florida					
Atsena	29.75	18	7 a. m.	30.02	8 7 a. m.
Jacksonville	30.04	22	2 p. m.	30.39	9 2 p. m.
St. Augustine	30.07	18	7 a. m.	30.38	9 2 p. m.
Salt Ponds (a)	29.94	23	2 p. m.	29.79	8 7 a. m.
Warrington	30.03	17	9 p. m.	30.28	8 2 p. m.
Alabama					
Auburn	29.36	22	7 a. m.	g 29.59	9 2 p. m.
Greensborough (f)	28.67	17	7 a. m.	29.90	10 2 p. m.
Mississippi					
Columbus	29.86	20	7 a. m.	30.17	8 2 p. m.
Texas					
New Braunfels (a)	28.83	28	9 p. m.	29.52	10 7 a. m.
Washington	29.63	16	7 a. m.	29.97	9 2 p. m.
Tennessee					
Glenwood	29.63	20	7 a. m.	29.94	15 2 p. m.
Memphis	29.78	20	2 p. m.	30.15	11 2 p. m.
Kentucky					
Millersburg	29.25	20	7 a. m.	29.72	15 9 p. m.
Paris	29.21	21	7 a. m.	29.54	15 9 p. m.
Springdale (f)	29.46	20	7 a. m.	29.83	15 0 p. m.
Ohio					
Belle Centre	28.82	21	7 a. m.	29.13	16 7 a. m.
Bowling Green (f)	29.26	20	9 p. m.	29.58	16 Sunrise.
Cincinnati, [Harper]	29.54	21	7 a. m.	29.86	15 9 p. m.
Cincinnati, [Hurt]	29.10	21	7 a. m.	29.56	16 2 p. m.
Cleveland (i)	29.04	18	7 a. m.	j 29.29	16 7 a. m.
Hillsborough	28.86	21	7 a. m.	29.19	16 7 a. m.
Medina	28.81	18	7 a. m.	29.07	16 7 a. m.
Ripley (f)	29.46	21	7 a. m.	29.77	16 7 a. m.
Urbana	28.88	21	7 a. m.	29.19	16 7 a. m.
Michigan					
Battle Creek	29.16	18	7 a. m.	29.39	16 7 a. m.
Marquette	29.42	4	7 a. m.	29.71	22 9 p. m.
New Buffalo	29.36	20	7 a. m.	29.63	30 2 p. m.

a Not corrected for temperature.

b Same height at 9 p. m. on the 21st.

c Incomplete.

d Same height at 2 p. m. on the 22d.

e Same height at 2 p. m. on the 26th.

f For changes from the usual hours of observation, &amp;c., see notes to table of the thermometer for this month.

g Same height at 9 p. m. on the 17th.

h Same height at 2 p. m. on the 9th.

i Aneroid.

j Same height at 7 a. m. on the 22d.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Indiana	Evansville	28.83	20	7 a. m.	<i>a</i> 29.24	15	2 p. m.	28.54
	Michigan City	29.30	20	2 p. m.	29.64	15	9 p. m.	28.92
	New Albany ( <i>b</i> )	29.49	3	9 p. m.	29.67	15	9 p. m.	29.25
	New Harmony	29.68	20	7 a. m.	30.12	15	2 p. m.	29.37
	Richmond ( <i>c</i> )	28.99	20	2 p. m.	29.30	10	7 a. m.	28.67
Illinois	Athens	29.46	20	7 a. m.	29.92	11	2 p. m.	29.19
	Batavia ( <i>d</i> )	29.25	20	2 p. m.	29.55	15	9 p. m.	28.85
	Manchester	28.86	20	2 p. m.	29.48	1	2 p. m.	28.60
	West Urbana	29.29	20	2 p. m.	29.69	15	2 p. m.	29.02
Missouri	Cape Girardeau ( <i>c</i> )	29.67	20	9 a. m.	30.14	30	3 p. m.	29.44
	St. Joseph ( <i>c</i> )	29.15	20	Sunrise.	<i>e</i> 29.64	10	9 p. m.	28.76
	St. Louis	29.60	20	7 a. m.	30.07	1	2 p. m.	29.32
	Springfield ( <i>c</i> )	28.67	19	Sunrise.	29.13	29	9 p. m.	28.46
Wisconsin	Appleton	29.04	20	2 p. m.	29.29	1	7 a. m.	28.79
	Beloit	29.25	20	7 a. m.	29.66	11	2 p. m.	28.94
	Kenosha ( <i>f</i> )	29.54	19	7 a. m.	29.82	14	9 p. m.	29.40
	Madison, [Sterling]	29.02	20	7 a. m.	29.43	11	2 p. m.	28.75
	Manitowoc ( <i>f</i> )	29.82	20	7 a. m.	30.08	1	7 a. m.	29.55
	Milwaukee, [Winkler]	29.34	20	7 a. m.	29.68	1	2 p. m.	29.05
	Waukesha, [Bean]	29.19	20	7 a. m.	29.47	15	2 p. m.	28.87
Iowa	Dubuque	29.42	20	7 a. m.	29.87	1	2 p. m.	29.08
	Fairfield	29.30	20	2 p. m.	29.73	11	2 p. m.	28.94
	Muscatine	29.56	19	9 p. m.	29.87	1	7 a. m.	<i>g</i> 29.23
Kansas	Lawrence	29.15	20	7 a. m.	29.63	30	2 p. m.	28.81
California	Sacramento	29.94	29	7 a. m.	30.17	5	9 p. m.	29.65
	San Francisco ( <i>d</i> )	29.96	29	7 a. m.	30.16	8	7 a. m.	29.57
Mexico	Mirador ( <i>c</i> )	22.75						
	Vera Cruz ( <i>c</i> )	29.91	17	8 a. m.	30.11	10	11 p. m.	29.68
Central America	Guatemala	25.21			25.31			25.10
South America	Catharina Sophia, Surinam	29.64	11	2 p. m.	<i>h</i> 29.76	14	6 p. m.	29.54
Azores	Horta, Fayal	30.01	1	2 p. m.	30.33	14	7 a. m.	29.76

*a* Same height at 2 p. m. on the 20th.*b* Incomplete.*c* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.*d* Aneroid.*e* Same height at 9 a. m. on the 20th.*f* Not corrected for temperature.*g* Same height at 2 p. m. on the 11th.*h* Same height at 6 a. m. on the 7th.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton (a) .....	29.60	26	9 a. m.	30.22	19	9 a. m.	28.48
Montreal .....	29.88	26	7 a. m.	30.48	19	9 p. m.	29.02
St. John's (a) .....	29.53	10	7 a. m.	<i>b</i> 29.93	7	2 p. m.	28.91
St. Martin .....	29.68	26	7 a. m.	30.34	19	2 p. m.	29.00
Toronto (a) .....	29.52	26	6 a. m.	30.24	19	6 a. m.	<i>c</i> 28.55
Windsor .....	29.90	30	9 p. m.	30.60	17	9 p. m.	29.51
Wolfville .....	29.76	30	7 a. m.	30.49	17	9 p. m.	29.04
Maine .....							
Gardiner .....	29.78	30	2 p. m.	30.36	21	7 a. m.	29.04
Portland .....	29.88	30	7 a. m.	30.51	20	7 a. m.	29.13
Steuben .....	29.86	26	7 a. m.	30.41	20	7 a. m.	29.18
New Hampshire—Claremont .....	28.94	26	2 p. m.	29.57	19	9 p. m.	28.16
Concord .....	29.53	29	9 p. m.	30.15	20	7 a. m.	28.85
Shelburne .....	29.72	30	7 a. m.	<i>d</i> 30.28	20	2 p. m.	29.09
Vermont .....							
Norwich .....	29.61	26	7 a. m.	30.14	19	9 p. m.	28.87
Shelburn .....	29.51	25	9 p. m.	30.14	19	9 p. m.	28.39
St. Johnsbury (e) .....	29.30	29	9 p. m.	29.90	19	9 p. m.	28.50
Massachusetts—Amherst .....	29.71	26	7 a. m.	30.36	19	9 p. m.	28.91
Bridgewater (a) .....	29.79	26	7 a. m.	30.39	19	7 p. m.	<i>f</i> 29.16
Cambridge .....	29.95	26	7 a. m.	30.56	19	9 p. m.	29.22
Canton .....	29.79	26	9 p. m.	30.37	19	9 p. m.	29.16
Lawrence .....	29.86	26	7 a. m.	30.47	20	7 a. m.	29.13
Nantucket .....	30.03	26	7 a. m.	30.58	19	9 p. m.	29.40
New Bedford .....	29.92	26	7 a. m.	30.51	19	9 p. m.	29.21
Newburyport .....	29.91	26	9 p. m.	30.54	19	9 p. m.	29.24
Princeton .....	29.82	30	7 a. m.	29.36	19	9 p. m.	28.09
Westfield .....	29.88	26	7 a. m.	30.46	19	9 p. m.	29.11
Williamstown .....	29.19	26	2 p. m.	29.87	19	9 p. m.	28.34
Worcester .....	29.48	26	2 p. m.	30.52	20	7 a. m.	28.79
Rhode Island—Providence (a) .....	29.79	26	Sunrise	30.43	19	10 p. m.	29.06
Connecticut—New London (g) .....	30.04	26	7 a. m.	30.58	19	2 p. m.	29.33
Norwich .....	29.90	26	7 a. m.	30.49	19	9 p. m.	29.26
Pomfret .....	29.38	26	7 a. m.	29.94	19	9 p. m.	28.61
Wallingford .....	29.89	26	7 a. m.	30.53	19	9 p. m.	29.05
New York—Blackwell's Island .....	30.03	26	7 a. m.	30.72	19	2 p. m.	29.20
Canton .....	29.27	26	9 p. m.	29.94	19	2 p. m.	28.41
Cazenovia .....	28.49	26	9 p. m.	29.10	19	2 p. m.	27.61
Fishkill Landing (h) .....	30.16	25	9 p. m.	<i>i</i> 30.70	19	2 p. m.	<i>j</i> 29.40
Flatbush .....	29.95	26	7 a. m.	30.63	19	2 p. m.	29.13
Fort Edward (g) .....	29.79	26	7 a. m.	30.42	19	2 p. m.	28.97
Lowville .....		26	7 a. m.	29.61	19	2 p. m.	28.23
Madrid .....	29.58	26	7 a. m.	30.23	19	2 p. m.	28.76
New York city .....	29.99	26	7 a. m.	30.67	19	2 p. m.	29.18
Oswego .....	29.23	26	9 p. m.	29.89	19	2 p. m.	28.30
Ovid .....	28.83	26	7 a. m.	29.48	19	7 a. m.	28.05
Penn Yan (a) .....	29.36	11	2 p. m.	29.87	19	2 p. m.	28.44
Pompey .....	28.09	26	2 p. m.	28.65	19	2 p. m.	27.21
Rochester, [Harkness] .....	29.35			30.05			28.42
Rochester, [Palmer] .....	29.36	26	7 a. m.	30.03	20	2 p. m.	28.33
Sag Harbor .....	29.72	26	7 a. m.	30.29	19	9 p. m.	28.95
Saratoga (e) .....	29.63	26	2 p. m.	30.25	19	2 p. m.	28.90
Spencertown .....	29.25	26	7 a. m.	29.83	19	9 p. m.	28.52
Waterford .....	29.83	26	7 a. m.	30.45	19	9 p. m.	29.03
New Jersey—Bloomfield .....	29.93	26	7 a. m.	30.64	19	2 p. m.	29.14
Burlington .....	29.93	26	7 a. m.	30.58	19	2 p. m.	29.15
Lambertville (a) .....	29.97	26	2 p. m.	30.60	19	$4\frac{1}{2}$ p. m.	29.08
Newark .....	29.96	25	7 a. m.	30.62	19	6 p. m.	29.07

*a* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

*b* Same height at 2 p. m. on the 9th, and at 9 p. m. on the 30th.

*c* Same height at 2 p. m. on the 19th.

*d* Same height at 2 p. m. on the 30th.

*e* Aneroid.

*f* Same height at 7 a. m. on the 20th.

*g* Incomplete.

*h* Not corrected for temperature.

*i* Same height at 2 p. m. on the 26th.

*j* Same height at 9 p. m. on the 19th.

## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Bedford (a).....	29.07	26	7 a. m.	29.63	19	2 p. m.	28.23
.....Cannonsburg.....	28.76	26	7 a. m.	29.38	19	7 a. m.	27.84
.....Chromedale.....	29.88	26	7 a. m.	30.58	19	2 p. m.	28.97
.....Easton.....	29.52	26	7 a. m.	30.17	19	2 p. m.	28.66
.....Gettysburg.....	29.48	26	7 a. m.	30.15	19	2 p. m.	28.58
.....Harrisburg, [Heisely].....	29.77	26	7 a. m.	30.41	19	2 p. m.	28.86
.....Harrisburg, [Hickok].....	29.72	26	7 a. m.	30.42	19	2 p. m.	28.79
.....Lewisburg.....	29.54	26	7 a. m.	30.24	19	2 p. m.	28.59
.....Morrisville.....	30.08	26	7 a. m.	30.80	19	2 p. m.	29.32
.....Mount Joy (b).....	29.70	26	7 a. m.	30.28	19	9 p. m.	28.96
.....Murrysville.....	28.80	26	7 a. m.	29.44	19	7 a. m.	27.95
.....Nazareth.....	29.40	25	9 p. m.	30.02	19	2 p. m.	28.53
.....Norristown.....	29.90	26	7 a. m.	30.62	19	2 p. m.	29.02
.....Philadelphia.....	29.88	26	7 a. m.	30.47	19	2 p. m.	29.12
.....Pittsburg, [Martin].....	28.85	25	2 p. m.	c 29.51	19	7 a. m.	27.96
.....Pittsburg, [Wilson].....	28.88	26	2 p. m.	29.46	19	2 p. m.	27.85
.....West Chester.....	29.42	26	7 a. m.	30.12	19	2 p. m.	28.61
Delaware.....Newark.....	29.86	26	7 a. m.	30.53	19	2 p. m.	28.99
Maryland.....Annapolis.....	30.04	26	7 a. m.	30.71	19	7 a. m.	29.34
.....Baltimore (a).....	29.85	26	7 a. m.	30.56	19	2 p. m.	28.92
.....Frederick.....	29.76	26	7 a. m.	30.46	19	2 p. m.	28.88
Dist. of Columbia.....Washington, [Smithsonian Inst.] (a).....	30.09	27	7 a. m.	30.66	19	7 a. m.	29.28
Virginia.....Alexandria.....	30.03	26	7 a. m.	30.70	19	2 p. m.	29.11
.....Berryville.....	29.42	26	7 a. m.	30.11	18	9 p. m.	28.50
.....Portsmouth.....	30.05	26	7 a. m.	d 30.68	19	2 p. m.	29.19
.....Roe Hill (a).....	29.99	26	7 a. m.	30.71	19	2 p. m.	29.05
North Carolina.....Chapel Hill.....	29.61	26	2 p. m.	30.29	19	2 p. m.	28.71
.....Davidson College (a).....	29.24	26	7 a. m.	29.90	19	2 p. m.	28.46
.....Murfreesborough (e).....	29.44	26	7 a. m.	30.11	19	2 p. m.	28.60
.....Warrenton.....	29.64	26	7 a. m.	30.20	19	2 p. m.	28.67
South Carolina.....All Saints.....	30.05	26	7 a. m.	30.53	19	9 p. m.	29.46
.....Camden.....	29.93	26	7 a. m.	30.48	19	2 p. m.	29.18
.....Charleston, [Dawson].....				30.61			29.57
.....Charleston, [Johnson].....	30.01	26	7 a. m.	f 30.60	19	2 p. m.	29.47
Georgia.....Hillsborough.....	29.45	26	7 a. m.	29.93	19	7 a. m.	28.85
.....Savannah.....	30.10	26	7 a. m.	30.57	19	2 p. m.	29.44
.....The Rock.....	29.26	26	7 a. m.	f 29.68	19	7 a. m.	28.75
Florida.....Atena.....	29.83	26	7 a. m.	g 30.10	18	2 p. m.	29.40
.....St. Augustine.....	30.14	26	7 a. m.	30.47	19	2 p. m.	29.68
.....Salt Ponds (b).....	29.69	26	2 p. m.	29.89	13	7 a. m.	29.41
.....Warrington.....	30.09	26	7 a. m.	30.43	19	7 a. m.	29.71
Alabama.....Auburn.....	29.41	25	7 a. m.	h 29.79	18	9 p. m.	29.08
.....Green-borough.....	29.65	26	7 a. m.	30.12	19	7 a. m.	29.18
Mississippi.....Columbus.....	29.86	26	7 a. m.	30.34	19	7 a. m.	29.35
Texas.....New Braunfels (b).....	28.90	19	7 a. m.	29.23	6	9 p. m.	i 28.40
.....Washington.....	29.69	26	7 a. m.	29.95	7	7 a. m.	29.16
Tennessee.....Glenwood.....	29.56	26	7 a. m.	30.08	18	9 p. m.	28.87
.....Memphis.....	29.77	26	7 a. m.	30.28	7	2 p. m.	29.18
Kentucky.....Paris.....	29.16	26	7 a. m.	29.73	19	7 a. m.	j 28.45
.....Springdale (a).....	29.41	26	7 a. m.	30.01	18	9 p. m.	28.73
Ohio.....Belle Centre.....	28.73	26	7 a. m.	29.40	19	7 a. m.	27.82
.....Bowling Green (a).....	29.26	25	9 p. m.	29.87	19	Sunrise	28.15
.....Cincinnati, [Harper].....	29.50	26	7 a. m.	30.07	18	9 p. m.	28.67
.....Cincinnati, [Hurt].....	29.25	26	7 a. m.	30.06	19	7 a. m.	28.57
.....Cleveland (k).....	28.97	26	7 a. m.	c 29.61	19	7 a. m.	28.12
.....Hillsborough.....	28.79	26	7 a. m.	29.39	19	7 a. m.	27.96

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Not corrected for temperature.

c Same height at 9 p. m. on the 25th.

d Same height at 2 p. m. on the 6th.

e Incomplete.

f Same height at 7 a. m. on the 27th.

g Same height at 9 p. m. on the 25th; at 2 p. m. and 9 p. m. on the 26th; and at 7 a. m. and 9 p. m. on the 27th.

h Same height at 9 p. m. on the 26th.

i Same height at 7 a. m. on the 7th.

j Same height at 9 p. m. on the 18th.

k Aneroid.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio ----- Medina -----	28.75	25	2 p. m.	<i>a</i> 29.38	19	7 a. m.	27.68
----- Oberlin -----	29.07	25	9 p. m.	29.74	19	7 a. m.	28.01
----- Ripley ( <i>b</i> ) -----	29.43	26	7 a. m.	30.01	19	7 a. m.	28.66
----- Urbana -----	28.82	26	7 a. m.	29.47	19	7 a. m.	27.91
Michigan ----- Battle Creek -----	29.07	26	7 a. m.	29.73	19	7 a. m.	28.14
----- Marquette -----	29.16	25	2 p. m.	29.79	5	9 p. m.	28.39
----- New Buffalo -----	29.22	25	9 p. m.	29.88	18	9 p. m.	28.29
Indiana ----- Evansville -----	28.82	26	7 a. m.	29.37	18	9 p. m.	28.07
----- Michigan City -----	29.18	25	9 p. m.	29.81	18	9 p. m.	28.30
----- New Albany -----	29.40	11	7 a. m.	29.96	18	9 p. m.	28.69
----- New Harmony -----	29.62	26	7 a. m.	30.23	18	9 p. m.	28.80
----- Richmond -----	28.92	26	7 a. m.	29.58	19	7 a. m.	28.17
Illinois ----- Athens -----	29.35	26	7 a. m.	<i>a</i> 29.98	18	9 p. m.	28.51
----- Batavia ( <i>c</i> ) -----	29.00	25	2 p. m.	<i>d</i> 29.55	18	9 p. m.	28.05
----- Manchester -----	28.82	25	7 a. m.	29.43	18	9 p. m.	28.04
----- West Urbana -----	29.19	26	7 a. m.	29.80	18	9 p. m.	28.40
Missouri ----- Cape Girardeau ( <i>b</i> ) -----	29.62	26	9 a. m.	30.19	18	9 p. m.	28.91
----- St. Joseph ( <i>b</i> ) -----	29.06	25	9 a. m.	29.64	4	9 p. m.	28.44
----- St. Louis -----	29.53	26	7 a. m.	<i>a</i> 30.13	18	9 p. m.	28.72
----- Springfield ( <i>b</i> ) -----	28.58	26	Sunrise	30.11	18	9 p. m.	28.10
Wisconsin ----- Appleton -----	28.89	25	7 a. m.	29.58	17	9 p. m.	27.99
----- Beloit -----	29.10	25	7 a. m.	29.81	18	9 p. m.	28.18
----- Kenosha ( <i>e</i> ) -----	29.38	24	9 p. m.	30.04	18	9 p. m.	28.51
----- Madison, [Sterling] -----	28.87	25	7 a. m.	29.57	18	9 p. m.	28.05
----- Manitowoc ( <i>e</i> ) -----	29.61	25	2 p. m.	30.30	18	9 p. m.	28.78
----- Milwaukee, [Winkler] -----	29.15	25	7 a. m.	<i>f</i> 29.82	18	9 p. m.	28.25
----- Waukesha, [Bean] -----	29.04	25	7 a. m.	29.71	18	9 p. m.	28.13
Iowa ----- Dubuque -----	29.24	25	7 a. m.	29.94	5	7 a. m.	28.53
----- Fairfield -----	29.12	25	9 p. m.	29.68	18	2 p. m.	<i>g</i> 28.51
----- Muscatine -----	29.41	11	7 a. m.	29.93	18	9 p. m.	28.66
Kansas ----- Lawrence -----	29.08	25	7 a. m.	29.59	4	9 p. m.	28.47
----- Leavenworth City -----	28.78	25	7 a. m.	29.10	18	9 p. m.	28.47
California ----- Sacramento -----	30.06	17	7 a. m.	30.27	10	2 p. m.	29.67
----- San Francisco ( <i>c</i> ) -----	30.05	27	7 a. m.	30.23	10	9 p. m.	29.72
West Indies ----- St. George's, Bermuda ( <i>h</i> ) -----	29.99						
Central America ----- Guatemala -----	25.23			25.33			25.08
South America ----- Catharina Sophia, Surinam ( <i>i</i> ) -----	29.59	20	6 p. m.	29.67	22	6 a. m.	29.50
Mexico ----- Mirador ( <i>b</i> ) -----	22.77						
----- Vera Cruz ( <i>b</i> ) -----	29.97	20	10 p. m.	30.22	7	9 p. m.	29.61

*a* Same height at 9 p. m. on the 25th.*b* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.*c* Aneroid.*d* Same height at 2 p. m. on the 26th.*e* Not corrected for temperature.*f* Same height at 2 p. m. on the 25th.*g* Same height at 9 p. m. on the 18th.*h* Observations taken at 9½ a. m. and 3½ p. m.*i* For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month. Aneroid.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Labrador.....Rigolet (a) .....	29.65	1	Sunrise.	30.40	24	Sunset.	24.50
British America ..Hamilton (a) .....	29.63	12	9 a. m.	30.22	31	9 a. m.	28.94
.....Montreal .....	29.97	20	9 p. m.	30.49	31	2 p. m.	28.99
.....St. John's (b) .....	29.35	21	7 a. m.	30.10	17	7 a. m.	28.10
.....St. Martin .....	29.74	20	9 p. m.	30.35	31	2 p. m.	28.88
.....Toronto (a) .....	29.62	12	6 a. m.	30.22	31	6 a. m.	28.85
.....Windsor (a) .....	29.87	1	7 a. m.	30.45	31	9 p. m.	28.96
.....Wolfville .....	29.83	1	7 a. m.	30.44	31	9 p. m.	29.09
Maine.....Gardiner .....	29.80	15	9 p. m.	30.24	31	2 p. m.	28.92
.....Portland .....	29.92	12	9 p. m.	30.39	31	2 p. m.	28.94
.....Steuben .....	29.89	15	9 p. m.	30.39	31	2 p. m.	28.83
New Hampshire ..Claremont .....	29.02	12	7 a. m.	29.51	31	2 p. m.	28.23
.....Concord .....	29.60	12	9 p. m.	30.10	31	2 p. m.	28.69
.....Shelburne .....	29.75	21	7 a. m.	30.16	31	9 p. m.	28.91
Vermont ..Burlington .....	29.63	12	7 a. m.	c 30.12	31	2 p. m.	28.70
.....Norwich .....	29.66	12	7 a. m.	d 30.10	31	7 a. m.	28.99
.....St. Johnsbury .....	29.37	20	9 p. m.	29.85	31	2 p. m.	28.46
.....Shelburn .....	29.57	12	7 a. m.	30.19	31	2 p. m.	28.38
Massachusetts ..Amherst .....	29.78	12	9 p. m.	30.31	31	2 p. m.	28.93
.....Bridgewater (a) .....	29.82	12	7 p. m.	30.32	31	2 p. m.	29.02
.....Cambridge .....	29.97	12	9 p. m.	30.50	31	2 p. m.	29.10
.....Canton .....	29.84	12	9 p. m.	30.32	31	2 p. m.	28.99
.....Lawrence .....	29.88	12	7 a. m.	30.46	31	2 p. m.	28.97
.....Nantucket .....	30.03	17	9 p. m.	30.53	31	2 p. m.	29.29
.....New Bedford .....	29.93	12	9 p. m.	30.46	31	2 p. m.	29.14
.....Newburyport .....	30.01	12	9 p. m.	30.51	31	2 p. m.	29.06
.....Princeton .....	28.82	12	7 a. m.	29.32	31	2 p. m.	28.32
.....Westfield .....	29.90	12	9 p. m.	30.42	31	2 p. m.	29.11
.....Williamstown .....	29.28	12	2 p. m.	29.82	31	2 p. m.	28.48
.....Worcester .....	29.49	12	9 p. m.	30.33	23	9 p. m.	28.97
Rhode Island ..Providence (a) .....	29.82	12	10 p. m.	30.34	31	1 p. m.	28.91
Connecticut.....New London .....	29.97	12	2 p. m.	30.58	22	2 p. m.	29.28
.....Norwich .....	29.92	12	9 p. m.	30.41	31	2 p. m.	29.11
.....Pomfret .....	29.38	12	9 p. m.	29.90	31	7 a. m.	28.60
.....Wallingford .....	29.91	12	9 p. m.	30.46	31	7 a. m.	29.10
New York.....Bellport .....	29.33	12	7 a. m.	e 29.77	31	2 p. m.	28.59
.....Canton .....	29.43	12	7 a. m.	29.97	31	2 p. m.	28.48
.....Cazenovia .....	28.58	12	2 p. m.	29.09	31	7 a. m.	27.82
.....Fishkill Landing (f) .....	30.27	23	7 a. m.	30.84	31	7 a. m.	g 29.40
.....Flatbush .....	29.98	12	9 p. m.	30.54	31	7 a. m.	29.18
.....Fort Edward .....	29.84	12	7 a. m.	30.36	31	2 p. m.	28.91
.....Lowville .....		12	2 p. m.	29.69	31	2 p. m.	28.27
.....Madrid .....	29.69	12	7 a. m.	30.26	31	2 p. m.	28.73
.....New York city .....	30.03	12	9 p. m.	30.59	31	7 a. m.	29.20
.....Oswego .....	29.33	12	2 p. m.	29.89	31	7 a. m.	28.53
.....Ovid .....	28.88	12	7 a. m.	h 29.41	31	7 a. m.	28.11
.....Penn Yann (a) .....	29.42	12	Sunrise	h 29.94	31	Sunrise	28.65
.....Pompey .....	28.14	12	2 p. m.	28.68	31	2 p. m.	27.39
.....Rochester [Harkness] .....	29.42			30.00			28.63
.....Rochester [Palmer] .....	29.46	12	7 a. m.	h 29.99	31	7 a. m.	28.65
.....Sag Harbor (a) .....	29.70	21	7 a. m.	30.14	31	7 a. m.	28.95
.....Saratoga (i) .....	29.58	12	7 a. m.	30.15	31	2 p. m.	28.70
.....Spencertown (a) .....	29.39	20	9 p. m.	29.72	22	9 p. m.	28.75
.....Waterford .....	29.88	13	7 a. m.	30.41	31	2 p. m.	29.04
New Jersey ..Bloomfield (a) .....	30.05	12	7 a. m.	30.53	22	2 p. m.	29.40
.....Burlington .....	30.00	13	7 a. m.	30.54	31	2 p. m.	29.41
.....Lambertville (a) .....	29.99	12	9 p. m.	30.55	31	7 a. m.	29.25

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Observations taken at 7 a. m. and 2 p. m.

c Same height at 9 p. m. on the 20th.

d Same height at 9 p. m. on the 12th.

e Same height at 2 p. m. and 9 p. m. on the 12th.

f Not corrected for temperature.

g Same height at 2 p. m. on the 31st.

h Same height at 2 p. m. on the 12th.

i Aneroid.



## No. 13.--BAROMETER, CORRECTED TO 32° F., DECEMBER, 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
Day.	Hour.	Day.	Hour.					
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
New Jersey	Newark (a)	30.02	12	6 p. m.	30.56	31	7 a. m.	29.21
Pennsylvania	Bedford	29.13	12	7 a. m.	29.65	31	7 a. m.	28.59
	Berwick (b)	29.25	12	2 p. m.	29.92	31	7 a. m.	28.53
	Cannonsburg	28.83	20	9 p. m.	29.73	31	7 a. m.	28.21
	Chromedale	29.91	12	7 a. m.	30.47	31	7 a. m.	29.19
	Easton	29.56	12	9 p. m.	30.09	31	7 a. m.	28.81
	Gettysburg	29.51	12	7 a. m.	c 30.03	31	7 a. m.	28.82
	Harrisburg, [Heisely]	29.80	12	2 p. m.	d 30.34	31	7 a. m.	29.09
	Harrisburg, [Hickok]	29.76	12	7 a. m.	30.30	31	7 a. m.	29.04
	Lewisburg	29.58	12	7 a. m.	30.12	31	7 a. m.	28.85
	Morrisville	30.13	12	9 p. m.	30.69	31	7 a. m.	29.39
	Mount Joy (b)	29.75	12	2 p. m.	30.27	31	7 a. m.	28.99
	Murrysville	28.86	12	7 a. m.	29.37	31	7 a. m.	28.29
	Nazareth	29.42	12	2 p. m.	30.00	31	7 a. m.	28.70
	Norristown	29.92	12	9 p. m.	30.50	31	7 a. m.	29.33
	Philadelphia	29.90	13	7 a. m.	30.41	31	7 a. m.	29.27
	Pittsburg, [Martin]	28.98	12	7 a. m.	29.40	31	7 a. m.	28.36
	Pittsburg, [Wilson]	28.86	12	7 a. m.	29.35	31	7 a. m.	28.28
	Somerset	27.65	20	9 p. m.	28.00	31	7 a. m.	27.08
	West Chester	29.46	12	9 p. m.	30.01	31	7 a. m.	28.74
Delaware	Milford	29.70	12	2 p. m.	d 30.25	31	7 a. m.	29.07
	Newark (a)	29.93	12	2 p. m.	30.40	22	2 p. m.	29.37
Maryland	Annapolis	30.06	12	7 a. m.	e 30.58	31	7 a. m.	29.45
	Baltimore	29.92	12	2 p. m.	d 30.45	31	7 a. m.	29.26
	Frederick	29.79	12	7 a. m.	30.33	31	7 a. m.	29.12
	Oakland (a)	27.61	12	9 p. m.	28.00	30	2 p. m.	27.19
Virginia	Alexandria	30.06	12	7 a. m.	30.58	31	7 a. m.	29.43
	Berryville	29.47	12	7 a. m.	30.00	31	7 a. m.	28.84
	Portsmouth	30.07	12	9 p. m.	30.58	30	9 p. m.	29.44
	Rose Hill	30.03	12	9 p. m.	30.57	30	9 p. m.	29.41
	Ruthven (a)	29.74	12	9 p. m.	30.26	30	9 p. m.	29.22
North Carolina	Ashville (a)	27.76	12	1 p. m.	28.08	30	1 p. m.	27.41
	Chapel Hill	29.57	11	7 p. m.	29.94	30	9 p. m.	29.11
	Davidson College (a)	29.25	13	7 a. m.	d 29.68	30	9 p. m.	28.70
	Murfreesborough	29.40	12	9 p. m.	29.97	30	9 p. m.	28.92
South Carolina	All Saints	30.05	12	9 p. m.	e 30.42	25	7 a. m.	29.45
	Camden	29.96	12	9 p. m.	30.37	25	7 a. m.	29.45
	Charleston, [Dawson]				30.57			29.85
	Charleston, [Johnson]	30.13	12	9 p. m.	e 30.48	25	7 a. m.	29.73
Georgia	Athens	29.34	13	7 a. m.	29.75	30	2 p. m.	28.63
	Hillsborough (a)	29.48	13	7 a. m.	29.86	30	2 p. m.	29.05
	Savannah	30.11	12	9 p. m.	30.45	30	2 p. m.	29.73
	The Rock	29.29	14	2 p. m.	29.63	30	2 p. m.	28.76
Florida	Atsena	29.86	12	9 p. m.	30.07	24	9 p. m.	29.57
	Jacksonville	30.15	13	7 a. m.	30.42	30	2 p. m.	29.78
	St. Augustine	30.16	12	7 a. m.	f 30.40	24	9 p. m.	29.80
	Salt Ponds (b)	29.74	3	2 p. m.	g 29.88	15	7 a. m.	29.56
	Warrington	30.10	11	7 a. m.	h 30.42	30	2 p. m.	29.79
Alabama	Auburn	29.42	13	7 a. m.	29.76	30	2 p. m.	29.09
	Greensborough	29.69	13	7 a. m.	30.08	6	7 a. m.	29.28
Mississippi	Columbus	29.90	13	7 a. m.	30.28	6	7 a. m.	29.42
Texas	Goliad	30.08	10	7 a. m.	30.41	5	2 p. m.	29.66
	Washington	29.71?	10	7 a. m.	i 30.07	5	9 p. m.	29.32
Tennessee	Glenwood	29.60	13	7 a. m.	30.01	6	7 a. m.	29.11
	Memphis	29.80	12	7 a. m.	30.19	6	7 a. m.	29.30
Kentucky	Paris	29.21	13	7 a. m.	29.62	5	2 p. m.	28.67
	Springdale (a)	29.46	12	7 a. m.	29.90	6	2 p. m.	28.94

a For changes from the usual hours of observation, &c., see notes to table of the thermometer for this month.

b Not corrected for temperature.

c Same height at 2 p. m. on the 12th.

d Same height at 9 p. m. on the 12th.

e Same height at 7 a. m. on the 13th.

f Same height at 2 and 9 p. m. on the 11th, and at 7 a. m. on the 13th.

g Same height at 2 p. m. on the 4th.

h Same height at 9 p. m. on the 11th.

i Same height at 7 a. m. on the 11th.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio	Belle Centre	29.82	12	7 a. m.	29.31	6	2 p. m.	28.31
	Bowling Green	29.26	12	Sunrise.	29.81	6	2 p. m.	28.72
	Cincinnati, [Harper]	29.55	13	7 a. m.	29.96	6	2 p. m.	29.01
	Cincinnati, [Hurt]	29.30	12	7 a. m.	29.83	6	2 p. m.	28.66
	Cleveland (a)	29.02	12	7 a. m.	29.52	30	9 p. m.	28.52
	Hillsborough	28.84	12	2 p. m.	b 29.27	30	9 p. m.	28.31
	Medina (c)	28.77	12	7 a. m.	29.31	31	7 a. m.	28.14
	New Lisbon (d)	28.64	12	7 a. m.	29.10	31	7 a. m.	28.00
	Ripley	29.48	12	7 a. m.	29.90	6	2 p. m.	28.92
	Savannah	28.92	12	2 p. m.	29.42	31	7 a. m.	28.33
	Urbana	28.89	12	7 a. m.	29.37	6	2 p. m.	28.34
Michigan	Battle Creek	29.13	12	7 a. m.	29.59	30	9 p. m.	28.54
	Marquette	29.35	11	9 p. m.	29.83	6	2 p. m.	28.57
	New Buffalo	29.31	12	7 a. m.	29.81	6	7 a. m.	28.73
Indiana	Evansville	28.87	13	7 a. m.	29.33	6	7 a. m.	28.35
	Michigan City	29.25	12	7 a. m.	29.72	6	7 a. m.	28.72
	New Harmony	29.68	12	7 a. m.	30.13	6	7 a. m.	29.13
Illinois	Richmond	28.99	12	7 a. m.	29.47	30	9 p. m.	28.48
	Batavia (a)	29.07	12	2 p. m.	29.55	31	9 p. m.	28.52
	Manchester(c)	28.84	12	7 a. m.	29.23	31	9 p. m.	28.34
	West Urbana	29.25	12	7 a. m.	29.67	■	7 a. m.	28.55
Missouri	Wheaton	29.23	12	7 a. m.	29.73	■	7 a. m.	28.60
	Cape Girardeau (c)	29.72	13	9 a. m.	30.08	6	Sunrise	29.15
	St. Joseph (c)	29.10	19	9 a. m.	29.43	31	3 p. m.	28.49
	St. Louis	29.58	12	7 a. m.	30.16	■	7 a. m.	29.05
Wisconsin	Springfield (c)	28.68	19	Sunrise.	e 29.00	5	3 p. m.	f 28.18
	Appleton	28.98	12	7 a. m.	29.56	6	2 p. m.	28.39
	Beloit	29.19	11	9 p. m.	29.66	■	7 a. m.	28.60
	Kenosha (d)	29.45	10	9 p. m.	29.95	■	7 a. m.	28.84
	Madison, [Sterling]	29.02	11	9 p. m.	29.49	6	7 a. m.	28.38
	Manitowoc	29.71	12	7 a. m.	30.23	6	7 a. m.	29.07
	Milwaukee, [Winkler]	29.23	12	7 a. m.	29.71	■	7 a. m.	28.63
	Racine, [Durham] (d)	29.22	11	9 p. m.	29.72	6	7 a. m.	g 28.68
	St. Croix	29.17	11	9 p. m.	29.66	■	7 a. m.	28.56
	Waukesha	29.14	12	7 a. m.	29.64	6	7 a. m.	28.50
	Dubuque	29.34	11	9 p. m.	29.82	31	9 p. m.	28.76
	Fairfield	29.18	11	9 p. m.	29.58	31	2 p. m.	28.64
	Muscatine	29.51	11	2 p. m.	h 29.99	31	9 p. m.	28.90
Minnesota	Wabashaw	29.15	12	7 a. m.	29.63	6	7 a. m.	28.56
Kansas	Lawrence	29.12	19	7 a. m.	29.53	5	2 p. m.	28.56
	Leavenworth City	28.75	18	9 p. m.	i 28.95	31	2 p. m.	28.40
Oregon	Fort Thomson	24.75	20	9 p. m.	25.07	6	1 p. m.	24.29
California	Sacramento	30.16	29	9 p. m.	j 30.44	11	7 a. m.	29.81
	San Francisco (a)	30.13	30	7 a. m.	30.41	10	9 p. m.	29.78
Mexico	Mirador (c)	22.82						
	Vera Cruz (c)	30.02	10	10 p. m.	30.30	5	4 p. m.	29.73
West Indies	St. George's, Bermuda (k)	29.94	13	9½ a. m.	30.32	26	3½ a. m.	29.50
Central America	Guatemala	25.25			25.36			25.11
South America	Catharina Sophia, Surinam (l)	29.59	4	6 a. m.	m 29.67	21	2 p. m.	n 29.51
	Catharina Sophia, Surinam (c)	29.88	4	6 a. m.	o 30.08	21	6 p. m.	p 29.78

a Aneroid.

b Same height at 7 a. m. on the 13th.

c For changes from the usual hours of observation, &amp;c., see notes to table of the thermometer for this month.

d Not corrected for temperature.

e Same height at 3 p. m. on the 29th.

f Same height at 3 p. m. on the 31st.

g Same height at 7 a. m. on the 31st.

h Same height at 9 p. m. on the 11th.

i Same height at 7 a. m., 2 and 9 p. m. on the 19th.

j Same height at 7 a. m. on the 30th.

k Observations taken at 3½ and 9½ a. m., 3½ and 9½ p. m.

l For changes from the usual hours of observation, &amp;c., see notes to table of the thermometer for this month. Aneroid.

m Same height at 6 a. m. on the 6th.

n Same height at 6 a. m. on the 23d.

o Same height at 6 a. m. on the 5th and 6th.

p Same height at 6 p. m. on the 22d.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°	°	°	°	°	°	°	°	°	
Hamilton (a) -----	12.68		14.58	13.63	?	41	2	30.50	?	—18	22	—5.00	----
Montreal -----	2.27	10.38	5.85	6.17	27	31	13	28.30	23	—27	8	—9.50	6.9
Stanbridge -----	1.16	11 00	5.68	5.95	27	34	27	30.67	18	—42	23	—29.33	6.5
St. John's (b) -----	25.19	30.64	28.10	27.98	20	47	20	45.67	27	7	27	8.33	----
St. Martin -----	—3.20	10.20	3.50	3.50	21	30	1	22.10	23	—30 c	23	—25.30	5.7
Toronto (d) -----	10.34	16.04	12.64	13.01	31	32	2	28.92	18	—18	23	—9.18	6.9
Wolfville -----	18.82	27.52	21.96	22.77	22	45	22	40.33	18	—10	18	—4.67	6.6
MAINE—													
Carmel -----	4.62	15.90	6.32	8.95	27	35	28	34.67	23	—25	23	—20.67	5.2
Cornish, [Guptill] -----	5.84	17.48	8.32	10.55	27	34	27	30.00	23	—26 c	23	—21.00	5.0
Cornish, [West] -----	3.19	15.58	6.81	8.53	27	32	27	28.67	23	—28 c	23	—23.33	5.4
Gardiner -----	7.19	18.58	12.32	12.70	27	35	27	31.33	24	—32	23	—14.33	6.0
Monson -----													6.0
Perry -----	12.29	19.32	16 06	15.89	27	38	27	33.33	24	—19	23	—9.00	5.9
Portland -----	8.34	20.51	13.32	14.06	29	38	27	33.50	24	—25	23	—17.16	5.9
Steuben -----	8.29	16.32	13.45	12.69	29	31	28	29.67	24	—29	24	—16.33	6.1
NEW HAMPSHIRE—													
Concord -----	7.49	18.24	13.92	13.22	27	38	27	31.00	24	—28	23	—14.67	4.6
Francestown, [Bixby] -----	9.65	18.00	12.77	10.14	27	36	27	33.33	23	—24	23	—18.00	5.4
Great Falls -----	7.26	19.94	11.18	12.79	28	39	27	33.00	23	—24 c	23	—19.67	4.7
Manchester -----	7.47	18.67	12.58	12.91	21	38	27	33.33	23	—22	23	—17.67	5.4
North Barnstead -----													6.8
Shelburne -----	4.00	17.62	11.28	10.97	27	36	27	29.00	24	—32	23	—22.00	6.2
Stratford -----	1.42	12.32	3.81	5.52	29	30	27	25.67	24	—39	23	—25.60	5.9
West Enfield -----	2.89	13.82	5.68	7.46	27	34	27	29.67	23	—33	23	—29.67	5.7
VERMONT—													
Brandon -----	3.12	14.52	8.44	8.69	29	35	27	29.67	23	—27	23	—19.33	6.1
Craftsbury -----	1.16	10.19	3.74	5.03	1	30	27	25.00	23	—34	23	—28.00	7.1
Norwich (e) -----	1.73	14.27	3.83	6.61	27	34	27	26.33	24	—44	23	—27.00	----
Rupert -----	4.40	14.40	14.00	10.92	21	f 34	29	30.00	23	—28	23	—18.00	5.2
Shelburn (g) -----	3.93	12.07	6.51	7.50	29	33	27	28.67	23	—30	23	—21.33	6.9
West Fairlee -----	5.29	17.03	8.74	10.35	27	34	27	30.00	24	—26	23	—18.00	----
MASSACHUSETTS—													
Amherst -----	8.66	18.61	13.24	13.50	27	37	27	34.10	24	—18	23	—11.30	4.9
Boston (h) -----	13.58	24.32	18.58	18.83	31	42	27	37.00	23	—14	23	—8.33	4.1
Bridgewater (j) -----	12.11	21.07	17.61	16.93	27	42	27	38.00	24	—22	23	—7.50	5.0
Cambridge -----	11.10	20.94	15.07	15.70	27	40	27	37.00	23	—16 c	23	—10.67	5.5
Canton -----	8.31	21.44	15.32	15.02	27	i 40	27	36.00	24	—26	23	—8.67	5.1
Florida -----													6.3
Lawrence -----	9.33			17.64	30	54	28	40.50	24	—25	23	—11.50	----
Mendon -----	10.45	18.26	14.48	14.40	27	40	27	36.00	24	—18	23	—10.67	5.5
Nantucket -----	20.55	27.15	23.58	23.76	31	43	31	37.20	23	—6.5	23	0.00	5.4
New Bedford -----	14.71	22.60	18.42	18.58	27	40	27	37.00	23	—11	23	—6.67	6.3
Newburyport -----	8.97	19.28	12.82	13.69	27	39	27	35.77	22	—20	23	—8.70	8.9
North Attleborough -----	11.78	21.05	15.67	16.17	31	43	27	34.90	24	—21	23	—9.60	5.2
Plainfield -----	1.42				1	k 20			23	—31			----
Richmond -----	7.42	17.95	11.94	12.44	29	42	29	31.33	23	—23	23	—17.33	6.2
Westfield -----	9.35	18.29	13.31	13.65	27	34	27	30.33	24	—24	23	—12.00	5.9
Weymouth -----	13.23		17.16	15.19	31	43	27	36.00	24	—15	23	—10.00	----
Williamstown -----	11.86	16.50	13.74	14.03	27	33	27	31.80	16	—9	22	—0.50	7.6
Worcester -----	12.39	20.19	15.90	16.16	27	38	27	35.67	24	—13	23	—8.00	5.2
RHODE ISLAND—													
Providence (l) -----	11.90	22.00	15.00	16.30	27	40	27	36.00	23	—14 c	23	—9.67	5.3
CONNECTICUT—													
Columbia -----	6.03	18.13	11.90	12.02	31	42	27	34.33	24	—22	18	—10.00	5.6
Georgetown -----	10.37	22.10	16.38	16.28	2	44	3	33.00	24	—18	23	—3.33	4.9

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 8 a. m., 3 p. m., and 6 p. m.

c Same temperature on the 24th.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e For the last 23 days of the month only.

f Same temperature on the 29th.

g Observations taken at sunrise, noon, and sunset.

h Observations taken at 6 a. m., 2 p. m., and 10 p. m.

i Same temperature on the 31st.

j Observations taken at 7 a. m., 1 p. m., and 7 p. m.

k Same temperature on the 27th.

l Observations taken at sunrise, 1 p. m., and 10 p. m.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	°		°		°		°			
New London	14.23	23.52	18.10	18.62	28	a 39	28	34.33	23	-16	23	-5.33	5.3
Norwich	11.10	21.74	15.45	16.10	28	45	28	36.00	24	-24	23	-8.00	4.8
Pomfret	11.19	19.42	14.23	14.95	31	42	27	34.00	23	-15	23	-10.00	5.7
Saybrook	14.94	22.43	19.19	18.85	31	40	28	35.67	23	-12	23	-2.67	5.7
Wallingford	12.81	12.81	14.65	13.42	27	36.5	27	34.17	24	-21	23	-9.33	4.8
NEW YORK—													
Angelica	7.81	18.58	9.74	12.04	31	46	31	40.67	18	-22	18	-11.33	5.6
Baldwinsville	9.48	17.19	12.87	13.18	27	34	27	29.00	18	-19	18	-10.33	8.3
Beverly	10.87	19.36	15.10	15.11	27	35	27	30.00	24	-16	18	-9.00	5.7
Blackwell's Island	17.68	23.81	21.23	20.91	27	38	27	34.67	18	-5	18	-1.00	5.8
Buffalo (b)	8.46	19.15	9.44	12.35	27	37		?	18	-10	18	-3.00	7.5
Cazenovia	5.52	12.10	8.84	8.82	27	a 31	27	25.33	18	-29	18	-18.67	8.4
Clinton	6.61	17.00	8.74	10.78	27	37	27	30.67	18	-24	23	-16.33	6.5
Fishkill Landing	10.74	22.39	14.58	15.90	27	37	27	33.33	24	-16.5	18	-5.83	5.6
Flatbush	15.50	23.70	17.76	19.32	27	37	27	33.00	24	-5	18	0.70	5.9
Fordham	18.33	25.74	20.58	21.55	27	42	27	37.33	18	-3	18	1.00	
Lake									23	-40			
Lowville				5.42	27	33	3	25.25	18	-34	23	-25.00	
McGrawville	7.00	12.36	8.34	9.23	27	32	31	27.43	23	-23.5	23	-16.77	7.5
Mexico	7.66	17.39	10.44	11.82	14	33	27	28.70	18	-31.5	18	-16.60	6.9
Morrisania	14.03	23.77	16.81	18.20	1	39	1	37.67	23	-8	23	-1.67	4.8
New York city	19.46	26.14	22.01	22.54	27	39	27	36.33	18	0	18	2.53	5.5
Nichols (c)	6.42	20.33	9.74	12.16	27	34	27	28.67	24	-26	18	-8.00	8.2
Oswego	9.77	18.00	15.16	14.31	27	34	27	31.00	18	-18	18	-8.33	8.2
Ovid	11.16	15.61	12.90	13.22	31	34	31	29.67	18	-17	18	-12.67	7.8
Penn Yan (d)	10.61	20.00	14.65	15.09	31	e 36	31	31.33	18	-18	18	-9.00	8.2
Plainville	9.13	18.32	14.13	13.86	27	35	27	30.00	18	-24	18	-13.33	8.0
Rochester, [Harkness]	13.00	18.50	14.90	15.47		37				-13			
Rochester, [Palmer]	13.32	17.97	13.35	14.88	27	a 36	31	32.33	18	-12	18	-4.00	9.2
Sag Harbor	15.93	26.87	19.35	20.72	21	44	27	38.00	23	-6	23	0.67	5.4
Saratoga	0.48	21.71	8.55	10.25	30	40	27	29.00	23	-40	23	-20.67	4.8
Spencertown	6.39	14.10	10.81	10.43	27	33	27	30.67	23	-23	23	-19.00	5.6
Townsendville	9.00	16.65	10.45	12.03	27	32	31	27.00	18	-17	18	-12.00	7.9
Troy	8.37	19.30	14.12	13.93	1	f 35	27	31.40	24	-20	23	-11.50	6.3
Utica	5.43	13.67	9.48	9.53	30	38	29	29.50	23	-26	18	-17.33	1.9
Wampsville	9.45	18.19	11.97	13.20	29	40	27	32.67	18	-23	18	-12.33	7.4
Waterford (g)	4.32	16.71	9.32	10.93	2	f 34	27	30.75	24	-27	23	-11.75	
West Concord													6.2
NEW JERSEY—													
Bloomfield	13.05	23.30	17.12	17.82	27	38	27	32.83	24	-16	18	-2.33	5.1
Burlington	14.71	25.61	20.45	20.26	29	39	31	35.33	24	-15	23	0.67	5.6
Freehold	17.61	27.06	21.59	22.06	27	47	27	39.00	23	-1 h	18	3.84	
Lambertville	12.20	25.56	18.93	18.90	27	41.3	27	34.93	24	-20	18	0.50	3.3
Newark (i)				19.33	4	37	4	32.00	24	-12	18	-1.75	
Sergeantsville	13.78	25.84	17.29	18.97	31	41	3	33.33	24	-12	18	-1.00	5.1
PENNSYLVANIA—													
Bedford	11.98	25.00	17.54	18.17	31	45	31	35.00	26	-9	22	-1.00	6.2
Berwick	11.48	21.72	15.23	16.14	27	j 35	27	32.33	24	-26	23	-3.33	5.2
Byberry	14.15	25.21	17.15	18.84		?		?	24	-15		?	
Cannonsburg	14.13	20.86	18.38	17.79	29	40	27	34.33	23	-6	26	-1.33	7.3
Carlisle	12.87	24.03	17.81	18.24	29	38	29	31.33	24	-16	23	-1.20	5.8
Chromedale	15.60	24.92	19.70	20.07	31	36	31	35.33	24	-17	23	-2.10	5.5
Easton	11.73	21.35	15.58	16.22	29	36	31	30.67	24	-14.5	23	-0.67	6.1
Fleming	10.83	23.51	15.16	16.50	31	38	31	32.00	26	-18	23	-1.00	6.2
Gettysburg	10.52	24.58	15.35	16.82	29	40	31	33.33	24	-20	23	-2.33	5.8
Harrisburg, [Heisely]	16.19	24.79	21.16	20.71	3	38	1	33.00	24	-12	24	3.00	5.9
Lewisburg	10.13	21.73	14.68	15.51	29	35	31	31.17	24	-18	18	-1.63	7.0
Mealville	8.50	20.07	12.10	13.56	30	40	27	a 30.67	16	-12	22	-1.00	7.2

a Same temperature on the 31st.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Observations taken at 6 a. m., 1 p. m., and 9 p. m.

d Observations taken at sunrise, 2 p. m., and sunset.

e Same temperature on the 3d.

f Same temperature on the 27th.

g Observations taken at 7 a. m., and at 1, 6, and 10 p. m. Mean at 6 p. m., 13.36.

h Same temperature on the 24th.

i Observations taken at 7 a. m. and 6 p. m.

j Same temperature on the 29th and 31st.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
	°	°	°	°		°		°		°		°	
PENNSYLVANIA—Continued.													
Morrisville	13. 13	25. 97	17. 74	18. 95	21	a 36	31	32. 00	24	—17	23	0. 33	4. 0
Moss Grove	8. 06	17. 60	9. 74	11. 80	27	40	27	30. 67	18	—12	18	—5. 67	6. 2
Nazareth	12. 43	22. 38	14. 40	16. 40	29	40	27	b 32. 00	24	—11	23	—2. 00	6. 1
Norristown	15. 61	25. 03	20. 21	20. 28	27	b 37	27	34. 50	24	—16	23	0. 00	5. 7
North Whitehall (c)	11. 65	23. 19	20. 13	18. 32	30	38	29	32. 33	24	—8 d	24	—1. 00	7. 5
Paradise				34. 00									
Philadelphia	16. 68	24. 90	21. 18	20. 92	27	38	31	35. 80	23	—5 e	18	1. 00	5. 3
Pittsburg, [Wilson]	11. 55	19. 65	14. 39	15. 20	26	42	27	35. 00	22	—22	22	—4. 67	---
Pocopson	13. 69	25. 81	17. 94	19. 15	29	38	31	34. 00	24	—19	23	—2. 00	5. 8
Shamokin	11. 51	21. 61	17. 29	16. 80	1	f 34	29	30. 33	24	—30	23	—4. 33	5. 6
Tarentum	12. 74	24. 74	17. 23	18. 24	27	43	27	41. 33	26	—10	18	3. 67	6. 6
West Haverford	17. 48	26. 64	---	22. 06	27	40	27	37. 00	23	—4	18	0. 00	5. 5
DELAWARE—													
Newark	14. 88	25. 22	20. 35	20. 15	27	40	27	35. 33	24	—11	23	1. 67	4. 6
MARYLAND—													
Annapolis	17. 26	29. 63	22. 60	23. 16	27	41	31	36. 50	23	—7	23	4. 00	4. 8
Bladensburg	14. 00	26. 06	21. 21	20. 42	21	42	31	35. 67	24	—13	?	?	6. 3
Frederick	15. 76	25. 21	20. 08	20. 35	29	38	2	32. 50	24	—6	18	4. 67	5. 8
Ridge (g)	22. 80	32. 37	24. 70	26. 62	27	46	27	39. 00	22	h 1	23	9. 00	4. 4
Sykesville	11. 00	27. 81	17. 81	18. 87	21	i 44	31	36. 33	24	—21	18	—0. 33	5. 0
DISTRICT OF COLUMBIA—													
Washington, [Smiths'n Inst.]	16. 32	27. 13	22. 03	21. 83	21	40	31	35. 00	24	—8	23	1. 67	5. 9
VIRGINIA—													
Alexandria	18. 35	28. 57	23. 84	23. 59	2	40	2	i 36. 70	24	—6	23	3. 30	5. 5
Ashland	14. 06	27. 22	17. 84	19. 71	31	44	27	39. 67	23	—24	19	—6. 00	5. 7
Berryville	17. 42	21. 49	26. 41	21. 77	7	39	27	32. 67	23	j 0	18	3. 33	5. 8
Crichton's Store (h)	26. 18	34. 70	33. 82	31. 57	27	50	27	43. 00	23	8	23	12. 67	5. 1
Kanawha	15. 97	27. 73	19. 94	21. 21	27	46	27	40. 67	23	—24	23	—5. 67	6. 3
Lewisburg	13. 11	26. 68	18. 66	19. 48	1	l 42	31	m 36. 00	19	—12	21	—3. 00	7. 1
Longwood	18. 58	31. 00	23. 08	24. 22	17	b 44	10	37. 67	23	—3	18	4. 67	5. 0
Meadow Dale	11. 00	23. 52	18. 19	17. 57	29	46	29	35. 33	23	—16	22	—5. 33	---
Montross	18. 10	30. 68	22. 74	23. 84	27	44	3	38. 67	23	—10	23	1. 84	6. 0
Mossy Creek	13. 11	30. 89	18. 50	20. 83	31	54	31	39. 16	23	—8	18	3. 33	5. 9
Poplar Grove	16. 97	31. 65	20. 65	23. 09	31	43	27	i 37. 67	23	—20	23	—1. 33	7. 0
Portsmouth	21. 97	33. 74	25. 65	27. 12	27	58	27	44. 00	23	—5	23	6. 33	3. 6
Rose Hill	20. 16	26. 82	27. 09	24. 69	27	42	27	38. 50	23	1	23	7. 00	5. 2
Rougemont (n)	17. 03	27. 45	20. 75	21. 74	29	41	27	i 34. 60	23	—13	18	—1. 40	---
Ruthven (o)	18. 19	33. 21	25. 93	25. 78	3	44	17	34. 67	23	—12	23	??	3. 7
Smithfield	20. 60	32. 70	26. 40	26. 57	27	53	27	41. 70	23	—11	23	3. 80	5. 5
Winchester	16. 26	28. 65	19. 61	21. 51	29	48	27	35. 33	23	—2	18	p 3. 00	5. 4
Wirt Court-House	11. 29	25. 16	15. 39	17. 28	27	40	27	37. 00	23	—26. 5	23	—7. 58	6. 9
NORTH CAROLINA—													
Chapel Hill	23. 00	34. 87	27. 48	28. 45	27	52	27	40. 00	23	1	23	10. 60	5. 2
Gaston	18. 03	33. 94	25. 68	25. 88	27	54	2	q 36. 00	23	—24	23	—1. 33	---
Goldsborough (r)	29. 30	40. 50	34. 30	34. 70	31	55	31	47. 80	23	2	12	24. 70	4. 7
Murfreesborough	23. 54	33. 48	28. 19	28. 40	27	52	31	41. 00	23	—4	23	7. 00	4. 9
SOUTH CAROLINA—													
Aiken	30. 77	40. 43	36. 00	35. 73	28	60	28	54. 67	19	4	23	21. 00	---
All Saints	32. 74	42. 71	35. 48	36. 98	28	61	31	52. 67	23	15	23	20. 67	4. 4
Camden	25. 26	40. 45	30. 71	32. 14	27	59	28	49. 00	20	0	19	14. 33	5. 5
Charleston	35. 61	47. 06	39. 58	40. 75	28	66	31	57. 00	19	14	19	22. 33	---
Charleston, [Dawson]	35. 54	47. 06	39. 58	40. 73	?	66	---	---	?	14	---	---	---
Edzefield (s)	29. 07	---	38. 92	22. 99	27	m 55	28	52. 50	19	3	19	14. 50	---
Edisto Island (t)	34. 73	44. 35	37. 08	38. 72	17	58	3	50. 67	13	19	19	21. 00	4. 3

a Same temperature on the 27th.

b Same temperature on the 29th.

c Observations taken at sunrise, noon, and sunset.

d Same temperature on the 26th.

e Same temperature on the 24th.

f Same temperature on the 29th, 30th, and 31st.

g Observations taken at 7½ a. m., 1 p. m., and 6 p. m. Incomplete.

h Same temperature on the 23d.

i Same temperature on the 31st.

j Same temperature on the 25th.

k Observations taken at 9 a. m., 1 p. m., and 4 p. m.

l Same temperature on the 2d and 31st.

m Same temperature on the 28th.

n Observations taken at 8 a. m., 12 m., and 2, 6, and 8 p. m. Mean at 12 m., 35. 24; mean at 6 p. m., 23. 80.

o P. M. observations discontinued after the 17th of the month.

p Same temperature on the 22d.

q Same temperature on the 17th and 31st.

r Observations interrupted, for the most part, from the 15th to the 25th of the month.

s Observations taken at sunrise and sunset.

t For the first 26 days of the month only.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—	°	°	°	□		□		°		°		□	
Factory Mills					28	66	31	56.27	19	13	19	22.67	4.3
Savannah	35.30	48.00	40.70	41.33	27	64	28	54.67	19	8	22	22.00	4.6
Sparta	31.52	43.48	36.74	37.25	27	64	28	54.67	19	8	22	22.00	5.3
The Rock	30.52	41.32	37.84	36.56	29	62	28	55.33	19	3	19	11.67	5.1
Whitemarsh Island	36.55	47.63	42.03	41.40	31	66	31	57.67	19	13	19	22.67	4.2
Zebulon	34.38	43.10	39.41	38.96	27	67	27	60.33	19	6	19	16.33	5.5
FLORIDA—													
Atsena	45.16	53.48	51.06	49.90	27	68	31	62.67	19	20	19	28.67	2.6
Belair	38.13	50.83	45.13	44.70	28	72	?	?	19	13	?	?	3.6
Gainesville	41.84	59.74	47.26	49.61	1	76	1	66.00	19	17	19	26.67	2.5
Jacksonville	43.19	57.00	45.83	48.67	28	72	28	61.00	19	16	19	26.33	3.3
St. Augustine (b)	46.77	56.58	48.93	50.76	31	69	1	64.33	19	19	19	27.33	3.3
Salt Ponds	60.93	66.55		63.74	3	78	3	74.00	20	42	20	48.00	1.8
Warrington	42.74	51.58	49.26	47.86	28	78	28	63.33	19	14	18	31.33	4.3
ALABAMA—													
Ashville (c)				32.75			28	57.00			19	8.00	
Auburn	29.60	44.10	38.20	37.30	17	65	27	56.67	19	05	19	15.00	5.2
Carlowville	33.19	44.57	38.83	38.86	17	66	27	55.33	19	8	18	15.00	5.6
Greene Springs (c)	35.20	43.58	28.70	35.83	27	70	27	61.33	19	4	18	10.00	6.2
Greensborough	33.58	40.33	37.95	37.29	27	61	27	59.10	19	8	19	16.33	6.4
MISSISSIPPI—													
Columbus	31.22	38.71	34.40	34.78	27	64	27	59.70	19	8	18	12.63	6.5
Port Gibson	36.32	44.06	41.03	40.47	27	72	27	65.67	18	14	18	18.00	6.6
LOUISIANA—													
Black River	37.77	49.61	42.02	43.13	27	76	27	67.67	19	13	18	20.33	6.2
New Orleans (f)	47.58	57.58	57.35	54.17	28	80	27	72.00	19	32	19	38.00	
Trinity	39.48	51.74	43.19	38.14	27	74	27	68.00	19	16	18	22.00	6.0
TEXAS—													
Austin	35.90	52.78	43.00	43.89	27	74	26	65.00	18	12	18	21.00	5.5
Helena	41.84	57.84	47.13	48.94	2	78	27	69.67	19	16	18	24.00	4.8
New Braunfels	38.89	56.03	49.83	48.25	26	77	26	69.33	18	14	18	24.33	4.4
Union Hill	35.58	50.29	48.13	44.67	26	72	27	66.67	18	9	17	27.33	3.0
Washington	36.80	52.40	40.64	43.28	26	76	26	66.67	18	10	18	19.00	5.3
TENNESSEE—													
Glenwood	20.42	28.42	24.51	24.45	27	48	26	47.83	19	— 8	22	2.67	7.2
Memphis	24.78	33.94	29.13	29.38	26	55	26	49.67	18	3	18	6.00	
Walnut Grove (h)									22	—24	22	— 9.33	6.4
KENTUCKY—													
Danville	16.32	28.78	19.97	21.69	2	49	27	41.33	19	—15	22	— 6.67	6.0
Millersburg	15.68	24.35	69.74	36.59	30	43	27	37.00	19	—22	22	— 8.00	6.2
Paris	14.84	23.45	19.03	19.11	27	41	27	37.67	19	—25	22	—12.33	6.1
Springdale (i)	14.22	27.58	21.93	21.24	26	43	27	37.00	19	—24.5	19	— 3.00	6.2
OHIO—													
Cincinnati, [Harper]	16.03	27.42	20.80	21.42	26	44	26	43.00	21	—10	21	— 1.67	5.5
Cincinnati, [Hurt]	15.97	28.00	20.26	21.41	27	44	27	37.67	23	—10	22	— 3.00	4.9
Cleveland	10.10	20.60	13.40	14.70	27	36	26	30.30	12	—13	18	— 2.00	6.1
Collingwood	11.19	21.03	14.26	15.49	26	40	27	29.67	18	— 8 j	22	— 2.67	
College Hill	11.94	24.37	16.74	17.68	26	42	27	38.00	23	—18	22	— 7.20	5.3
Franklin	12.00	23.13	15.97	17.03	27	44	27	37.67	23	—15	22	— 4.00	5.1
Gallipolis	16.03	25.90	20.13	20.69	27	44	27	40.00	23	—15	22	0.00	3.7
Germantown	11.39	21.77	14.26	15.81	26	46	27	35.33	22	—16	22	—10.33	6.2
Grauville	12.10	20.87	14.90	15.96	27	43	27	39.33	12	—13	22	— 3.67	5.9
Hillsborough	13.77	21.56	17.31	17.55	27	41.5	27	35.83	23	—11	22	— 5.00	5.6
Hiram	11.23	16.45	12.60	13.43	27	37	27	31.33	22	— 9	22	— 7.00	6.4
Jefferson	9.48	16.97	11.00	12.48	2	36	27	32.33	25	—12	18	— 4.67	8.2
Madison, [Atkins] (l)	15.25	22.05	18.94	18.75	31	41	31	31.00	25	— 7	25	4.00	7.3

a Same temperature on the 31st.

b Observations taken at 8 a. m., 2 p. m., and 10 p. m.

c Hours of observation not reported.

d Same temperature on the 28th and 30th.

e Observations taken at sunrise, 2 p. m., and 9 p. m.

f Observations taken at 9 a. m., noon, and 3 p. m.

g Same temperature on the 27th.

h Lowest temperature only appears to have been registered.

i Observations taken at 7 a. m., 2 p. m., and 6 p. m.

j Same temperature on the 19th, 22d, and 23d.

k Same temperature on the 27th, 28th, and 30th.

l Observations interrupted from the 14th to the 24th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°		°		°		°		°	
Madison, [Cunningham] . . . . .	12. 84	22. 55	12. 32	15. 90	26	a 40	27	30. 67	22	— 9 <sup>b</sup>	22	— 1. 67	6. 5
New Lisbon . . . . .	12. 35	25. 68	15. 00	17. 68	— — —	43	30	36. 67	— — —	— 9	22	— 3. 00	3. 1
Oberlin (c) . . . . .	9. 13	21. 74	13. 16	14. 68	30	a 37	27	30. 67	12	— 11	18	— 4. 67	5. 1
Perrysburg (d) . . . . .	11. 78	22. 19	15. 19	16. 39	27	48	27	35. 70	19	— 13	22	0. 33	—
Portsmouth (e) . . . . .	16. 55	27. 00	19. 58	21. 04	29	47	27	40. 33	23	— 14	23	— 0. 67	6. 3
Savannah . . . . .	10. 46	19. 84	12. 23	14. 17	26	f 39	27	31. 00	23	— 20 <sup>g</sup>	22	— 8. 33	6. 3
Sidney . . . . .	11. 78	20. 55	16. 80	18. 38	29	48	27	38. 00	23	— 15	22	— 2. 67	7. 3
Urbana . . . . .	9. 61	21. 48	12. 55	14. 88	26	42	27	34. 67	23	— 19	22	— 7. 00	5. 7
West Bedford (h) . . . . .	11. 00	19. 20	14. 30	14. 83	27	41	27	33. 00	23	— 12	22	— 6. 00	6. 0
Zanesville . . . . .	11. 81	22. 36	14. 55	16. 24	27	43	27	36. 00	12	— 15	22	— 2. 00	9. 3
MICHIGAN—													
Battle Creek . . . . .	9. 06	21. 42	11. 55	14. 01	26	36	26	27. 33	18	— 26	18	— 10. 00	5. 9
Cooper . . . . .	9. 52	18. 48	12. 52	13. 51	26	37	26	24. 33	18	— 12	18	— 4. 00	6. 6
Copper Falls Mines . . . . .	5. 63	9. 95	6. 65	7. 41	2	29	2	26. 20	23	— 14	22	— 8. 00	8. 7
Grand Rapids, [Currier] . . . . .	7. 77	18. 29	13. 00	13. 02	30	32	10	27. 00	18	— 28	18	— 9. 33	6. 6
Grand Rapids, [Streng] . . . . .	7. 13	24. 20	15. 61	15. 65	9	46	9	29. 00	18	— 28	18	— 8. 00	6. 9
Monroe . . . . .													5. 0
Romeo (d) . . . . .	9. 96	18. 83	12. 88	13. 89	31	35	3	26. 66	18	— 10	22	— 6. 16	7. 2
INDIANA—													
Cannelton . . . . .	18. 84	27. 06	25. 81	16. 57	26	48	26	42. 00	19	— 10	22	1. 00	—
Logansport (i) . . . . .	9. 00	20. 00	16. 00	15. 00	?	42	— — —	?	— 19	— — —	—	—	—
Michigan City (j) . . . . .	8. 45	21. 10	13. 32	14. 29	30	41	30	33. 25	23	— 24	23	— 7. 75	—
New Harmony . . . . .	15. 20	25. 70	20. 50	20. 47	26	48	26	40. 67	19	— 13	22	0. 67	5. 6
Richmond . . . . .	13. 61	22. 46	18. 17	18. 08	26	43	30	34. 43	23	— 14. 5	22	— 4. 10	5. 7
ILLINOIS—													
Athens . . . . .	5. 26	21. 38	11. 58	12. 74	30	46	30	35. 00	18	— 20 <sup>k</sup>	18	— 10. 33	5. 5
Angusta . . . . .	5. 87	18. 03	90. 87	11. 59	30	45	30	36. 67	18	— 23	18	— 11. 67	4. 5
Brighton . . . . .	9. 10	21. 55	15. 07	15. 24	29	42	26	34. 00	18	— 20	18	— 3. 33	4. 4
Chicago . . . . .	6. 83	15. 52	10. 25	10. 87	30	37	30	31. 96	19	— 13. 5	22	— 10. 20	4. 9
Fremont Centre . . . . .	3. 03	11. 06	5. 12	6. 40	30	34	30	29. 00	17	— 16 <sup>m</sup>	17	— 11. 33	3. 7
Manchester (d) . . . . .	6. 96	23. 67	11. 51	14. 05	30	46	30	35. 00	18	— 22	18	— 8. 00	3. 6
Marengo . . . . .	2. 97	14. 68	7. 10	8. 25	30	36	30	30. 67	18	— 18 <sup>n</sup>	22	— 11. 33	3. 7
Ottawa . . . . .	5. 66	13. 68	9. 93	9. 76	30	39	30	32. 00	19	— 16	22	— 9. 67	3. 3
Pekin (o) . . . . .	6. 06	11. 77			29	38	26	32. 00	18	— 19	18	— 8. 50	7. 5
Peoria . . . . .	7. 44	20. 38	12. 50	13. 44	30	43	30	36. 12	18	— 16	18	— 6. 60	4. 8
Riley . . . . .	— 0. 19	10. 16	2. 03	4. 00	30	39	26	25. 67	19	— 24 <sup>n</sup>	22	— 17. 00	4. 6
Warsaw . . . . .	7. 13	20. 35	12. 87	13. 45	30	46	30	38. 00	18	— 22	18	— 6. 67	5. 9
West Salem . . . . .	14. 68	28. 03	20. 42	21. 04	26	49	26	42. 00	19	— 10	22	3. 33	5. 6
MISSOURI—													
St. Louis . . . . .	13. 90	24. 80	19. 20	19. 30	26	45	36	39. 50	18	— 12. 5	18	— 2. 17	3. 9
WISCONSIN—													
Appleton . . . . .	0. 45	13. 84	4. 74	6. 34	30	34	2	28. 00	18	— 26	18	— 14. 33	4. 7
Bay City . . . . .	— 4. 58	8. 29	3. 29	2. 33	28	28	2	21. 00	22	— 34	22	— 18. 67	—
Beloit . . . . .	0. 68	14. 93	5. 16	6. 92	30	40	30	33. 67	18	— 25	22	— 14. 67	3. 7
Janesville . . . . .	2. 55	13. 97	6. 42	7. 65	30	40	30	31. 33	18	— 23	18	— 12. 67	4. 4
Kenosha . . . . .	6. 48	15. 73	9. 65	10. 62	26	37	30	33. 33	23	— 16	22	— 10. 33	4. 5
Madison, [Schue] . . . . .	1. 03	8. 54	4. 48	4. 68	26	33	2	28. 67	18	— 24	18	— 15. 33	—
Madison, [Sterling] . . . . .	1. 19	10. 88	4. 15	5. 14	30	37	30	30. 33	18	— 25	22	— 12. 67	4. 1
Manitowoc (d) . . . . .	7. 39	19. 42	11. 48	12. 76	30	38	30	33. 33	22	— 16	22	— 8. 33	4. 4
Milwaukee, [Pomeroy] . . . . .	4. 26	21. 26	6. 65	10. 72	9	p 39	2	28. 67	23	— 18	21	— 9. 00	4. 6
Milwaukee, [Winkler] . . . . .	4. 13	12. 89	6. 23	7. 75	30	34	30	23. 67	23	— 19	22	— 13. 33	4. 3
New London . . . . .	— 3. 81	14. 10	2. 26	4. 18	30	34	2	25. 67	18	— 28 <sup>q</sup>	18	— 16. 33	4. 2
Norway . . . . .	3. 84	13. 84	6. 65	8. 11	30	33	30	30. 50	18	— 20	22	— 13. 67	4. 5
Platteville . . . . .	— 3. 10	10. 35	— 1. 71	1. 85	30	36	30	24. 67	18	— 29	21	— 18. 00	3. 7
Prescott . . . . .	7. 67	4. 61	0. 42	4. 23	26	28	2	17. 33	18	— 39	17	— 20. 00	2. 8

a Same temperature on the 31st.

b Same temperature on the 25th.

c For the last 23 days of the month only.

d Observations taken at 7 a. m., 1 p. m., and 9 p. m.

e Observations taken at 7 a. m., 1 p. m., and 9 p. m.

f Same temperature on the 27th.

g Same temperature on the 12th.

h Observations interrupted from the 5th to the 19th.

i Observations taken at sunrise, noon, and sunset.

j Observations taken at 6 a. m., noon, 5 p. m., and 9 p. m. Mean at 5 p. m. 19.22

k Same temperature on the 19th.

l Same temperature on the 23d.

m Same temperature on the 23d and 23d.

n Same temperature on the 23d.

o Observations taken at sunrise and 1 p. m.

p Same temperature on the 25th.

q Same temperature on the 19th and 23d.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp	Date.	Temp.	Date.	Mean temp	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Racine .....	5.96	14.63	10.89	10.49	28	31	30	27.20	23	—17	23	—9.77	4.6
Waukesha .....	2.03	12.27	4.20	6.17	30	34	30	29.33	18	—20	22	—13.00	3.3
IOWA—													
Bellevue .....	—2.26	13.13	1.90	4.26	30	37	26	26.00	18	—32	18	—19.00	4.6
Border Plains .....	—2.29	9.32	1.19	2.74	29	28	30	21.33	18	—30	17	—15.00	5.1
Fairfield (a) .....	3.90	14.77	7.45	9.53	30	42	30	35.50	18	—24	17	—12.50	---
Fort Madison (b) .....	3.90	15.55	11.87	10.44	30	43	30	36.00	18	—27	18	—12.33	4.7
Franklin .....	—4.45	6.97	—0.53	0.66	30	33	30	23.00	18	—36	18	—20.30	4.1
Maquoketa (c) .....	—2.93	9.47	0.67	2.40	30	36	29	25.67	18	—27	18	—18.00	5.4
Muscatine .....	1.16	12.55	4.97	6.23	30	41	30	26.67	18	—30	18	—18.00	4.0
Pleasant Plain .....	3.48	16.77	7.19	9.15	30	46	30	32.33	18	—27	21	—10.33	4.4
MINNESOTA—													
Hazlewood .....	—7.97	1.00	—3.06	—3.34	30	25	1	16.33	5	—32	17	—22.00	3.8
Lake Winnibigoshish .....	15.85	—2.17	—8.48	—8.83	1	d 16	13	6.00	22	—38	22	—24.67	3.8
Princeton .....	12.81	1.42	—6.26	—5.88	30	28	22	22.33	18	—38	30	—15.33	3.3
INDIAN TERRITORY—													
Fort Gibson .....	17.71	---	---	---	26	44	---	---	18	—20	---	---	---
OREGON—													
Salem (e) .....	---	---	---	41.34	---	---	---	---	7	10	7	19.10	---
CALIFORNIA—													
Sacramento .....	45.32	51.81	48.45	48.53	31	61	30	55.83	9	31	9	36.33	6.8
San Francisco .....	49.03	54.87	50.87	51.59	29	66	30	60.67	8	34	8	40.33	4.5
MEXICO—													
Mirador (f) .....	58.79	74.00	62.97	65.25	---	---	---	73.69	---	---	---	53.73	---
CENTRAL AMERICA—													
Guatemala (g) .....	---	---	---	57.40	---	73	---	---	---	41	---	---	---
WEST INDIES—													
Port of Spain, Trinidad .....	74.79	82.08	77.52	78.13	18	85	11	82.50	14	72	25	76.00	---
St. George's, Bermuda .....	---	---	---	57.80	5	71	---	---	13	46	---	---	---
SOUTH AMERICA—													
Catharina Sophia, Surinam (h) .....	74.50	82.70	80.00	79.07	4	86	4	81.00	24	70	7	76.50	4.7
AZORES—													
Horta, Fayal .....	57.23	59.48	56.97	57.89	4	i 64	6	62.33	27	51	29	53.33	6.1

a Observations taken at 7 a. m., 12 m., 6 p. m., and 10 p. m. Mean at 6 p. m. 12.00.

b Observations taken 6 a. m., noon, and 7 p. m.

c Observations taken at sunrise, noon, and 10 p. m. For the last 15 days of the month only.

d Same temperature on the 2d.

e Hours of observation not reported.

f Observations taken at 7 a. m., 2 p. m., and 8 p. m.

g Maximum and minimum thermometers.

h Observations taken at 6 a. m., 2 p. m., and 6 p. m.

i Same temperature on the 11th.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) .....	30.90	33.40	33.46	32.18	?	63	7	54.00	?	0	10	6.00	----
Montreal .....	20.31	25.69	22.27	22.76	8	46	7	42.67	12	—15	11	—7.33	7.2
St. John's (b) .....	25.96	28.71	26.32	27.00	9	60	9	55.67	12	—5	12	—0.67	----
St. Martin .....	16.67	28.10	19.75	21.51	7	51	24	41.80	12	—20	11	—12.90	6.1
Stanbridge .....	23.75	27.75	24.25	25.25	8	60	7	50.00	12	—16	11	—8.00	7.0
Toronto (d) .....	25.28	31.41	28.63	28.47	7	50	7	47.08	2	—6	2	3.72	7.2
Wolfville .....	25.22	32.32	26.70	28.08	18	56	8	56.33	12	—9	12	—3.33	5.4
MAINE—													
Cornish, [Guptill] .....	21.18	32.86	24.32	26.12	17	56	17	48.67	11	—14 <sup>e</sup>	11	—10.00	5.0
Cornish, [West] .....	19.86	28.89	23.21	23.99	18	54	18	46.67	11	—15	11	—10.33	5.2
Gardiner .....	21.82	33.32	25.32	26.82	18	f 56	18	45.67	12	—10	11	—2.67	6.3
Monson .....													5.9
Perry .....	23.61	31.54	25.21	26.79	18	56	8	47.33	12	—10	11	—5.00	5.8
Portland .....	23.20	36.64	27.66	29.17	18	62	18	51.50	12	—11	11	—1.83	6.7
Steuben .....	22.28	29.25	24.46	25.33	25	60	18	46.00 <sup>f</sup>	12	—14	11	—9.00	6.9
NEW HAMPSHIRE—													
Concord .....	24.32	35.50	29.25	29.69	18	59	18	50.67	12	—14	11	0.67	4.9
Francetown, [Bixby] .....	25.96	35.07	27.81	29.61	17	g 56	18	51.00	11	—10 <sup>h</sup>	11	—3.00	5.9
Francetown, [Root] .....	26.27	38.30	28.40	30.99	18	60	16	47.33	11	—11	12	2.83	7.0
Londonderry .....	25.18	36.57	30.11	30.62	25	62	18	52.67	12	—8	11	—3.00	5.3
Manchester (i) .....	22.39	41.21	28.00	30.53	17	62	16	48.00	12	—13	12	4.33	5.3
North Barnstead .....													6.3
Stratford .....	19.36	30.29	21.54	23.73	17	54	8	45.67	12	—26	11	—12.00	7.5
West Enfield .....	22.46	31.57	25.25	26.43	17	57	17	48.33	12	—16	11	—8.33	5.6
VERMONT—													
Brandon .....	23.37	32.01	25.82	27.07	17	55	17	49.83	3	—13	11	—2.00	6.5
Craftsbury .....	19.93	29.68	22.07	23.89	17	56	17	48.00	12	—21	11	—12.00	6.5
Norwich .....	22.85	33.11	25.54	27.17	17	52	7	44.33	12	—13	11	—3.00	6.7
Rupert .....	26.57	38.07	32.18	32.27	25	62	8	56.40 <sup>f</sup>	3	—10	2	6.00	6.5
Shelburn .....	24.07	31.70	25.04	26.94	8	c 54	17	48.67	3	—15	11	—4.00	6.8
West Fairlee .....	22.82	39.03	26.11	29.32	7	c 52	17	45.33	12	—13	11	—5.33	----
MASSACHUSETTS—													
Amherst .....	27.37	36.68	30.34	31.46	25	62	18	48.93	3	—3	11	5.10	6.1
Boston (d) .....	31.36	42.50	33.89	35.92	18	70	19	57.67	12	—2	11	7.33	3.8
Bridgewater (j) .....	30.10	39.50	33.07	34.22	25	66	25	55.67	12	—0.5	11	6.81	5.2
Cambridge .....	29.86	39.32	32.14	33.77	18	66	18	56.67	12	—4	11	4.33	6.3
Canton .....	27.93	38.27	30.59	32.26	18	f 65	18	54.00	12	—25	11	5.50	5.3
Florida .....													6.9
Lawrence (k) .....	26.77	40.87	31.26	32.97	18	67	18	56.33	12	—6	11	3.16	6.7
Mendon .....	27.89	37.57	32.21	32.66	25	66	18	55.67	12	—4	11	8.67	5.7
Nantucket .....	34.44	38.87	34.28	35.86	7	c 52	7	48.33	11	7	11	12.90	5.5
New Bedford .....	29.84	37.54	31.84	33.07	25	57	25	49.50	12	1	11	7.50	7.0
Newburyport .....	27.37	38.27	31.98	32.54	18	65	18	55.00	11	h—4	11	1.70	8.7
North Attleborough .....	29.25	38.89	30.54	32.89	18	66	25	54.00	12	—3	12	9.67	5.4
Plainfield (l) .....	21.75	32.39	23.54	25.85	18	60			11	—12 <sup>h</sup>			----
Richmond .....	28.07	39.50	31.86	33.14	16	60	17	55.00	11	—8	11	0.67	6.9
Southwick .....													5.4
Westfield .....	27.00	36.79	30.32	31.37	25	63	25	50.67	11	0	11	5.00	6.1
Weymouth .....	30.14		32.46		25	54	18	51.50	11	2 <sup>h</sup>	11	5.00	----
Williamstown .....	28.20	34.30	29.54	30.68	18	57	18	51.50	11	5	11	3.20	6.4
Worcester .....	29.25	37.31	31.64	32.73	18	65	18	57.00	12	—4	11	5.67	7.1
RHODE ISLAND—													
Providence (m) .....	28.80	39.30	29.90	32.67	25	68	25	55.00	12	—3	11	7.00	5.4
CONNECTICUT—													
Columbia .....	29.21	41.68	30.14	33.68	18	72	18	54.33	11	0	11	6.67	5.9
New London .....	30.07	39.54	31.79	33.80	25	66	25	54.00	11	4	11	8.33	5.8

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at 8 a. m., 3 p. m., and 9 p. m.

c Same temperature on the 17th.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e Same temperature on the 15th.

f Same temperature on the 25th.

g Same temperature on the 18th.

h Same temperature on the 12th.

i Incomplete.

j Observations taken at 7 a. m., 1 p. m., and 7 p. m.

k Incomplete at 2 p. m. and 9 p. m.

l Observations taken at 7 a. m., 9 a. m., 12 m., and 9 p. m. Mean at 9 a. m., 25.71.

m Observations taken at sunrise, 1 p. m., and 10 p. m.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Norwich .....	31.54	38.11	32.30	32.98	25	64	25	51.67	11	0	11	6.67	4.9
Pomfret .....	28.54	37.25	30.43	32.07	25	64	25	52.33	12	— 3	11	4.67	5.8
Saybrook .....	29.61	35.46	30.86	31.98	25	50	25	46.00	11	4	11	9.33	5.4
Wallingford .....	28.20	38.89	30.46	32.52	25	66	25	52.00	3	— 1	11	7.67	5.0
NEW YORK—													
Angelica .....	29.82	39.61	31.29	33.57	17	63	7	53.33	3	— 8	2	6.00	5.2
Baldwinsville .....	29.93	35.29	31.39	32.20	17	50	17	56.00	12	1	11	5.00	6.9
Beverly .....	30.25	38.63	31.89	33.59	25	56	25	56.33	11	5	11	10.33	6.1
Blackwell's Island .....	32.46	40.04	34.79	35.76	25	64	25	57.33	11	5	11	13.67	5.8
Buffalo (a) .....	28.93	36.54	30.17	31.88	7	61			10	1	11	9.33	7.3
Cazenovia .....	28.00	32.18	28.75	29.64	17	56	17	50.33	11	— 6	11	3.00	7.5
Clinton .....	30.75	37.54	30.86	33.05	7	61	17	57.00	11	— 5	11	1.33	6.3
Fishkill Landing .....	29.93	40.82	32.57	34.44	25	65	25	53.67	3	4	11	12.33	5.9
Flatbush .....	30.70	41.40	33.20	35.10	25	65	25	57.60	11	77	11	13.60	5.4
Fordham .....	34.04	39.11	34.86	36.00	18	61	18	52.67	11	10	11	16.67	---
Houseville .....	24.28	31.07	25.89	27.08	17	55	17	49.67	3	— 10 d	11	4.33	7.5
Lowville .....				26.70	17	52	17	42.25	3	— 14	2	1.25	---
McGrawville .....	27.59	34.27	29.70	30.52	17	57	16	50.40	10	0	11	3.53	6.6
Morrisania .....	30.21	41.43	32.29	34.64	25	68	25	56.33	11	4	11	12.00	5.6
New York city .....	34.61	43.17	37.11	38.30	25	64	25	57.76	11	5	11	15.50	5.3
Nichols (c) .....	28.25	41.36	30.25	33.32	17	65	7	51.33	3	— 1 d	11	7.67	---
Oswego .....	30.00	36.50	32.61	33.04	17	63	17	55.00	11	1 e	11	6.33	7.6
Ovid .....	30.68	36.04	31.61	32.78	17	62	17	55.00	11	3	11	4.33	6.9
Penn Yan (f) .....	29.05	39.50	32.50	33.68	24	65	24	52.67	?	?	?	?	7.5
Plainville .....	29.71	36.64	31.29	32.55	17	62	17	53.33	11	2 e	11	3.67	7.3
Rochester, [Harkness] .....	32.00	37.00	33.50	34.17		62				5			---
Rochester, [Palmer] .....	31.82	36.81	34.68	34.44	24	63	24	54.67	11	5	2	12.00	7.7
Sag Harbor .....	32.14	43.46	33.00	36.20	25	66	25	55.00	11	5	11	12.33	5.2
Saratoga .....	24.25	38.04	26.68	29.66	8	52	8	45.33	11	— 20	11	4.00	4.7
Spencertown .....	29.18	35.68	29.93	31.60	18	50	17	53.00	11	— 3	11	0.00	6.0
Townsendville .....	28.96	37.07	29.82	31.95	17	53	17	54.67	11	0	11	4.00	7.0
Troy .....	29.25	36.02	31.71	32.33	8	56	16	50.20	3	— 1	11	6.00	6.9
Utica .....	24.75	33.14	26.85	28.25	24	53	16	47.00	3	5	3	4.67	1.8
Wampsville .....	31.75	39.50	32.32	34.52	17	65	17	58.00	11	— 2 e	11	0.67	7.3
Waterford (h) .....	27.63	36.78	29.53	31.43	25	56	17	49.50	3	— 4	11	6.00	---
Wellsville .....	26.46	38.35	31.31	32.04	17	g 60	17	49.33	11	— 10	10	8.00	7.5
West Concord .....													6.3
NEW JERSEY—													
Bloomfield .....	31.54	43.61	33.81	36.32	25	69	25	57.67	11	5	11	13.67	4.8
Burlington .....	31.71	44.93	37.11	37.92	24	66	25	57.67	3	6 d	11	13.67	5.1
Freehold .....	33.64	46.54	36.21	38.80	16	69	25	59.00	11	7	11	14.50	---
Lambertville .....	30.91	45.92	34.83	37.22	25	67.4	25	58.10	11	2	11	12.10	5.0
Newark (i) .....				35.97	25	68	25	55.25	3	7 d	11	14.00	---
Sergeantsville .....	30.79	44.36	34.14	36.43	19	j 67	25	54.00	3	6 d	11	14.67	3.8
PENNSYLVANIA—													
Bedford .....	30.21	47.02	38.08	38.44	18	74	18	54.67	11	— 11	2	11.83	4.6
Berwick .....	33.33	43.21	34.39	36.98	24	65	7	54.67	3	— 14	11	5.33	4.4
Cannonsburg .....	37.14	46.07	41.54	41.58	18	67	18	60.33	3	12	2	19.00	6.9
Carlisle .....	29.80	45.63	34.76	36.73	18	66	25	54.00	3	— 10	3	8.00	4.3
Chromedale .....	31.53	44.67	35.27	37.16	19	66	25	58.00	3	4	11	13.50	4.5
Easton .....	29.61	41.10	32.85	34.52	25	66	25	55.33	11	4	3	11.33	5.8
Fleming .....	29.53	43.64	31.50	34.89	18	67	25	52.67	3	— 12	2	9.67	5.5
Gettysburg .....	28.04	45.54	34.21	35.93	18	70	25	56.33	11	— 13	3	10.00	4.2
Harrisburg, [Heisely] .....	33.21	42.68	37.41	37.77	25	62	25	56.00	3	1	3	12.67	4.9
Lewisburg .....	30.11	41.49	33.80	35.13	24	62	25	54.13	3	— 15	11	6.07	6.6
Meadville .....	31.61	42.50	34.57	36.23	17	g 68	18	57.00	11	— 4	10	7.33	7.2
Morrisville .....	30.50	45.18	34.39	36.69	19	70	25	56.00	3	4	11	13.33	3.8

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 17th.

c Observations taken at 6 a. m., 1 p. m., and 9 p. m.

d Same temperature on the 11th.

e Same temperature on the 12th.

f Observations taken at sunrise, 2 p. m., and sunset.

g Same temperature on the 24th.

h Observations taken at 7 a. m., 1 p. m., 6 p. m., and 10 p. m. Mean at 6 p. m., 31.78.

i Observations taken at 7 a. m., and 6 p. m.

j Same temperature on the 25th.

k Same temperature on the 19th.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°		°		°		°			
Moss Grove .....	29.89	40.82	30.70	33.80	17	66	18	59.00	10	— 5	2	4.67	6.3
Nazareth .....	29.74	41.42	30.75	33.97	25	64	25	52.67	3	3 <sup>a</sup>	11	12.33	5.7
Norristown .....	31.75	43.95	36.79	37.50	19	<sup>b</sup> 66	25	58.33	2	6.5	2	14.17	4.6
North Whitehall (c) .....	28.50	41.14	36.11	35.25	25	66	25	59.00	3	— 6	3	10.00	3.6
Paradise .....				21.00									
Philadelphia .....	34.23	46.63	38.95	39.94	19	68	25	59.33	11	9	11	15.67	4.7
Pittsburg, [Wilson] .....	35.04	39.89	37.79	37.57	6	<sup>d</sup> 65	18	60.00	3	0	2	11.00	---
Pocopson .....	31.93	45.71	35.32	37.65	18	68	25	59.00	3	7 <sup>a</sup>	11	13.00	5.0
Shamokin .....	30.32	42.29	36.68	36.43	18	68	25	57.33	3	— 10	3	9.00	5.6
Tarentum .....	35.39	47.64	39.50	40.84	17	<sup>e</sup> 69	18	60.33	3	— 2	2	13.67	6.4
West Haverford .....	35.36	47.39	---	41.37	19	70	25	62.00	11	11	11	14.00	4.6
DELAWARE—													
Newark .....	35.62	47.68	35.04	39.45	19	71	25	59.00	11	8	11	16.67	4.0
MARYLAND—													
Annapolis .....	32.92	48.00	37.87	39.60	19	69	25	59.33	11	9	11	16.00	4.3
Bladensburg .....	34.50	49.70	39.52	41.24	19	75	18	<sup>b</sup> 59.67	3	4	3	18.00	4.1
Frederick .....	33.09	45.56	37.14	38.60	19	69	19	57.50	3	3.5	3	15.67	4.4
Ridge .....	38.45	50.17	41.21	43.28	19	81	19	52.33	11	12	11	19.50	2.8
Sykesville .....	31.18	48.71	37.89	39.26	19	73	19	59.00	3	0	2	15.00	4.0
DISTRICT OF COLUMBIA—													
Washington, [Smith Inst.] ..	34.14	48.68	41.27	42.03	19	72	19	59.83	3	8	11	17.83	4.0
VIRGINIA—													
Alexandria .....	37.18	52.32	37.18	42.23	19	75	25	62.83	3	11	11	17.83	4.3
Ashland .....	34.57	52.00	41.18	42.58	17	74	7	62.00	2	11	2	15.00	4.6
Berryville .....	34.54	46.07	41.24	40.62	25	67	25	57.67	1	12 <sup>f</sup>	3	20.33	4.2
Capon Bridge .....				38.96			17	64.00			2	12.00	---
Crichton's Store (g) .....	44.88	54.74	58.16	52.59	19	77	19	71.33	3	25	11	28.33	4.2
Kanawha .....	36.07	54.82	41.38	44.09	18	<sup>h</sup> 75	20	63.83	2	12 <sup>a</sup>	2	17.83	4.3
Lewisburg .....	30.71	49.21	38.07	39.33	19	69	19	56.00	3	4	10	19.33	4.4
Longwood .....	40.04	54.39	44.86	46.43	19	77	19	65.33	3	15	2	25.00	3.8
Meadow Dale .....	32.82	48.84	41.75	41.14	18	67	19	58.00	3	4	10	20.67	---
Montross .....	38.41	52.96	43.09	44.82	19	74	19	62.33	11	11	11	18.00	4.2
Mossy Creek .....	32.91	53.42	37.96	41.43	19	72	25	59.00	3	— 5	3	18.67	4.3
Poplar Grove .....	33.79	56.89	39.21	43.30	17	78	20	62.67	2	10	2	22.33	4.3
Portsmouth .....	41.43	58.43	44.93	48.26	19	81	17	66.67	11	18 <sup>i</sup>	11	20.67	2.9
Rose Hill .....													3.9
Rougement .....	38.29	53.92	44.19	45.47	19	82	18	69.00	11	8	10	12.33	3.6
Ruthven (j) .....	43.19	61.60	47.94	50.91	19	79	19	63.67	27	30	27	35.00	1.7
Smithfield .....				46.40	19	79	24	66.00	11	13	11	20.20	---
Winchester .....	35.00	51.25	39.39	41.88	18	74	19	61.33	3	5	3	<sup>a</sup> 19.33	3.2
Wirt Court House .....	32.14	49.07	38.32	39.84	17	72	7	58.00	2	— 3	2	10.67	5.1
NORTH CAROLINA—													
Chapel Hill .....	43.14	61.07	48.64	50.95	19	76	19	64.67	11	21 <sup>b</sup>	11	28.33	4.3
Gaston (k) .....	35.81	58.28	43.24	45.78	19	80	19	60.00	10	14	3	28.67	---
Goldsborough .....	46.25	63.26	51.76	53.76	19	79	19	68.00	12	22	11	29.10	4.3
Murfreesborough .....	42.39	57.39	48.07	49.28	19	78	19	65.67	11	20 <sup>i</sup>	11	25.67	3.3
SOUTH CAROLINA—													
Aiken (m) .....	50.50	66.42	59.65	58.86	27	<sup>n</sup> 76	28	66.67	10	33	9	42.00	---
All Saints .....	49.82	63.18	54.46	55.82	21	76	21	67.67	10	31 <sup>o</sup>	11	36.67	3.7
Camden .....	45.60	66.43	53.40	55.14	19	78	25	64.67	10	22	11	32.67	5.1
Charleston, [Dawson] .....	52.82	65.78	56.57	58.39	?	77			?	34			---
Charleston, [Johnson] .....	52.82	65.79	56.57	58.39	19	77	25	67.67	10	34	11	41.33	---
Mount Pleasant (p) .....	52.50	---	54.90	57.63	8	67	16	62.50	10	33	10	34.50	4.4
GEORGIA—													
Factory Mills .....													4.1

<sup>a</sup> Same temperature on the 11th.<sup>b</sup> Same temperature on the 25th.<sup>c</sup> Observations taken at sunrise, noon, and sunset.<sup>d</sup> Same temperature on the 18th.<sup>e</sup> Same temperature on the 24th.<sup>f</sup> Same temperature on the 3d.<sup>g</sup> Observations taken at 8½ a. m., noon, and 4½ p. m.<sup>h</sup> Same temperature on the 20th.<sup>i</sup> Same temperature on the 12th.<sup>j</sup> For the last 17 days of the month only.<sup>k</sup> For the first 21 days of the month only.<sup>l</sup> Same temperature on the 21st.<sup>m</sup> Incomplete.<sup>n</sup> Same temperature on the 28th.<sup>o</sup> Same temperature on the 11th and 12th.<sup>p</sup> Observations taken at 8 a. m., 3 p. m., and 9 p. m.; incomplete.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—Continued.	■	○	○	○	■	○	○	○	■				
Savannah	50.00	68.34	55.16	57.83	21	79	25	67.87	10	34	11	41.87	3.9
Sparta	49.00	66.29	55.82	57.04	26	a 78	5	68.00	10	30	9	38.33	4.0
The Rock	48.18	63.71	57.82	56.57	27	78	25	69.00	9	26	9	36.67	---
Whitemarsh Island	51.07	65.25	55.89	57.40	19	77	25	67.33	10	36	11	43.33	3.0
Zebulon	51.66	64.48	58.94	58.36	18	76	18	69.00	9	32	9	40.00	3.9
FLORIDA—													
Atsena	58.50	67.89	63.18	63.19	6	b 74	24	70.00	11	40	11	51.67	2.1
Belair	51.93	---	60.39	61.37	26	78	26	70.67	10	34	10	39.00	5.9
Gainesville	53.32	73.00	58.79	61.70	20	c 80	27	69.33	11	38	10	47.67	1.5
Jacksonville	56.07	71.70	59.39	62.45	28	81	28	72.67	10	40	10	47.33	4.0
St. Augustine (d)	60.04	66.32	60.82	62.39	28	81	28	73.67	10	48	10	50.00	3.1
Salt Ponds (e)	66.14	73.82	---	69.98	24	f 80	25	76.00	2	57	2	60.00	3.5
Warrington	58.50	66.25	63.71	62.82	20	g 75	25	71.33	9	36	9	47.33	4.2
ALABAMA—													
Ashville (h)	---	---	---	51.13	---	---	27	66.00	---	---	10	35.00	---
Auburn	51.32	66.18	59.61	59.04	26	91	25	70.67	9	27	9	37.33	2.8
Carlsville	52.25	67.29	58.39	59.31	27	80	26	72.00	11	27	10	38.00	3.0
Greene Springs (j)	51.00	73.76	59.05	61.27	26	86	25	72.67	11	24	11	24.00	4.7
Greensborough	52.61	61.15	58.66	57.47	26	74.5	25	71.17	11	27.5	9	37.33	4.1
MISSISSIPPI—													
Columbus	48.29	63.12	53.92	55.11	27	78	25	68.90	11	25	8	35.20	3.8
Port Gibson	52.68	66.89	60.89	60.15	27	81	25	74.00	10	28	8	36.00	4.5
LOUISIANA—													
Black River	55.68	70.20	61.71	62.53	25	a 82	25	74.67	11	k 30	8	39.00	4.7
New Orleans (l)	63.43	71.93	72.93	69.43	25	84	25	80.67	8	m 44	11	50.67	---
TEXAS—													
Austin	53.71	68.00	58.79	60.17	15	a 78	27	71.00	9	26	8	37.67	5.8
Helena	57.86	70.75	61.79	63.47	3	n 80	26	72.67	9	27	11	36.33	5.8
New Braunfels	56.07	69.78	60.57	62.14	6	a 81	27	72.67	8	29	11	38.67	5.2
Union Hill	52.29	65.64	64.04	60.66	4	78	18	70.67	8	21	8	38.33	2.1
Washington	57.00	68.70	55.93	60.54	27	86	27	73.67	10	18	10	35.00	4.3
TENNESSEE—													
Glenwood	44.27	57.60	50.19	50.69	27	80	18	65.83	11	16	10	23.83	5.5
Memphis	50.39	60.50	52.14	54.34	17	f 75	17	68.33	11	23	9	k 30.67	---
KENTUCKY—													
Danville	40.57	56.32	44.75	47.31	7	o 75	18	65.00	11	10	10	19.33	4.0
Paris	38.71	49.79	44.64	44.38	17	69	7	62.00	11	11	11	17.00	4.9
Springdale (p)	38.95	53.89	50.77	47.87	18	75	17	65.67	11	8	10	18.83	5.9
OHIO—													
Cincinnati, [Harper]	35.23	50.86	44.61	43.57	18	75	18	66.67	2	10	10	17.33	5.6
Cincinnati, [Hurt]	39.71	56.50	46.93	47.71	18	80	18	72.00	11	9	10	18.00	5.3
Cincinnati, [Lea] (q)	41.68	50.39	46.36	46.14	17	r 69	18	64.67	11	17	10	20.33	4.7
Cleveland	33.07	42.84	34.82	37.58	24	67	s 15	58.67	11	6	10	10.00	7.5
Collingwood	32.57	41.14	36.18	36.63	7	69	7	60.67	11	4	10	7.00	---
College Hill	35.66	49.44	41.82	42.31	18	72	18	64.33	11	3	10	11.20	5.1
Franklin	36.86	47.93	40.32	41.70	7	70	15	60.67	9	k 10	1	18.00	5.4
Gallipolis	37.18	51.11	44.71	44.33	17	72	7	60.67	11	t 10	2	17.00	1.9
Granville	35.29	47.92	40.89	41.37	18	68	7	60.67	11	11	2	12.33	6.4
Hillsborough	35.74	46.61	41.64	41.33	17	67	18	60.33	11	5	2	13.67	4.9
Hiram	34.45	41.43	38.25	38.04	17	66	11	r 59.33	10	3	10	7.00	5.4
Jefferson	32.21	39.79	33.50	34.83	17	b 66	15	58.67	1	u 0	10	4.67	8.9
Madison, [Atkins]	34.11	41.43	37.00	37.51	17	68	7	62.00	1	k 6	10	8.67	6.9
Madison, [Cunningham]	32.79	40.36	33.64	35.60	17	68	17	58.67	2	1	10	7.67	7.0

- a Same temperature on the 27th.  
 b Same temperature on the 24th.  
 c Same temperature on the 26th.  
 d Observations taken at 8 a. m., 2 p. m., and 10 p. m.  
 e Observations taken at 7 a. m. and 2 p. m.  
 f Same temperature on the 25th.  
 g Same temperature on the 21st.  
 h Hours of observation not reported.  
 i Same temperature on the 26th and 27th.  
 j Incomplete.  
 k Same temperature on the 10th.

- l Observations taken at 9 a. m., noon, and 3 p. m.  
 m Same temperature on the 9th.  
 n Same temperature on the 6th.  
 o Same temperature on the 17th and 18th.  
 p Observations taken at 7 a. m., 2 p. m., and 6 p. m.  
 q Observations taken at sunrise, 1 p. m., and 9 p. m.  
 r Same temperature on the 18th.  
 s Same temperature on the 17th and 24th.  
 t Same temperature on the 11th.  
 u Same temperature on the 2d and 10th.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°		°		°		°			
Medina .....	28.69	40.04	30.98	33.24	24	63	24	56.67	2	0	10	5.33	----
New Lisbon .....	36.38	45.85	34.78	39.00	----	68	7	59.34	----	5	10	14.00	3.9
Oberlin .....	32.43	42.30	35.61	36.78	24	65	7	60.00	11	2	10	9.00	6.1
Perrysburg (b) .....	34.00	43.11	37.46	38.19	25	68	8	61.33	12	4	12	12.33	----
Portsmouth (c) .....	38.75	51.86	44.61	45.07	17	73	7	64.00	11	11	2	18.67	5.4
Savannah .....	31.71	44.32	35.00	37.01	24	67	7	58.33	2	0	2	6.00	6.7
Sidney .....	33.66	47.04	38.55	39.75	18	70	6	58.67	11	1	11	13.33	8.2
Urbana .....	32.21	46.21	38.79	39.07	18	70	18	60.00	2	4	2	10.67	6.6
West Bedford .....	33.57	42.79	38.86	38.41	17	65	7	58.33	11	4	2	11.33	6.4
Zanesville .....	34.75	45.75	40.21	40.24	17	59	7	60.67	2	8	2	12.67	8.6
MICHIGAN—													
Battle Creek .....	27.36	38.61	31.14	32.37	17	58	17	53.00	11	3	10	2.67	6.3
Cooper .....	27.39	35.89	31.29	31.52	17	f 56	17	51.67	10	2	10	3.33	6.6
Copper Falls Mines .....	8.73	16.64	10.67	12.01	16	43	16	35.10	10	22	10	16.00	7.4
Grand Rapids, [Streng] .....	27.07	37.28	32.14	32.16	17	56	17	50.67	10	4	10	3.33	7.3
Grand Rapids, [Currier] .....	25.79	33.46	30.89	30.05	16	55	17	49.67	10	3	10	1.33	6.7
Monroe .....													6.3
INDIANA—													
Cannelton .....	44.36	54.71	50.21	49.76	18	75	18	68.00	11	15	10	18.00	4.9
Logansport (g) .....	33.00	41.00	38.00	37.00	?	61	----	----	?	3	----	----	----
Michigan City (h) .....	30.54	38.68	32.29	33.84	17	62	17	52.50	1	0	1	4.12	----
New Albany .....	40.20	48.41	43.68	44.10	18	67	6	61.67	11	13.5	10	17.33	6.3
New Harmony .....	41.36	51.46	44.89	45.90	17	69	17	62.00	11	12	10	15.67	6.3
Richmond .....	36.27	45.98	40.60	40.95	18	66	17	59.50	11	15	10	9.17	6.2
ILLINOIS—													
Athens .....	30.36	43.82	35.03	36.40	17	65	14	55.33	10	5	10	2.33	6.2
Augusta .....	28.57	39.89	33.43	33.96	14	62	14	53.67	10	8	10	1.67	5.3
Brighton .....	31.86	44.07	37.61	37.85	17	71	17	62.67	10	0	10	10.00	8.9
Chicago .....	26.26	35.21	30.92	30.80	17	59	17	49.40	10	5	10	0.10	6.4
Fremont Centre .....	24.68	33.54	26.85	28.36	17	52	17	46.33	10	4	10	0.00	6.9
Manchester (b) .....	30.50	43.93	34.29	36.24	17	70	14	53.33	10	4	10	4.67	6.1
Marengo .....	24.00	35.54	26.89	28.81	17	56	17	46.00	10	8	10	0.67	6.5
Ottawa .....	25.46	36.68	32.14	31.43	6	55	17	48.00	10	4	10	1.33	5.9
Pekin (j) .....	26.57	37.39	----	31.98	17	57	17	53.00	10	7	10	1.50	8.5
Peoria .....	30.08	41.26	33.83	35.06	h 59	6	51.17	10	1.7	10	10	5.58	6.0
Riley .....	23.36	33.19	25.63	27.39	17	52	17	43.67	10	12	10	6.00	6.4
Upper Alton .....	32.85	46.24	33.08	37.39	17	70	16	58.00	10	0	10	7.33	5.9
Warsaw .....	29.64	41.04	32.74	34.47	14	64	14	54.00	10	9	10	1.00	5.8
West Salem .....	40.50	52.71	44.14	45.78	17	71	17	65.00	11	11	10	14.33	6.0
MISSOURI—													
St. Louis .....	36.70	47.40	42.20	42.10	17	74	17	62.67	10	5	10	11.50	6.1
WISCONSIN—													
Appleton .....	16.75	29.29	21.54	22.53	16	47	16	41.33	10	16	10	10.35	6.6
Bay City .....	7.29	20.79	15.89	14.66	16	k 42	16	36.67	10	30	10	16.67	----
Beloit .....	23.35	34.07	25.85	27.76	23	52	23	43.00	10	8	10	4.67	5.6
Janesville .....	23.61	32.21	26.43	27.42	23	50	23	43.33	10	8	10	3.07	6.4
Kenosha .....	25.36	34.39	30.48	30.08	17	k 52	17	46.33	10	8	10	2.33	6.1
Madison, [Schue] .....	20.15	29.52	23.00	24.32	14	46	14	42.33	10	16	10	12.00	----
Madison, [Sterling] .....	21.43	30.36	23.25	25.01	23	46	23	41.00	10	13	10	7.33	6.7
Manitowoc .....	23.07	33.94	27.93	28.31	23	f 50	17	44.00	10	7	10	1.33	6.5
Milwaukee, [Pomeroy] .....	24.68	35.93	27.46	29.36	22	58	17	46.67	10	11	10	2.67	7.1
Milwaukee, [Winkler] .....	22.66	31.09	25.57	27.72	23	49	17	43.33	10	12	10	6.67	6.6
New London .....	15.96	28.71	19.96	31.54	16	46	16	41.33	10	23	10	13.00	5.9
Norway .....	24.25	31.61	26.79	27.55	23	48	17	43.33	10	11	10	5.33	6.7
Platteville .....	20.00	32.75	22.00	24.92	23	47	16	41.33	10	21	10	13.67	6.5
Prescott .....	12.57	27.29	16.18	18.68	16	k 46	16	37.67	10	35	10	17.00	3.8
Racine .....	23.81	31.94	27.30	27.68	24	48	17	43.20	10	7	1	1.20	6.3
Waukesha .....	21.89	29.38	25.52	25.60	6	l 46	17	42.33	10	11	10	6.33	6.6

a Same temperature on the 10th and 11th.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Same temperature on the 11th.

e Same temperature on the 10th.

f Same temperature on the 24th.

g Observations taken at sunrise, noon, and sunset.

h Observations taken at 6 a. m., 12 m., 5 and 9 p. m.; mean at 9 p. m., 35.84.

i Same temperature on the 15th.

j Observations taken at sunrise and 1 p. m.

k Same temperature on the 23d.

l Same temperature on the 17th and 24th.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M <sup>n</sup> temp	Date.	Temp.	Date.	Mean temp	
IOWA—	☐	☐	○	○		☐		☐		☐		☐	
Bellevue .....	21.78	33.50	24.11	26.46	14	a 46	23	42.00	10	—14	10	—8.00	6.2
Border Plains .....	17.32	26.54	19.68	21.18	16	42	16	39.67	10	—25	10	—5.67	5.8
Fairfield (b) .....	26.43	37.43	29.36	31.42	23	58	23	49.75	10	—15	10	1.00	—
Fort Madison (c) .....	26.82	36.32	31.67	31.40	14	55	16	48.33	10	—10	10	—1.00	5.7
Franklin .....	18.32	27.46	20.21	22.00	16	44	16	40.00	10	—26	10	—15.67	6.1
Maquoketa (d) .....	23.24	31.64	24.39	26.42	23	46	16	40.00	10	—14	10	—6.67	3.3
Muscatine .....	24.46	34.36	28.14	28.99	23	57	23	46.33	10	—12	10	—5.33	6.7
Pleasant Plain .....	22.89	37.25	28.10	29.41	23	60	16	47.67	10	—17	10	—2.67	5.5
MINNESOTA—													
Hazlewood .....	6.82	15.64	10.82	11.09	16	42	23	32.67	10	—28	■	—15.33	5.0
Lake Winnibigoshish .....	2.55	17.39	6.67	8.87	23	42	16	33.00	10	—42	10	—21.00	6.5
Princeton .....	6.00	19.68	10.75	12.14	23	40	16	34.33	10	—10	10	—20.67	5.7
KANSAS—													
Council City .....	22.85	38.57	27.32	29.58	16	64	16	46.67	10	—12	10	4.00	4.4
UTAH—													
Great Salt Lake City (f) .....	28.61	36.75	30.71	31.97	26	55	26	46.50	8	■	7	17.25	4.3
INDIAN TERRITORY—													
Fort Gibson .....	38.32	—	—	—	17	64	—	—	12	12	—	—	—
OREGON—													
Salem (g) .....	—	—	—	49.15	—	—	—	—	—	—	—	—	—
CALIFORNIA—													
Sacramento .....	42.84	53.89	50.39	49.04	23	k 59	28	53.33	7	34	7	40.33	5.8
San Francisco .....	49.21	55.50	50.36	51.69	1	68	1	61.00	7	38	■	44.00	5.9
MEXICO—													
Mirador (i) .....	62.60	81.07	59.72	67.80	—	—	—	80.89	—	—	—	57.20	—
WEST INDIES—													
Port of Spain, Trinidad .....	75.38	81.75	77.30	78.14	2	88	11	j 79.80	7	73	12	k 76.00	—
St. George's, Bermuda .....	—	—	—	61.50	10	72	—	—	12	52	—	—	—
CENTRAL AMERICA—													
Guatemala (l) .....	—	—	—	62.67	—	81	—	—	—	43	—	—	—
SOUTH AMERICA—													
Cathar'a Sophia, Surin'm (m) .....	73.88	82.31	79.56	78.58	■	85	■	80.50	2	67	2	75.00	5.0
AZORES—													
Horta, Fayal .....	52.79	56.22	53.36	54.12	21	n 62	25	60.67	14	44	14	46.33	6.8

a Same temperature on the 23d.

b Observations taken at 7 a. m., 12 m., 6 p. m., and 10 p. m. Mean at 6 p. m., 32.46.

c Observations taken at 6 a. m., noon, and 7 p. m.

d Observations taken at sunrise, noon, and 10 p. m.

e Same temperature on the 10th.

f Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 31.92.

g Hours of observation not reported.

h Same temperature on the 28th.

i Observations taken at 7 a. m., 2 p. m., and 8 p. m.

j Same temperature on the 24th and 27th.

k Same temperature on the 25th.

l Register thermometer.

m Observations taken at 6 a. m., 2 p. m., and 6 p. m. For the first 16 days of the month only.

n Same temperature on the 24th and 25th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°	°	°	°	°	°	°	°	°	
Hamilton (a) -----	28.97	-----	30.90	29.93	?	62	31	44.50	?	— 2	2	5.00	-----
Montreal -----	20.95	30.49	25.44	25.63	30	48	30	45.00	3	— 2.5	8	6.33	6.3
Red River Settlement -----	10.50	23.86	16.77	17.04	30	46	26	36.67?	7	—22	7	— 8.67	-----
St. John's -----	26.68	32.26	29.95	29.63	3	45	3	41.00	9	10 b	12	13.00	4.5
St. Martin -----	17.09	32.38	24.10	24.52	31	52	31	40.90	11	—11	12	5.50	5.6
Stanbridge -----	20.94	31.84	25.03	25.94	24	c 48	19	41.00	3	— 3	8	4.33	7.0
Toronto (d) -----	22.62	32.98	27.40	27.67	23	56	30	44.13	2	—57	2	1.10	6.1
Wolfville -----	24.90	34.04	27.78	28.91	19	51	19	42.70	9	4	8	12.50	5.3
MAINE—													
Cornish, [Guptill] -----	22.97	33.06	25.03	27.02	31	50	31	41.00	8	2	8	9.00	6.0
Cornish, [West] -----	22.10	31.90	24.52	26.17	31	52	31	42.00	11	0	8	7.67	5.7
Gardiner -----	25.03	36.98	28.60	30.20	31	50	29	c 41.67	11	— 4	8	14.50	5.8
Monson -----													5.9
Perry -----	24.13	33.87	27.29	28.43	27	49	27	e 39.67	11	5 f	8	10.67	5.0
Portland -----	25.29	36.83	28.82	30.31	31	52	31	43.16	11	5	8	14.67	6.3
Steuben -----	23.90	32.87	26.77	27.85	31	54	19	40.33	9	7 f	8	10.33	6.4
NEW HAMPSHIRE—													
Concord -----	25.32	37.64	31.10	31.35	31	55	24	45.33	11	2	3	g 16.00	4.9
Francestown, [Bixby] -----	25.29	36.45	27.71	29.82	31	54	31	44.33	3	6 h	3	11.67	5.9
Manchester -----	25.03	38.45	32.19	31.89	24	55	24	44.67	11	— 1	3	15.33	5.2
North Barnstead -----													5.6
West Enfield -----	22.00	31.97	25.26	29.78	24	55	24	46.67	3	— 2 h	8	7.33	6.0
VERMONT—													
Brandon -----	22.23	33.07	26.48	27.26	31	51	19	40.50	8	— 3 f	2	9.00	6.4
Craftsbury -----	17.55	29.55	22.61	23.24	24	48	24	39.00	3	— 6	7	4.00	6.1
Norwich -----	21.58	34.06	26.97	27.54	24	52	24	41.67	11	— 5	8	86.70	7.2
Rupert -----	23.42	37.48	31.32	30.74	30	56	19	48.00	3	0 f	3	12.67	6.7
St. Johnsbury -----	22.00	34.21	22.30	26.17	31	52	24	38.67	11	—16	8	6.67	5.3
Shelburn -----	21.13	32.03	25.20	26.12	30	48	24	38.33	8	— 7	2	g 9.00	6.3
West Fairlee -----	23.26	34.61	26.84	28.24	24	51	19	42.67	3	0 h	2	10.67	-----
Woodstock -----	20.70	31.95	26.44	26.36	24	48	19	39.50	11	—12	7	11.50	6.4
MASSACHUSETTS—													
Amherst -----	25.97	37.57	30.47	31.34	31	54.5	30	43.40	11	4	3	13.40	5.5
Boston (i) -----	28.71	42.42	33.26	34.80	31	60	31	41.00	11	10 f	2	19.00	4.0
Bridgewater (j) -----	29.18	38.92	33.26	33.45	31	53	19	48.17	13	3 f	13	16.50	5.0
Cambridge -----	27.87	39.00	31.43	32.77	24	57	24	46.00	11	6 f	2	16.00	5.9
Canton (k) -----	27.80	33.35	26.39	29.18	19	53	19	46.33	13	2	13	16.00	4.7
Florida -----													6.8
Lawrence -----	26.35	38.51	31.48	32.11	31	55	24	42.67	11	5 f	2	16.67	5.2
Mendon -----	27.30	37.45	30.45	31.73	31	57	31	49.00	11	5	2	15.00	5.1
Nantucket -----	33.96	39.58	33.46	35.67	31	52.5	31	44.50	3	16.5	3	21.67	4.7
New Bedford -----	29.56	37.79	31.18	32.84	31	56	31	44.70	13	10	3	17.50	6.0
Newburyport (l) -----	28.02	36.73	30.99	31.91	27	53	31	42.20	13	5	12	15.80	7.7
North Attleborough -----	28.81	39.56	31.03	33.13	31	57	31	47.07	11	5.5	2	14.90	4.9
Plainfield (m) -----	16.81	30.58	20.97	23.23	24	46			8	— 8			-----
Richmond -----	23.35	34.68	27.87	28.63	31	52	19	45.67	3	— 4	3	7.67	7.1
Southwick -----													6.0
Westfield -----	26.16	37.16	30.71	31.34	31	54	31	44.73	11	0	3	13.33	5.9
Weymouth -----	30.26	-----	30.32	30.29	30	49	19	46.50	13	7	13	15.00	4.9
Williamstown (n) -----	24.60	32.84	28.58	28.67	31	48	19	44.50	3	0.5	3	8.00	7.0
Worcester -----	27.86	38.97	33.03	33.29	31	59	19	49.46	11	5 f	2	14.67	7.1
RHODE ISLAND—													
Providence (i) -----	26.90	39.60	30.00	32.17	31	61	31	c 46.00	11	6	3	16.33	4.9
CONNECTICUT—													
Columbia -----	28.52	38.55	28.23	31.77	31	55	31	46.00	3	4	3	12.00	5.6

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 12th and 16th.

c Same temperature on the 30th.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e Same temperature on the 29th, 30th, and 31st.

f Same temperature on the 13th.

g Same temperature on the 7th.

h Same temperature on the 8th.

i Observations taken at sunrise, 1 p. m., and 10 p. m.

j Observations taken at 7 a. m., 1½ p. m., and 7 p. m.

k For the first 20 days of the month only.

l Observations taken at 8 a. m., 2 p. m., and 9 p. m.

m Observations taken at 7 a. m., 9 a. m., noon, and 9 p. m. Mean at 9 a. m., 24.55.

n Observations taken at 7½ a. m., 2 p. m., and 9 p. m.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean Cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	°		°		°		°		°	
New London	29.71	39.29	32.29	33.76	31	55	31	46.33	3	5	3	15.33	5.7
Norwich	26.97	39.00	32.16	32.71	31	56	19	47.00	11	— 1	1	14.00	4.8
Pomfret	26.94	36.21	29.43	30.86	19	50	19	45.33	3	7	2	13.00	5.3
Saybrook	28.97	35.65	31.45	32.02	27	a 48	31	42.00	3	1	3	17.00	5.0
Wallingford	26.16	39.02	30.50	31.89	31	57	19	45.83	11	0.5	1	14.33	4.4
NEW YORK—													
Angelica	23.00	30.90	27.35	27.08	23	54	23	46.67	3	— 10	1	54.67	4.2
Baldwinsville	24.03	32.74	27.87	28.21	18	52	18	45.67	3	5	2	9.33	6.5
Beverly	28.48	38.34	33.67	33.50	19	57	31	46.67	3	7	2	15.67	5.2
Blackwell's Island	31.71	39.84	35.48	35.68	31	55	31	47.33	1	10	2	17.67	5.4
Cazenovia	22.35	30.13	23.55	25.34	31	46	18	42.67	3	— 3	2	5.00	7.9
Clinton	24.42	35.26	25.84	28.51	19	54	19	45.00	2	1 c	2	c 8.00	7.4
Eden	25.13	33.77	28.03	28.98	22	56	23	49.00	2	1	2	3.33	6.1
Fishkill Landing	29.10	40.68	32.65	34.14	31	55	19	46.67	3	7	2	17.33	4.2
Flatbush	30.20	40.40	33.30	34.63	31	57	31	45.90	3	8.5	2	16.33	5.6
Fordham	33.68	40.48	34.68	36.28	31	66	18	53.33	3	10	2	14.00	---
Lowville				24.80	31	46	18	38.50	13	— 1	2	2.50	---
McGrawville	22.71	30.31	23.94	25.65	31	47	18	41.80	10	— 3	10	4.50	6.7
Morrisania	29.81	42.16	32.35	34.77	31	60	31	48.00	3	7	1	14.33	4.6
New York city	33.36	42.55	37.15	37.69	31	59	31	50.13	3	12	2	17.76	5.0
Nichols (d)	22.39	37.90	27.06	29.12	18	60	18	47.33	1	— 3	2	10.67	---
Oswego	25.84	35.71	29.68	30.41	31	54	31	45.00	8	4	8	14.00	6.8
Ovid	25.78	33.13	28.81	29.24	18	52	18	45.00	3	1	2	9.00	6.4
Penn Yan (e)	24.29	36.71	30.81	30.60	31	f 54	18	46.00	3	1	2	12.00	6.3
Plainville	25.07	35.52	25.69	28.76	31	52	23	44.00	11	1	2	10.67	7.8
Rochester, [Harkness]	27.90	36.00	30.10	31.33		55				5			
Rochester, [Palmer]	28.65	36.02	30.55	31.74	23	58	23	49.00	2	9	2	11.10	7.1
Sag Harbor	30.47	41.59	32.60	34.89	16	58	16	g 45.67	3	10	1	17.67	4.7
Saratoga	21.84	38.55	28.71	29.70	30	51	19	44.00	8	— 8	8	7.67	4.1
Spencertown	25.80	33.50	30.20	29.83	19	51	19	46.33	3	1 h	3	9.00	6.2
Townsendville	24.13	34.94	26.32	28.46	18	55	18	46.67	2	4	2	6.33	6.8
Utica	25.87	35.44	28.56	29.96	31	50	19	45.33	8	4	8	13.33	5.1
Wampsville	26.06	36.87	29.35	30.76	31	55	18	46.33	3	0	2	10.00	7.5
Waterford (i)	26.22	37.93	30.29	31.96	30	j 56	19	46.50	3	2	2	11.50	---
Wellsville	18.77	35.06	26.29	26.71	18	k 56	18	44.00	8	10	2	5.33	5.3
West Concord													5.0
NEW JERSEY—													
Bloomfield	29.56	42.21	33.60	35.12	31	61	31	48.33	11	5	3	16.83	4.3
Burlington	30.24	43.82	36.49	36.85	18	61	18	50.33	3	7	3	17.67	5.2
Freehold	29.47	44.24	33.63	35.78	24	60	18	48.33	3	7	2	16.50	---
Lambertville	29.28	44.89	31.16	35.11	18	62	18	50.37	3	44	2	17.83	4.9
Newark (l)				35.81	31	60	31	49.63	11	8.5	3	18.33	---
Sergeantsville	27.13	49.03	34.61	36.92	24	j 70	24	50.33	3	6	3	20.00	4.3
PENNSYLVANIA—													
Bedford	23.16	43.97	34.03	33.72	24	69	24	57.00	3	5	2	13.00	5.0
Berwick	30.84	41.58	33.68	35.37	18	m 58	18	50.67	2	8	2	14.67	4.2
Cannonsburg	30.43	41.14	35.87	35.81	22	68	22	61.00	3	8	1	15.33	5.4
Carlisle	31.45	42.87	35.87	36.73	18	61	24	54.30	3	12 n	1	19.00	4.7
Chromedale	28.92	42.07	33.88	34.96	18	60	24	48.60	3	9	2	17.00	4.9
Easton	30.20	43.25	34.17	35.87	18	62	18	50.00	3	10	10	19.67	5.3
Fleming	26.25	40.90	36.55	34.57	24	65	24	51.00	8	— 3	2	n 14.33	4.7
Gettysburg	27.58	43.29	33.19	34.69	24	66	24	55.33	3	5	2	17.00	4.7
Harrisburg, [Heisely]	33.58	43.70	39.10	38.79	18	60	22	51.67	3	14	2	22.33	4.5
Harrisburg, [Hickok]	31.57	42.77	36.68	37.01	18	60	21	51.00	3	13	2	19.00	4.4
Lewisburg	27.49	40.12	33.42	33.68	22	59	22	48.67	8	4	2	14.20	6.1

a Same temperature on the 29th.

b Same temperature on the 7th.

c Same temperature on the 3d.

d Observations taken at 6 a. m., 1 p. m., and 9 p. m.

e Observations taken at sunrise, noon, and sunset.

f Same temperature on the 13th.

g Same temperature on the 30th.

h Same temperature on the 13th.

i Observations taken at 7 a. m., 1 p. m., 6 p. m., and 10 p. m. Mean at 6 p. m., 33.39.

j Same temperature on the 31st.

k Same temperature on the 2d.

l Observations taken at 7 a. m. and 6 p. m.

m Same temperature on the 22d.

n Same temperature on the 8th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Meadville.....	23.52	38.71	28.61	30.24	23	70	23	56.00	8	— 3 a	2	4.67	5.9
Morrisville.....	28.35	44.19	33.94	35.49	31	60	18	47.67	3	7	2	17.67	3.6
Mount Joy.....	33.71	44.29	38.35	38.78	24	67	24	51.00	8	10	2	19.00	1.4
Nazareth (c).....	27.11	39.12	28.17	31.47	18	59	18	46.33	3	7	2	13.00	5.5
Norristown.....	31.90	41.10	34.90	35.97	18	60	18	50.30	3	10	2	17.30	4.8
North Whitehall (d).....	26.65	40.68	36.68	34.67	18	60	18	48.00	2	13	2	14.00	6.6
Paradise.....				31.00									
Philadelphia.....	32.55	44.42	37.08	38.02	18	63	18	53.00	3	10	2	17.70	5.2
Pittsburg, [Wilson].....	29.13	39.48	33.42	34.01	23	71	23	64.00	3	4	2	8.00	
Pocopsco.....	30.39	43.81	34.26	36.15	18	60	18	50.00	3	9	2	16.33	5.3
Shamokin.....	26.61	39.02	34.83	33.49	22	58	22	55.00	8	0	2	14.00	5.9
Tarentum.....	29.29	44.29	34.52	36.03	23	73	23	60.67	8	6	2	13.33	5.3
West Haverford.....	31.93	45.68		38.80	18	64	18	53.00	3	8	3	18.00	4.7
DELAWARE—													
Newark, (e).....	29.55	42.77	34.43	35.58	18	62	18	49.67	3	13	2	20.33	4.2
MARYLAND—													
Annapolis.....	32.38	45.10	37.14	38.31	21	60	24	52.00	3	10	3	23.66	3.8
Bladensburg.....	30.43	46.26	36.93	37.87	24	77	24	63.67	8	14	2	19.83	4.6
Frederick.....	31.76	43.11	35.66	36.84	18	59	24	54.67	3	13	2	20.67	4.2
Ridge (h).....	39.05	48.24	38.21	41.83	21	67	24	60.67	3	16	2	22.00	3.5
Sykesville.....	29.81	45.90	35.24	36.98	24	64	24	57.00	3	0	2	18.00	5.0
DISTRICT OF COLUMBIA—													
Washington, [Smith. Inst.].....	32.44	46.14	38.50	39.03	24	72	24	60.30	3	12	2	20.60	4.2
VIRGINIA—													
Alexandria.....	34.06	47.42	40.90	40.79	24	71	24	61.30	3	12	2	22.00	4.3
Ashland.....	31.54	48.00	35.54	38.36	23	78	23	65.50	3	10 i	2	20.00	3.6
Berryville.....	32.87	43.83	37.18	37.96	24	71	24	60.00	2	13	2	17.00	4.8
Capon Bridge (j).....	34.40	45.85	36.36	38.87	23	64	31	59.00	2	10	2	13.33	
Crichton's Store (k).....	40.70	50.70	52.08	47.83	21	71	21	63.67	8	26	13	31.00	3.6
Kanawha.....	33.11	48.31	37.53	39.65	23	78	23	66.67	2	10	2	13.33	4.7
Lewisburg.....	26.21	43.87	31.71	33.93	24	70	24	54.67	3	4	2	8.67	4.2
Longwood.....	37.32	48.19	39.65	41.72	23	74	24	68.00	2	11	2	15.67	3.3
Meadow Dale.....	23.26	41.06	34.55	32.96	23	68	24	60.00	3	— 2	2	3.67	
Montross.....	36.32	46.10	39.74	40.72	24	76	24	66.33	3	11	2	21.33	2.9
Mossy Creek.....	30.45	47.24	34.97	37.55	24	77	24	64.33	2	9 b	2	14.00	4.0
Poplar Grove.....	30.97	50.90	36.65	39.51	23	83	23	69.00	3	10	2	13.33	4.8
Portsmouth.....	37.61	54.00	40.10	43.90	24	82	24	67.33	3	15	2	25.33	2.9
Rose Hill.....													3.4
Rougemont.....	34.16	51.10	39.61	41.62	24	87	24	71.00	3	10	2	16.33	3.4
Ruthven.....	35.15	50.65	38.37	41.39	24	82	24	66.00	3	11	3	23.33	1.7
Smithfield.....	35.81	50.56	41.13	42.50	24	80	24	69.30	3	12	2	23.70	3.5
Winchester.....	32.03	47.19	35.61	38.28	24	76	24	62.67	3	10	2	15.67	5.6
Wirt Court-House.....	28.52	45.87	34.90	36.43	23	78	23	64.00	2	8 i	2	12.00	5.0
NORTH CAROLINA—													
Chapel Hill.....	37.84	55.39	43.52	45.58	24	84	24	70.30	3	14	2	24.00	3.8
Gaston (l).....	36.92	54.25	43.67	44.95	24	82	24	69.33	8	20	8	26.00	
Goldsborough.....	41.62	53.90	45.14	46.89	24	79	24	71.80	3	18	2	27.30	3.4
Murfreesborough.....	36.93	51.22	42.63	43.59	24	79	24	67.67	3	16	2	25.67	2.7
SOUTH CAROLINA—													
Aiken.....	44.33	58.41	52.00	51.58	24	82	24	70.67	3	24	2	36.67	
All Saints.....	42.84	56.52	49.42	49.59	24	m 75	25	66.33	3	24	2	34.33	3.6
Camden.....	39.29	57.53	46.19	47.67	24	80	24	67.60	3	16	3	29.60	4.0
Charleston, [Dawson].....	47.32	60.93	52.58	53.61	?	79			?	27			
Charleston, [Johnson].....	47.32	60.94	52.58	53.61	25	79	25	69.33	3	27	2	37.33	
Mount Pleasant (n).....	49.66		51.48	50.57	22	66	23	63.00	3	27	3	32.00	2.9

a Same temperature on the 10th.

b Same temperature on the 3d.

c For the first 26 days of the month only.

d Observations taken at sunrise, noon, and sunset.

e For the first 23 days of the month only.

f Same temperature on the 21st.

g Same temperature on the 24th.

h Observations taken at 7½ a. m., 1 p. m., and 9 p. m.; interrupted from the 11th to the 18th of the month.

i Same temperature on the 8th.

j Observations interrupted from the 8th to the 19th of the month, inclusive.

k Observations taken at 8 a. m., noon, and 5 p. m.

l For the last 24 days of the month only.

m Same temperature on the 25th.

n Observations taken at 7 a. m. and 9 p. m.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—						°		°		°			
Athens (a).....	41.11	58.10	50.36	49.86	24	78	24	65.50	10	25	9	33.00	3.4
Factory Mills.....	39.13	58.09	46.67	47.96	24	80	24	67.77	3	21	2	33.17	3.5
Savannah.....	45.90	62.10	52.10	53.37	24	80	25	69.83	3	29	3	39.17	3.5
Sparta.....	41.90	59.39	50.52	50.60	24	79	24	68.00	1	26	1	35.33	3.6
The Rock.....	42.48	59.65	53.97	52.03	25	79	25	71.00	3	28	2	32.00	---
Whitemarsh Island.....	47.03	59.94	52.61	53.19	21	c 78	25	68.10	3	34	2	40.00	3.4
Zebulon.....	46.08	56.21	54.37	52.22	24	89	24	73.67	3	28	2	34.67	4.0
FLORIDA—													
Alligator (d).....	48.84	73.16	56.47	59.49	24	c 85	25	70.33	15	35	14	44.00	1.9
Atsena.....	56.32	64.90	60.48	60.57	23	76	23	70.00	3	36	3	46.33	3.3
Belair.....	48.74	65.42	56.00	56.72	25	82	25	70.00	3	32	13	45.33	3.2
Gainesville (e).....	49.77	68.83	56.19	58.26	21	f 81	23	68.67	3	32	3	44.67	2.1
Jacksonville.....	53.45	67.92	55.79	59.05	25	85	25	73.66	3	33	14	44.00	3.3
St. Augustine.....	58.84	64.84	58.48	60.72	1	c 79	1	72.67	3	41	3	47.67	3.2
Salt Ponds (h).....	68.16	72.55	---	70.35	12	80	12	76.00	3	j 62	3	65.00	3.3
Warrington.....	57.94	65.77	60.77	61.49	30	80	25	74.33	7	41	7	43.67	4.1
ALABAMA—													
Ashville (l).....	---	---	---	42.46	---	---	20	72.00	---	---	2	30.00	---
Auburn.....	44.13	58.55	52.77	51.82	24	78	23	69.00	3	28	2	35.33	3.4
Carlowville.....	46.65	60.48	52.48	53.20	23	c 79	24	71.67	12	30	12	37.67	2.8
Green Springs.....	40.63	65.41	45.68	50.57	22	85	23	65.67	12	25	7	34.00	4.2
Greensborough.....	47.40	56.68	54.09	52.72	23	c 72	23	68.33	12	28	7	36.00	3.6
MISSISSIPPI—													
Columbus.....	43.21	59.76	49.74	50.90	23	81	23	68.23	12	26	7	33.10	2.9
Port Gibson.....	48.03	64.35	57.68	56.69	28	84	28	75.33	12	31	7	41.33	3.7
LOUISIANA—													
Black River.....	50.27	67.36	59.04	58.89	28	86	28	m 75.00	12	33	12	40.33	3.8
New Orleans, [Barton].....	56.02	66.40	61.23	61.22	27	80	27	70.67	8	39	7	45.17	3.5
New Orleans, [Taylor] (n).....	64.32	70.00	68.68	67.67	25	o 82	28	p 82.00	7	40	7	42.67	---
Trinity.....	53.07	70.03	61.67	61.59	27	88	28	78.00	12	35	12	43.33	3.6
TEXAS—													
Austin.....	52.39	69.13	58.03	59.85	29	84	21	73.33	13	26	12	35.67	5.2
Helena (q).....	59.00	75.39	62.96	65.78	20	r 86	22	c 75.67	13	26	12	36.67	5.6
New Braunfels.....	54.63	73.43	61.03	63.03	27	r 90	31	78.00	13	25	7	44.00	4.9
Union Hill.....	49.90	65.78	62.61	59.43	28	86	28	73.67	12	26	12	37.00	2.4
Washington.....	58.19	73.78	55.28	62.42	27	80	27	78.67	12	30	12	38.67	4.6
TENNESSEE—													
Glenwood.....	36.24	50.95	42.65	43.28	23	80	23	70.53	7	17	7	23.93	4.8
Memphis.....	45.06	58.58	48.03	50.56	22	83	23	72.33	7	24	7	30.67	---
KENTUCKY—													
Danville.....	32.71	51.10	39.19	41.00	23	82	23	70.00	7	11	2	17.00	3.1
Paris (s).....	31.42	44.73	37.42	37.86	23	76	23	67.67	2	10	2	16.33	3.8
Springdale (s).....	30.10	49.26	43.16	40.84	23	80	23	71.00	10	11	2	21.00	4.5
OHIO—													
Cincinnati, [Harper].....	33.74	48.61	38.84	40.40	23	78	23	66.67	2	u 12	2	19.67	3.9
Cincinnati, [Hurt] (v).....	29.06	46.72	35.22	37.00	21	68	21	54.67	2	10	7	24.67	3.8
Cleveland.....	27.89	37.73	31.77	32.46	22	u 60	23	52.00	2	5	2	8.30	6.5
Collingwood.....	28.84	39.48	32.35	33.56	23	67	23	57.33	2	0	2	9.67	---
Edinburg.....	29.52	37.77	31.94	33.08	23	68	23	57.33	2	16	2	18.67	5.4
Gallipolis.....	33.13	46.32	37.14	38.86	23	76	23	68.33	2	11	2	14.00	1.6
Hillsborough.....	29.13	41.76	34.58	35.16	23	73	23	62.30	2	5.5	2	12.00	3.7
Hiram.....	27.10	37.62	30.32	31.68	23	81	23	54.67	2	4	7	12.00	6.7
Jefferson.....	26.87	37.00	28.63	30.83	17	x 60	22	54.00	1	2	2	6.00	8.9
Madison, [Atkins].....	28.77	39.47	32.23	33.49	23	63	23	57.33	13	4	2	9.00	6.2

a For the last 26 days of the month only.

b Same temperature on the 8th and 10th.

c Same temperature on the 25th.

d For the last 19 days of the month only.

e Observations taken at 6 a. m., 2 p. m., and 9 p. m.

f Same temperature on the 23d, 23d, and 24th.

g Same temperature on the 24th.

h Observations taken at 7 a. m. and 2 p. m.

i Same temperature on the 13th.

j Same temperature on the 20th.

k Same temperature on the 9th.

l Hours of observation not reported.

m Same temperature on the 26th.

n Observations taken at 9 a. m., noon, and 3 p. m.

o Same temperature on the 27th, 28th, and 29th.

p Same temperature on the 29th.

q Observations interrupted from the 5th to the 9th of the month, inclusive.

r Same temperature on the 23th.

s Observations taken at 6 a. m., 2 p. m., and 6 p. m.

t Same temperature on the 7th.

u Same temperature on the 10th.

v No observations after the 21st of the month.

w Same temperature on the 21d.

x Same temperature on the 23d.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°		°		°		°			
Madison, [Cunningham].....	29.16	38.77	29.42	32.45	31	59	23	49.33	2	7	2	11.00	5.8
Medina.....	29.31	38.96	30.44	32.90	23	67	24	48.00	2	2.5	2	2.50	5.2
New Lisbon.....	31.09	45.22	32.35	36.22		77	23	64.67		7	2	12.33	3.3
Oberlin.....	27.70	40.90	31.20	33.27	19	80	23	57.30	2	0	2	7.00	4.8
Perrysburg (a).....	31.58	44.03	34.26	36.69	23	67	20	50.00	2	3	1	15.00	---
Portsmouth (c).....	34.87	48.71	35.52	39.70	23	d 79	23	75.00	2	11	2	17.00	4.9
Savannah.....	26.00	41.65	29.23	32.29	23	74	23	58.00	2	— 4	2	2.00	5.8
Sidney.....	28.35	44.71	32.53	35.20	23	69	23	60.33	10	— 2	2	11.83	4.6
Urbana.....	27.35	44.61	31.68	34.55	30	75	23	63.33	10	— 6	2	8.67	5.2
Welchfield.....	26.10	40.40	29.00	31.83	22	66	22	54.30	3	0	2	6.60	4.4
West Bedford.....	29.16	39.52	32.00	33.56	23	70	23	60.33	2	2	2	5.67	5.3
Windham.....	27.81	41.94	29.29	33.01	23	73	23	53.33	8	— 5	7	8.67	---
MICHIGAN—													
Battle Creek.....	25.29	38.84	27.90	30.68	31	58	31	44.67	2	— 2	2	10.00	5.0
Cooper.....	25.61	34.71	26.84	29.05	30	56	31	42.67	2	0	2	10.00	3.5
Copper Falls Mines.....	17.02	24.85	19.44	20.44	30	49	30	42.30	7	— 6	7	2.20	4.8
Grand Rapids, [Streng].....	23.57	38.90	29.51	30.66	30	e 53	31	43.60	2	— 2	2	11.60	5.4
Grand Rapids, [Currier].....	21.87	34.39	27.10	27.79	30	54	29	42.00	2	— 3	2	7.67	4.6
Monroe.....													4.7
Romeo (a).....	23.37	33.27	26.65	27.76	31	57	23	45.16	2	— 2	2	4.41	6.7
INDIANA—													
Cannelton.....	35.74	50.35	40.84	42.31	23	80	23	67.33	7	16	7	23.00	3.6
Evansville.....	33.94	50.23	40.26	41.48	23	76	23	68.33	7	f 15	2	17.63	4.7
Logansport (g).....	29.00	38.00	34.00	34.00	?	64			?	— 2			---
Michigan City.....	25.04	37.18	27.73	29.98	22	56	22	47.33	10	— 3	7	9.42	5.5
New Albany (h).....	33.13	43.50	36.40	37.68	22	73	22	58.33	10	12	7	20.00	4.6
New Harmony.....	33.81	47.23	38.97	40.00	22	74	23	68.00	12	14	2	20.00	4.9
Richmond (h).....	28.43	41.25	33.42	34.37	24	56	24	52.00?	7	11	2	13.33	3.3
ILLINOIS—													
Athens.....	24.94	41.39	30.23	32.19	22	72	22	65.33	10	— 10	9	5.67	5.1
Augusta.....	26.06	39.12	32.10	32.43	22	68	22	55.33	12	— 2	9	6.00	4.4
Batavia (i).....	30.14	41.41	34.24	34.36	29	59	30	48.20	10	— 11	10	16.00?	---
Brighton.....	28.23	40.47	36.53	35.08	24	68	24	56.67	6	j 7	9	k 18.00	4.1
Chicago.....	24.09	33.16	27.26	28.17	21	52	21	41.70	12	— 5	7	6.70	5.0
Edgington.....	24.42	36.39	28.42	29.74	30	60	22	50.67	7	— 4	11	4.67	4.3
Fremont Centre.....	25.13	36.45	27.22	29.60	30	60	30	47.33	10	— 4	10	10.00	4.7
Manchester (a).....	28.16	43.84	31.61	34.54	22	74	22	61.00	10	l 3	9	11.33	5.0
Marengo.....	22.26	39.06	26.58	29.30	29	62	29	43.67	7	— 4	7	4.00	5.3
Ottawa.....	24.55	35.81	29.58	29.98	22	62	22	47.00	10	— 7	11	7.67	3.1
Peoria.....	26.80	41.69	32.24	33.58	22	66	22	55.25	12	— 1	9	10.00	4.7
Pekin (m).....	24.23	39.00	36.14	33.12	22	68	22	53.00	12	— 5	7	9.00	5.3
Riley.....	20.74	35.36	24.19	26.76	30	53	30	42.00	12	— 12	7	1.00	4.0
Warsaw.....	27.45	40.35	32.29	33.36	22	70	22	56.00	12	2	11	16.00	5.1
West Salem.....	31.23	49.48	38.48	39.73	22	78	22	65.33	10	5	7	19.33	4.5
Winnebago.....													5.3
MISSOURI—													
St. Louis.....	33.40	45.90	39.10	39.47	21	74	23	67.33	8	10	10	16.83	4.8
WISCONSIN—													
Appleton.....	20.30	34.32	25.06	26.56	30	56	31	44.00	2	— 5	7	3.00	4.6
Bay City.....	10.03	32.65	23.87	22.18	25	n 52	30	39.33	2	— 18 o	6	p 2.67	---
Beloit.....	21.64	38.19	25.93	28.59	30	64	30	46.00	7	— 6 l	7	5.33	3.7
Janesville.....	23.68	37.10	28.19	29.56	30	59	30	43.67	7	0	7	6.67	4.5
Kenosha.....	24.65	35.58	27.93	29.39	27	52	30	42.50	10	— 1	7	10.50	3.8
Madison, [Schue].....	21.71	32.90	25.34	26.65	30	58	30	44.67	7	— 2	7	2.67	8.4
Madison, [Sterling].....	22.52	34.10	26.43	27.68	30	59	30	46.67	10	0	7	6.00	4.9
Manitowoc.....	22.19	35.90	28.97	29.02	31	57	31	49.33	7	0	7	8.33	4.8

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 23d.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Same temperature on the 24th.

e Same temperature on the 31st.

f Same temperature on the 10th and 12th.

g Observations taken at sunrise, noon, and sunset.

h Incomplete.

i Observations taken at 7 a. m., 9 a. m., 2 p. m., and 6 and 9 p. m.

Mean at 9 a. m., 31.47; mean at 6 p. m., 34.52.

j Same temperature on the 10th.

k Same temperature on the 11th.

l Same temperature on the 12th.

m Observations taken at sunrise, 1 p. m., and 9 p. m.

n Same temperature on the 28th.

o Same temperature on the 6th.

p Same temperature on the 7th.

## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	3 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
WISCONSIN—Continued.	□	□	□	□		□		□		□		○	
Milwaukee, [Pomeroy] .....	23.87	39.32	28.74	30.64	27	60	27	45.33	10	— 2	10	5.33	3.9
Milwaukee, [Winkler] .....	22.35	33.58	25.16	27.03	30	49	31	41.67	10	— 3	7	8.33	4.0
New London .....	18.58	34.16	23.35	25.36	30	56	30	42.67	2	—10 <sup>a</sup>	7	— 0.33	4.0
Norway .....	23.55	35.48	26.06	28.36	29	b 56	31	44.00	2	4	7	10.00	3.9
Platteville .....	21.32	38.00	25.90	28.41	30	62	30	48.00	7	—11	7	— 0.67	4.8
Prescott .....	18.16	34.61	21.06	24.61	29	56	29	43.33	7	—17	7	1.00	3.4
Racine .....	23.43	34.98	28.70	29.04	21	c 48	23	41.40	10	— 2	10	8.30	4.3
Waukesha .....	22.07	32.11	26.96	27.05	30	56	30	43.00	12	— 1	7	7.33	4.8
IOWA—													
Bellevue .....	21.42	34.36	25.73	27.17	29	d 58	30	45.00	7	— 8	7	2.33	4.8
Border Plains .....	21.94	34.84	26.23	27.67	29	58	30	47.00	7	—13	7	3.67	5.5
Fairfield (e) .....	26.13	37.26	28.26	31.24	22	60	22	50.25	9	— 5	9	2.75	---
Fort Madison (f) .....	24.45	37.12	32.26	31.28	22	62	22	54.00	12	— 4	9	6.00	5.0
Franklin .....	20.19	32.77	23.90	25.62	29	58	30	47.67	7	—11	9	— 0.67	4.7
Maquoketa (g) .....	28.81	43.05	32.95	34.94	29	61	31	43.67	12	— 6	10	9.33	5.4
Muscatine .....	22.94	36.81	27.32	29.02	22	h 58	22	47.00	7	— 5 <sup>i</sup>	9	3.33	4.7
Pleasant Plain .....	21.77	39.74	28.48	30.00	22	66	22	50.67	11	—12	9	2.67	4.4
MINNESOTA—													
Hazlewood .....	17.32	27.26	21.00	21.86	21	b 45	29	d 38.33	11	—11 <sup>b</sup>	6	— 7.00	4.6
Lake Winnebigoishish .....	14.72	34.88	24.12	24.57	30	50	30	42.33	7	—22	7	— 6.70	4.4
Princeton .....	11.84	32.29	20.10	21.41	29	50	30	39.33	7	—24	7	— 9.00	4.4
KANSAS—													
Council City .....	28.83	44.07	32.80	35.23	22	77	22	60.67	11	i 5	11	10.33	4.4
Manhattan (j) .....	29.19	46.81	41.77	39.26	26	76	22	65.67	11	8	6	17.00	5.0
INDIAN TERRITORY—													
Fort Gibson .....	42.39	---	---	---	23	68	---	---	12	18	---	---	---
OREGON—													
Salem (k) .....	---	---	---	46.50	---	---	---	---	---	---	---	---	---
UTAH—													
Great Salt Lake City (l) .....	35.13	51.22	46.23	44.19	28	m 58	25	55.50	24	29	13	37.75	5.8
CALIFORNIA—													
Sacramento .....	51.84	60.81	56.65	56.43	12	n 66	13	n 61.67	23	44	23	51.67	4.2
San Francisco .....	52.90	62.81	52.87	56.19	13	75	11	63.00	20	o 47	25	p 51.67	3.7
MEXICO—													
Mirador (q) .....	66.29	81.46	68.74	72.16	---	---	---	82.75	---	---	---	55.92	---
WEST INDIES—													
St. George's, Bermuda .....	---	---	---	63.70	18	72	---	---	3	51	---	---	---
CENTRAL AMERICA—													
Guatemala (r) .....	---	---	---	63.79	---	81	---	---	---	46	---	---	---
AZORES—													
Horta, Fayal .....	56.23	59.58	55.55	57.12	24	b 64	24	b 61.33	18	49	18	53.00	7.3

<sup>a</sup> Same temperature on the 7th.<sup>b</sup> Same temperature on the 29th.<sup>c</sup> Same temperature on the 23d.<sup>d</sup> Same temperature on the 30th.<sup>e</sup> Observations taken at 7 a. m., 12 m., and 6 and 10 p. m. Mean at 6 p. m., 33.32.<sup>f</sup> Observations taken at 6 a. m., noon, and 7 p. m.<sup>g</sup> For the last 23 days of the month only.<sup>h</sup> Same temperature on the 29th and 30th.<sup>i</sup> Same temperature on the 12th.<sup>j</sup> Observations taken at 6 a. m., 1 p. m., and 6 p. m.<sup>k</sup> Hours of observation not reported.<sup>l</sup> Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 40.14.<sup>m</sup> Same temperature on the 13th and 17th.<sup>n</sup> Same temperature on the 17th.<sup>o</sup> Same temperature on the 21st.<sup>p</sup> Same temperature on the 28th.<sup>q</sup> Observations taken at 7 a. m., 2 p. m., and 8 p. m.<sup>r</sup> Register thermometer.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Hamilton (a) .....	39.20	38.00	38.13	38.66	?	61	4	50.00	?	10	2	24.00	---
Montreal .....	36.06	43.39	36.41	38.62	24	56	24	47.16	2	9	2	18.33	6.9
Red River Settlement .....	21.20	33.70	-----	27.45	23	b 50	24	44.00	10	c 2	10	d 13.00	---
St. John's .....	36.03	45.20	41.47	40.90	9	60	9	56.00	6	24	6	30.00	---
St. Martin .....	32.60	43.37	35.70	37.22	19	55	19	e 46.00	2	3	2	14.80	5.8
Stanbridge .....	34.77	42.90	37.27	38.31	11	64	19	47.33	2	7	2	14.33	6.5
Toronto (f) .....	30.90	40.86	33.27	35.01	4	52	4	43.40	2	10	2	20.35	5.4
Wolfville .....	38.09	48.81	39.35	42.08	10	65	10	53.50	3	17	3	22.53	3.9
MAINE—													
Cornish, [Guptill] .....	33.73	44.56	36.33	38.31	11	g 54	11	49.67	2	h 13	2	16.33	5.7
Cornish, [West] .....	34.17	44.20	36.43	38.27	11	56	6	50.00	2	12	2	16.00	5.6
Gardiner .....	38.37	47.17	39.40	41.65	24	58	24	51.33	2	19	2	20.67	6.7
Monson .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7.0
Perry .....	33.60	43.73	35.90	37.74	11	49	6	45.33	3	15	2	20.67	6.0
Portland .....	36.10	44.81	38.54	39.82	24	56	6	47.83	2	19	2	21.56	6.5
Steuben .....	35.20	43.37	38.73	39.10	24	52	30	46.33	3	18	2	20.33	6.9
NEW HAMPSHIRE—													
Concord .....	35.90	48.20	42.27	42.12	4	i 58	6	55.67	2	14	2	19.33	4.7
Francestown, [Bixby] .....	36.07	46.30	38.47	40.28	11	j 60	6	55.33	2	10	2	16.67	5.8
Manchester (k) .....	36.32	47.95	42.16	42.14	5	l 60	6	57.67	2	10	2	21.33	6.8
North Barnstead .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.3
Stratford .....	31.97	42.03	35.43	36.48	19	59	6	53.00	3	4	2	11.33	---
West Enfield .....	33.30	45.47	36.79	38.52	11	58	11	54.00	2	3	2	11.00	6.1
VERMONT—													
Brandon .....	34.81	44.28	36.98	38.69	6	59	6	50.33	2	7	2	15.33	6.9
Craftsbury .....	30.87	42.27	33.57	35.57	6	54	6	47.00	2	2	2	10.00	6.5
Norwich .....	35.97	46.97	38.47	40.47	18	62	11	53.00	2	9	2	14.67	6.7
Rupert .....	33.43	46.83	39.13	39.80	5	l 62	5	l 57.33	2	10	2	17.33	7.4
St. Johnsbury .....	31.37	45.07	35.76	37.40	6	59	11	52.00	3	4	2	15.33	5.9
Shelburn .....	36.30	44.39	36.53	39.07	6	64	6	51.00	11	8	2	16.00	7.1
West Fairlee .....	39.03	44.09	37.86	40.09	6	56	6	54.33	2	10	2	16.00	---
MASSACHUSETTS—													
Amherst .....	36.77	46.85	39.49	41.04	5	58	6	51.30	2	14	2	21.00	5.5
Bridgewater (m) .....	37.20	46.97	44.83	43.00	5	59	6	55.83	2	16	2	19.50	5.4
Cambridge .....	37.23	47.87	40.14	41.75	5	63	6	58.67	2	14	2	18.67	6.0
Florida .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.7
Lawrence .....	36.33	48.37	40.50	31.73	9	68	6	57.33	2	13	2	17.67	4.8
Mendon .....	36.57	45.73	38.67	40.32	5	61	5	54.33	2	12	2	17.33	5.3
Nantucket .....	41.73	46.69	40.25	42.89	11	n 54	11	51.00	2	25	2	26.50	5.4
New Bedford .....	38.03	46.43	39.25	41.24	5	56	11	48.67	2	17	2	21.20	5.7
Newburyport .....	36.97	47.99	40.86	41.94	11	63	11	57.20	2	14	2	20.80	7.9
Richmond .....	33.77	44.23	37.70	38.57	5	58	5	49.33	3	16	3	27.33	7.4
Southwick .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.8
Westfield .....	35.90	47.00	38.70	40.53	5	59	6	48.67	2	14	2	19.67	6.3
Weymouth .....	38.90	-----	40.13	59.51	11	58	6	58.00	2	17	2	19.50	5.1
Williamstown .....	36.49	44.58	36.37	39.15	6	61	5	52.00	2	10	2	16.67	6.3
Worcester .....	36.50	46.62	40.17	41.10	5	60	11	55.67	2	13	2	18.33	6.5
RHODE ISLAND—													
Providence (o) .....	35.90	49.00	38.20	41.03	11	62	11	49.67	2	15	2	19.00	5.5
CONNECTICUT—													
Columbia .....	39.00	47.73	37.60	41.44	5	61	11	53.00	2	18	2	22.00	5.6
New London .....	38.97	48.03	40.13	42.38	5	60	28	50.33	2	18	2	26.00	5.5
Norwich .....	37.70	46.60	42.00	42.10	5	61	6	52.33	2	15	2	20.33	4.9
Pomfret .....	35.01	44.30	37.54	38.95	5	60	11	50.80	2	13	2	18.50	6.1
Saybrook .....	37.57	44.23	39.43	40.41	30	56	11	p 46.33	2	20	2	23.33	5.2
Wallingford .....	36.15	48.45	39.20	41.27	5	62	11	50.00	2	15	2	20.83	4.4

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 24th and 28th.

c Same temperature on the 13th and 15th.

d Same temperature on the 13th.

e Same temperature on the 24th.

f Observations taken at 6 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 12th and 13th.

h Same temperature on the 3d.

i Same temperature on the 6th and 9th.

j Same temperature on the 30th.

k Incomplete.

l Same temperature on the 6th.

m Observations taken at 7 a. m., 2 p. m., and 7 p. m.

n Same temperature on the 26th and 28th.

o Observations taken at 6 a. m., 1 p. m., and 10 p. m.

p Same temperature on the 28th.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—	°	°	°	°		°		°		°		°	
Angelica.....	30.83	43.47	33.30	35.87	30	63	13	48.33	2	a 6	2	13.67	6.2
Baldwinsville.....	35.47	42.67	37.77	38.64	4	55	5	51.00	2	12	2	20.33	6.7
Beverly.....	37.70	48.21	40.13	42.01	5	b 59	5	51.67	2	16	2	21.67	5.2
Blackwell's Island.....	40.70	48.73	42.80	44.08	5	58	28	52.00	2	19	2	24.67	5.5
Buffalo (c).....	32.12	42.77	33.78	36.22	30	61	5	51.33	2	12			7.0
Cazenovia.....	31.73	38.40	32.70	34.28	■	56	5	50.00	2	■	2	12.33	7.1
Clinton.....	36.40	44.37	34.13	38.30	4	60	5	54.67	2	10	2	15.00	7.1
Eden.....	35.37	40.63	35.30	37.10	30	56	5	51.67	2	10	2	16.33	6.8
Fishkill Landing.....	36.40	49.93	40.17	42.17	5	d 60	5	53.00	2	17	2	22.67	5.0
Flatbush.....	38.70	47.90	39.90	42.17	25	58	28	49.53	2	17	2	27.33	5.9
Lowville.....				34.31	30	53	5	48.25	2	7	2	12.50	
McGrawville.....	33.26	40.72	33.17	35.72	6	55	5	51.17	2	7	2	13.17	6.6
Morrisania (e).....	37.65	49.46	38.77	41.96	5	f 62	26	51.00	2	15	2	22.00	4.7
New York city.....	41.67	50.97	43.32	45.32	26	60	26	53.40	2	19	2	25.40	5.4
Nichols (g).....	30.27	44.65	32.87	35.93	30	h 61	5	51.33	2	10	2	14.00	
Oswego.....	37.93	42.30	35.50	38.58	5	53	5	51.00	2	13	2	20.33	6.3
Ovid.....	34.83	40.23	35.80	36.95	■	56	5	52.00	2	10	2	16.00	6.5
Penn Yan (i).....	32.05	43.93	37.30	37.75	30	j 57	5	51.33	2	11	2	18.33	7.0
Plainville.....	35.27	41.73	34.20	37.07	4	59	5	54.33	2	10	2	19.00	7.8
Rochester, [Harkness].....	39.20	42.70	37.10	39.67		57				13			
Rochester, [Palmer].....	34.82	42.42	37.60	38.28	4	58	5	54.33	2	13	2	22.67	6.6
Sag Harbor.....	39.70	50.53	39.90	43.38	26	65	5	52.33	2	19	2	23.33	5.4
Saratoga.....	34.57	51.00	38.67	41.41	18	b 66	■	51.67	2	12	2	21.33	4.0
Sennett.....	38.87	43.83	37.50	40.07	4	60	5	53.33	2	12	2	18.67	5.9
Spencertown.....	37.13	46.83	39.50	41.15	5	60	5	53.67	2	9	2	13.00	5.1
Townsendville.....	35.53	41.97	33.37	36.96	26	57	5	50.00	2	■	2	14.33	6.9
Utica.....	37.27	44.85	37.05	39.72	5	65	5	56.00	2	11	2	17.33	6.9
Wampsville.....	37.97	47.03	37.28	40.76	6	62	5	56.67	2	10	2	18.00	7.4
Waterford (k).....	36.90	47.71	38.23	41.63	30	60	26	49.50	2	13	2	21.75	
Wellsville.....	32.10	40.17	33.03	35.10	30	57	5	b 47.33	2	6	2	11.00	6.7
West Concord.....													6.6
NEW JERSEY—													
Bloomfield.....	39.31	49.27	40.50	43.03	5	62	5	52.00	2	16	2	23.67	4.9
Burlington.....	38.94	48.84	42.10	43.29	5	65	■	57.00	2	20	2	26.67	5.6
Freehold.....	35.80	49.15	39.23	41.39	5	66	5	55.84	3	17	■	23.67	
Lambertville.....	38.70	50.54	38.55	42.60	30	67.3	5	55.73	2	14	2	24.37	4.2
Newark (l).....				43.40	5	62	■	53.88	2	17	■	24.50	
Sergeantsville.....	33.67	53.70	41.70	43.02	30	71	5	53.00	2	10	2	22.33	5.0
PENNSYLVANIA—													
Bedford (m).....	36.06	51.56	40.94	42.85	30	69	30	53.33	2	n 19	2	25.67	5.9
Berwick (o).....	41.52	50.90	40.70	44.28	30	66	5	59.00	2	20	2	23.33	4.4
Cannonsburg.....	34.53	44.83	40.07	39.81	30	65	5	53.33	7	18	5	26.67	6.7
Carlisle.....	39.29	49.20	41.81	43.43	30	66	5	56.83	2	22	2	28.33	5.8
Chromedale.....	40.20	48.50	37.90	42.20	10	63	5	44.90	2	21	2	26.30	5.9
Easton.....	39.03	49.97	38.80	42.60	5	64	5	57.00	2	19	2	23.33	6.0
Fleming.....	35.80	47.36	37.63	40.26	30	64	30	52.67	2	18	2	25.33	5.9
Gettysburg.....	36.80	49.33	39.83	41.99	29	72	5	57.33	3	21	2	28.00	5.5
Harrisburg, [Heisely].....	41.53	50.69	44.90	45.71	30	67	30	57.00	2	26	2	32.33	5.6
Harrisburg, [Hickok].....	39.10	48.97	43.12	43.73	30	66	5	57.00	2	22	2	28.67	5.9
Lewisburg.....	36.87	48.06	38.75	41.23	30	63	5	54.36	2	16	2	24.00	6.8
Meadville.....	33.47	42.83	34.33	36.88	4	64	4	50.67	2	16	2	22.00	6.4
Morrisville.....	38.43	50.80	40.00	43.08	5	64	5	55.00	2	20	2	25.67	4.3
Murrysville.....	36.77	46.33	37.67	40.26	30	64	5	56.67	7	18	2	25.67	6.6
Nazareth.....	35.89	48.14	35.77	39.93	30	65	5	50.67	2	15	2	20.33	5.7
Norristown.....	38.50	47.50	39.70	41.90	30	61	27	52.00	2	21	2	24.30	5.5

a Same temperature on the 7th.

b Same temperature on the 30th.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Same temperature on the 11th and 26th.

e For the first 26 days of the month only.

f Same temperature on the 11th.

g Observations taken at 6 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 4th and 26th.

i Observations taken at sunrise, 2 p. m., and sunset.

j Same temperature on the 6th.

k Observations taken at 6 a. m., 1 p. m., 6 p. m., and 10 p. m. Mean at 6 p. m., 43.70.

l Observations taken at 7 a. m. and 6 p. m.

m Observations interrupted from the 12th to the 21st of the month, inclusive.

n Same temperature on the 3d.

o Observations interrupted from the 13th to the 19th of the month, inclusive.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	3 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
	°	°	°	°		°		°		°		°	
PENNSYLVANIA—Continued.													
North Whitehall (a).....	34.73	46.93	42.53	41.40	5	63	5	54.67	2	15	2	22.00	7.
Paradise.....				41.00									
Philadelphia.....	42.03	51.28	42.98	45.43	5	64	5	58.20	2	23	2	27.67	5.6
Pittsburg, [Wilson].....	34.30	43.77	39.87	39.31	20	67	5	56.67	7	16	6	24.00	---
Pococson.....	38.40	49.33	40.23	42.65	5	62	5	55.67	2	22	2	27.67	5.5
Shamokin.....	31.83	44.57	44.90	40.43	5	60	5	55.33	3	12	2	21.67	6.3
Tarentum.....	34.47	46.90	38.97	40.11	26	65	5	56.67	7	20	2	25.00	6.5
DELAWARE—													
Newark (d).....	45.24	56.03	48.94	50.07	30	70	26	66.67	20	31	20	32.83	5.6
MARYLAND—													
Annapolis.....	40.73	51.21	42.50	44.81	27	68	27	56.50	7	25	2	32.50	4.8
Bladensburg.....	39.41	52.60	41.18	44.40	5	70	5	60.33	3	22	2	29.00	5.5
Frederick.....	40.73	50.02	42.62	44.46	5	65	5	58.17	2	27	2	31.00	5.2
Ridge (e).....	50.00	54.30	44.50	59.60	28	68	28	60.67	8	30	2	35.00	4.5
Sykesville.....	39.23	51.35	42.10	44.23	5	66	5	59.00	2	23	7	30.33	4.4
DISTRICT OF COLUMBIA—													
Washington, [Smith Inst.].....	40.71	51.30	43.95	45.32	5	67	5	59.67	2	26	2	33.00	5.2
VIRGINIA—													
Alexandria.....	42.72	53.40	46.40	47.51	5	70	5	61.33	2	27	2	33.00	4.7
Ashland.....	39.23	51.66	42.50	44.46	30	74	30	64.00	6	26	6	29.00	5.0
Berryville.....	39.41	48.59	42.76	43.59	5	66	5	60.67	2	24	2	31.33	5.7
Capon Bridge.....	39.88	49.63	40.47	43.39	4	68	5	60.33	2	24	2	29.00	5.5
Crack Whip.....	34.93	46.87	36.50	39.43	4	64	5	55.33	1	16	2	23.67	5.1
Crichton's Store (g).....	45.86	55.85	55.96	52.56	27	74	27	69.67	2	32	13	35.00	5.1
Kanawha.....	37.87	52.97	42.30	44.38	30	76	5	61.67	2	25	6	29.12	6.3
Lewisburg.....	36.47	49.10	39.57	41.71	8	70	30	55.33	1	18	1	26.00	5.9
Meadow Dale.....	30.23	43.00	39.23	37.49	26	60	5	49.00	2	13	2	23.00	---
Montross.....	42.80	52.77	43.40	46.32	5	72	5	61.33	2	27	11	30.00	6.1
Mossy Creek.....	37.40	52.36	41.00	43.59	25	70	5	57.67	3	22	2	32.67	5.3
Poplar Grove.....	37.87	54.57	43.07	45.17	30	76	5	60.00	6	22	6	29.00	6.3
Portsmouth.....	43.97	56.33	44.13	48.14	27	73	5	62.67	2	30	3	35.00	4.1
Rose Hill.....	45.18	52.25	49.26	48.90	5	69	27	63.50	2	31	2	35.00	4.9
Rougemon.....	42.60	57.80	45.37	48.59	26	73	25	61.33	2	25	13	34.67	5.4
Ruthven.....	43.63	55.44	47.79	48.95	5	71	5	61.00	2	30	2	34.67	3.2
Smithfield.....	44.30	54.90	45.90	48.37	27	73	27	63.90	2	30	2	34.90	4.9
Winchester.....	41.00	53.07	41.63	45.23	4	68	5	58.67	2	22	2	30.00	4.5
Wirt Court-House.....	34.40	48.83	41.17	41.47	4	66	5	58.00	7	16	1	28.00	6.4
NORTH CAROLINA—													
Chapel Hill.....	46.07	61.07	49.13	52.09	26	79	27	66.00	1	30	13	38.67	4.9
Gaston.....	40.53	50.93	47.93	46.46	25	72	27	65.33	7	28	13	36.00	---
Goldsborough.....	48.41	59.79	44.49	50.90	27	77	27	69.30	7	35	2	40.60	5.0
Murfreesborough.....	42.93	55.53	47.80	48.75	26	70	27	63.33	3	30	2	35.00	3.7
SOUTH CAROLINA—													
Aiken.....	49.33	63.10	54.63	55.69	26	73	25	65.33	7	28	7	43.67	---
All Saints.....	50.53	62.86	54.47	55.95	18	77	27	69.67	7	35	7	41.33	4.1
Camden.....	47.66	64.33	50.80	54.26	9	78	27	68.00	6	35	7	42.00	4.9
Charleston, [Johnson].....	53.97	64.20	56.47	58.21	26	76	27	69.00	7	37	7	44.67	---
Charleston, [Dawson].....	53.96	64.20	56.46	58.21	?	76			?	37			---
GEORGIA—													
Athens.....	45.86	61.37	51.91	53.05	26	75	30	66.50	7	30	6	36.80	3.7
Augusta.....	51.96	64.12	57.60	57.89	26	76	26	70.67	3	39	2	42.00	---
Factory Mills.....	48.84	64.41	51.66	54.97	18	79	18	65.67	7	34	7	42.50	3.8
Savannah.....	53.20	67.80	56.70	59.23	27	80	27	70.67	7	38	7	45.93	4.6
Sparta.....	45.97	64.90	54.67	55.18	30	78	30	67.33	7	30	6	42.67	4.4

a Observations taken at sunrise, noon, and sunset.

b Same temperature on the 30th.

c Same temperature on the 3d.

d For the last twenty days of the month only.

e Observations taken at 7 a. m., 1 p. m., and 9 p. m. Incomplete.

f Same temperature on the 6th.

g Observations taken at 7½ a. m., noon, and 5½ p. m.

h Same temperature on the 7th.

i Same temperature on the 6th and 7th.

j Same temperature on the 11th.

k Same temperature on the 26th.

l Same temperature on the 26th and 30th.

m Same temperature on the 26th and 27th.

n Same temperature on the 27th.

o Same temperature on the 17th.

p Same temperature on the 22th.

q Same temperature on the 22d.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.	LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—Continued	□	□	○	○		○		○		○		○	
The Rock .....	47.67	64.67	57.20	56.51	26	77	18	69.33	7	32	6	39.00	4.6
Whitemarsh Island .....	54.03	64.30	57.33	58.55	27	77	27	69.33	7	40	7	46.67	4.0
Zebulon .....	51.25	62.10	52.13	55.16	30	76	30	69.66	7	35	6	42.00	4.1
FLORIDA—													
Alligator .....	54.53	69.93	58.60	61.02	18	85	19	76.33	7	40	24	50.00	3.4
Atsena .....	59.37	67.73	64.33	63.81	30	80	30	70.69	7	a 44	7	53.67	3.0
Belair .....	51.83	68.14	60.00	59.99	27	75	27	68.67	7	38	7	50.00	3.3
Gainesville (b) .....	52.40	72.20	61.20	61.93	5	81	18	71.33	e 38	7	49.00	2.2	
Jacksonville .....	57.63	71.73	61.47	63.61	18	81	18	73.00	7	42	7	50.67	3.7
St. Augustine .....	62.90	69.70	62.43	65.01	18	86	18	78.33	7	50	7	54.00	3.6
Salt Ponds .....	68.17	73.97		71.07	30	82	30	79.00	24	58	24	61.00	2.7
ALABAMA—													
Ashville (d) .....				49.73			30	66.50			7	38.25	---
Auburn .....	48.57	63.27	56.10	55.98	30	75	19	70.33	6	36	6	38.67	4.0
Carlowville .....	50.57	67.50	56.27	58.11	18	e 80	28	69.33	6	f 32	6	37.67	4.0
Greene Springs .....	46.71	68.91	50.21	55.28	18	g 84	30	72.00	6	28	6	34.33	3.7
Greensborough .....	50.41	60.18	57.27	55.95	18	77	30	70.00	6	32	6	36.83	4.4
MISSISSIPPI—													
Columbus .....	47.23	63.79	52.36	54.46	29	76	30	68.90	6	30	6	35.77	3.9
Port Gibson .....	48.41	64.97	56.41	56.60	28	80	28	70.00	6	30	6	38.67	3.9
LOUISIANA—													
Black River .....	50.63	67.67	57.93	58.74	21	79	17	74.33	6	32	6	42.33	4.4
New Orleans, [Barton] .....	54.43	68.00	59.50	60.64	18	h 81	18	74.67	13	41	6	46.67	3.1
Trinity .....	54.20	70.03	59.57	61.27	21	83	17	74.00	6	32	12	45.00	4.2
TEXAS—													
Austin .....	51.27	69.67	56.60	59.18	29	84	17	g 73.33	6	24	18	47.00	5.2
New Braunfels .....	54.00	75.21	60.33	63.18	17	91	30	79.67	6	31	6	46.67	4.4
Washington .....	56.13	71.29	55.50	60.97	26	90	21	76.33	11	30	12	44.67	4.6
TENNESSEE—													
Glenwood .....	40.70	52.88	46.37	46.65	30	71	30	63.17	6	22	6	28.53	5.5
Memphis .....	49.40	58.83	50.13	52.79	29	76	29	67.00	6	31	6	35.33	---
KENTUCKY—													
Danville .....	40.43	55.30	42.73	46.15	30	78	30	66.00	6	18	6	23.33	4.2
Millersburg .....	31.43	46.17	35.67	37.76	23	72	23	61.33	6	10	2	15.67	5.1
Paris .....	36.67	48.75	40.80	42.07	30	74	30	64.00	2	i 23	6	24.67	5.5
Springdale (j) .....	33.42	50.58	44.05	42.68	30	77	30	64.17	6	18	6	24.67	5.8
OHIO—													
Cincinnati, [Harper] .....	38.80	53.07	42.17	44.68	30	77	30	66.00	6	21	6	24.00	5.6
Cincinnati, [Hurt] .....	38.63	54.83	42.40	45.29	30	76	30	64.67	6	f 21	6	29.33	4.7
Cleveland .....	34.60	43.20	35.70	37.83	4	k 65	30	55.80	6	20	6	23.00	5.7
College Hill .....	39.29	49.09	38.87	42.42	30	74	30	63.00	6	19	6	21.80	5.3
Collingwood .....	34.57	44.07	37.10	38.58	29	65	25	50.00	2	19	2	25.33	---
Edinburg .....	34.97	42.37	34.70	37.35	4	k 60	30	54.67	1	l 18	6	22.33	6.2
Gallipolis .....	37.30	50.20	42.90	43.47	30	72	30	62.00	2	m 24	6	26.00	---
Hillsborough .....	36.03	46.67	39.17	40.62	30	69	30	60.67	6	20	6	21.80	5.1
Hiram .....	33.40	42.33	35.46	37.06	4	k 63	30	53.33	6	f 18	6	22.00	7.0
Jefferson .....	35.60	41.33	35.90	37.61	30	62	4	k 52.67	6	22	2	25.33	8.8
Madison, [Atkins] (n) .....	38.76	44.83	36.62	40.07	4	69	4	58.00	6	20	2	24.00	6.2
Madison, [Cunningham] .....	36.79	42.90	33.13	37.61	4	70	4	57.67	1	o 18	2	22.00	6.8
Medina .....	35.33	42.66	34.55	37.51	30	63	30	51.50	6	18	6	20.67	7.8
New Lisbon .....	36.87	50.00	40.54	42.47	---	62	5	54.34	---	22	2	27.00	3.7
Oberlin .....	35.90	44.34	35.57	38.60	30	68	30	57.00	2	i 21	2	24.33	5.6
Perrysburg (p) .....	38.17	46.83	38.77	41.26	30	66	30	57.00	6	22	2	30.00	---
Portsmouth (q) .....	40.47	52.77	46.03	46.42	30	72	30	66.33	6	f 25	6	27.33	6.3
Savannah .....	35.07	45.63	34.37	38.36	30	70	30	58.67	6	f 18	6	23.33	6.9

a Same temperature on the 23d.  
b Observations taken at 6 a. m., 2 p. m., and 9 p. m.  
c Same temperature on the 12th.  
d Hours of observation not reported.  
e Same temperature on the 28th.  
f Same temperature on the 7th.  
g Same temperature on the 29th.  
h Same temperature on the 26th.  
i Same temperature on the 6th.

j Observations taken at 7 a. m., 2 p. m., and 7 p. m.  
k Same temperature on the 30th.  
l Same temperature on the 2d and 6th.  
m Same temperature on the 6th, 7th, and 17th.  
n Observations interrupted from the 13th to the 18th of the month, inclusive.  
o Same temperature on the 2d.  
p Observations taken at 7 a. m., 1 p. m., and 9 p. m.  
q Observations taken at 7 a. m., 1 p. m., and 9 p. m.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Ohio—Continued.	°	°	°	°		°		°		°			
Sidney .....	35.65	46.57	38.78	40.33	30	70	30	61.33	6	16	6	21.84	7.0
Urbana .....	33.83	48.03	36.67	39.51	30	71	30	60.33	6	16	6	20.33	6.7
Welchfield .....	33.43	43.47	34.80	37.23	30	68	30	57.00	1	a 18	2	23.00	5.6
Windham .....	34.30	44.40	36.53	38.41	4	64	4	50.33	6	18	6	24.00	5.1
MICHIGAN—													
Battle Creek .....	34.20	46.00	35.10	38.43	30	68	30	56.00	2	18	6	22.00	6.2
Cooper .....	35.43	42.60	34.13	37.39	30	62	30	55.00	2	b 20	6	23.33	5.1
Copper Falls Mines .....	19.45	31.44	25.06	25.32	25	c 46	25	38.40	6	8	5	12.50	5.5
Grand Rapids, [Streng] .....	33.06	47.23	36.70	39.00	30	76	30	58.00	2	19	6	23.67	6.2
Grand Rapids, [Currier] .....	31.93	43.33	34.50	36.59	29	d 66	30	52.67	2	16	6	22.67	4.8
Monroe .....													6.0
INDIANA—													
Cannelton .....	41.30	52.60	45.10	46.33	30	73	30	65.33	6	22	6	25.67	5.3
Evansville .....	38.87	50.73	43.33	44.31	25	70	30	60.67	6	25	6	28.67	4.4
Logansport (e) .....	32.00	44.00	40.00	39.00	?	64			?	18			
Michigan City .....	34.87	43.32	35.18	37.79	30	64	30	56.92	2	21	6	23.05	6.6
New Albany .....	39.87	49.97	39.62	43.15	30	77	30	66.00	7	18	■	25.50	6.0
New Harmony .....	39.67	49.97	42.37	44.00	25	69	30	60.67	6	25	6	27.67	5.9
Richmond .....	35.81	44.93	40.08	40.27	30	66	30	60.83	6	19	6	22.50	6.4
ILLINOIS—													
Albion (f) .....	35.29	47.94		40.81	25	73		?	6	19		?	5.9
Athens .....	33.46	49.50	37.23	40.06	29	71	29	58.33	■	15	6	22.00	5.3
Augusta .....	33.70	46.30	38.46	39.49	29	69	29	57.00	6	15	6	23.67	4.8
Batavia (g) .....	35.37	42.73	35.86	39.17	28	61	28	54.80	15	18	6	25.80	
Brighton .....	34.60	39.93	37.40	37.31	29	64	29	60.00	5	19	5	21.00	4.7
Chicago .....	32.28	39.45	33.40	35.04	4	59	30	49.10	■	16	6	20.40	6.5
Edgington .....	30.00	43.63	34.83	36.15	30	60	30	53.00	6	h 12	6	18.33	4.7
Fremont Centre .....	35.00	41.67	33.00	36.56	30	64	30	56.00	■	18	6	22.00	6.4
Manchester (i) .....	34.57	50.00	36.57	40.38	25	72	25	60.00	6	15	6	23.33	5.6
Marengo .....	32.23	43.60	33.53	36.45	30	68	30	56.67	6	j 16	■	20.00	6.8
Ottawa .....	32.13	42.52	36.66	37.10	24	60	30	52.67	6	h 16	6	17.67	5.6
Pekin .....	33.20	45.13	35.80	38.04	29	72	29	59.00	■	16	6	22.00	6.6
Peoria .....	34.64	49.11	38.05	40.60	29	72	29	59.75	6	h 18	6	23.67	6.0
Riley .....	30.00	43.69	32.33	35.34	29	67	30	54.33	6	12	6	18.00	5.1
Upper Alton .....	37.10	48.86	40.93	42.30	25	72	25	59.67	6	18	■	24.00	4.1
Warsaw .....	35.53	47.17	39.30	40.33	29	69	29	58.00	6	17	5	k 25.67	5.7
West Salem .....	38.67	44.20	42.10	41.66	25	c 71	30	61.67	■	24	6	25.67	5.4
West Urbana .....	34.53	46.80	37.73	39.69	25	67	29	57.33	6	17	6	23.00	5.5
Winnebago .....													5.8
MISSOURI—													
Cape Girardeau (l) .....	40.28	52.45	46.68	46.06	25	71	30	61.37	■	18	6	28.00	5.1
Palmyra (m) .....	32.28	48.16	38.01	39.90	25	70	33	58.25	6	14	6	24.50	5.4
St. Louis .....	38.97	50.85	43.50	44.44	28	77	25	62.33	6	20	6	27.23	6.2
WISCONSIN—													
Appleton .....	28.63	42.53	33.33	34.83	30	65	30	55.33	■	12	6	19.00	5.5
Bay City .....	19.60	35.33	27.27	27.40	24	46	30	40.00	11	— 6	6	16.00	
Beloit .....	28.93	45.60	34.43	36.32	29	66	29	d 50.67	11	12	6	22.33	5.7
Janesville .....	32.03	44.67	34.70	37.13	29	d 64	30	57.00	6	17	6	21.33	6.5
Kenosha .....	32.37	39.72	34.30	35.46	4	56	29	46.50	6	16	■	20.67	5.6
Madison, [Schue] .....	29.50	41.83	32.83	34.72	30	65	29	52.00	11	13	6	20.00	4.3
Madison, [Sterling] .....	30.17	39.79	33.62	34.53	30	63	30	54.67	11	14	6	21.00	5.7
Manitowoc .....	29.56	42.27	34.20	35.34	30	62	30	50.67	6	15	6	22.33	6.2
Milwaukee, [Pomeroy] .....	31.80	39.03	31.13	33.99	3	54	30	45.00	6	n 15	6	19.33	6.3

a Same temperature on the 2d and 6th.

b Same temperature on the 6th and 7th.

c Same temperature on the 29th.

d Same temperature on the 30th.

e Observations taken at sunrise, noon, and sunset.

f Observations taken at 7 a. m. and 2 p. m. Incomplete.

g Observations taken at 7 and 9 a. m., 2, 6, and 9 p. m. Mean at 9 a. m., 42.06; mean at 6 p. m., 39.83.

A Same temperature on the 15th.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Same temperature on the 11th.

k Same temperature on the 6th.

l Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 44.83.

m Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 41.12.

n Same temperature on the 7th.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Milwaukee, [Winkler] .....	31.13	37.70	31.12	33.32	3	54	30	47.00	5	15	5	18.33	6.2
New London .....	30.06	44.00	32.99	35.68	30	66	30	58.67	6	16	6	23.33	5.4
Platteville .....	30.73	45.33	33.93	36.66	30	66	29	55.33	6	12	6	18.67	5.2
Racine .....	30.42	39.19	32.60	34.07	29	53	27	41.40	10	15	6	23.00	6.6
Waukesha, [Bean] .....	41.80	54.50	42.00	46.10	8	73	27	59.67	13	20	12	32.33	5.2
IOWA—													
Bellevue .....	30.23	43.03	33.56	35.61	28	60	29	53.33	6	16	11	20.33	---
Border Plains .....	33.17	44.37	34.60	37.38	29	71	29	54.67	6	5	5	18.33	5.9
Fairfield (c) .....	33.63	45.23	33.93	38.78	30	72	29	56.75	5	d 14	5	20.50	---
Fort Madison (e) .....	31.43	45.16	39.90	38.83	29	69	30	58.00	5	14	6	23.33	5.3
Franklin .....	31.57	43.13	32.43	35.71	29	68	30	56.00	6	13	5	20.00	4.6
Maquoketa (f) .....	27.88	42.33	30.73	33.65	3	58	3	46.33	15	16	5	22.67	6.2
Muscatine .....	29.47	44.70	34.83	36.33	29	65	30	54.33	6	13	6	19.00	4.9
Pleasant Plain .....	31.50	48.17	34.70	38.12	30	72	30	58.67	6	13	5	23.33	4.6
MINNESOTA—													
Hazlewood .....	27.90	34.40	27.70	30.00	28	58	28	47.33	5	7	5	7.67	3.8
Princeton .....	24.13	37.47	27.23	29.61	28	60	29	44.67	6	6	5	14.67	4.0
KANSAS—													
Council City .....	36.00	52.57	36.20	41.59	28	74	28	57.33	5	14	5	17.33	4.2
INDIAN TERRITORY—													
Fort Gibson .....	42.40	---	---	---	29	60	---	---	14	24	---	---	---
UTAH—													
Great Salt Lake City (g) .....	41.53	60.47	47.13	49.71	22	77	22	62.75	2	i 28	2	36.00	8.3
OREGON—													
Salem (j) .....	---	---	---	49.45	---	---	---	---	---	---	---	---	---
CALIFORNIA—													
Sacramento .....	57.50	67.07	62.43	62.33	7	k 79	7	k 70.33	2	48	1	55.00	1.6
San Francisco .....	56.53	66.87	55.47	59.62	7	83	7	69.67	1	51	2	55.00	3.5
MEXICO—													
Mirador (l) .....	71.73	81.36	72.61	75.23	---	---	---	90.72	---	---	---	63.12	---
WEST INDIES—													
St. George's, Bermuda .....	---	---	---	62.90	7	73	---	---	1	53	---	---	---
CENTRAL AMERICA—													
Guatemala .....	---	---	---	68.90	---	89	---	---	---	52	---	---	---
SOUTH AMERICA—													
Catharina Sophia, Surinam (m) .....	73.67	85.73	82.97	80.79	19	59	30	82.50	20	n 67	30	82.50	3.6
AZORES—													
Horta, Fayal .....	58.50	61.50	55.70	58.57	15	67	20	62.00	5	49	8	55.00	6.2

a Same temperature on the 30th.

b Same temperature on the 28th.

c Observations taken at 7 a. m., 12 m., 6 p. m., and 10 p. m. Mean at 6 p. m., 42.33.

d Same temperature on the 6th and 15th.

e Observations taken at 6 a. m., noon, and 7 p. m.

f For the first 16 days of the month only.

g Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 51.43.

h Same temperature on the 23d.

i Same temperature on the 5th.

j Hours of observation not reported.

k Same temperature on the 12th.

l Observations taken at 7 a. m., 2 p. m., and 8 p. m.

m Observations taken at 6 a. m., 2 p. m., and 6 p. m.

n Same temperature on the 25th.

o Same temperature on the 21st.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Hamilton (a).....	53.26	51.86	51.86	52.56	?	88	25	74.00	?	30	11	35.00	---
Montreal.....	51.14	60.94	52.22	54.77	24	b 84	25	79.33	11	31.5	5	40.03	6.8
St. John's.....	44.74	53.45	47.58	48.59	30	70	30	63.67	26	32	15	37.00	---
St. Martin.....	45.12	61.96	51.20	52.76	25	87	25	73.80	12	30	11	36.30	4.6
Stanbridge.....	48.81	60.00	50.68	53.16	25	82	27	70.00	11	32	11	35.33	4.8
Toronto (c).....	44.45	53.77	47.14	48.45	25	72	25	63.85	11	28	11	31.95	6.1
Windsor.....	49.04	59.71	49.40	42.72	25	79	25	68.50	11	33	12	37.50	5.3
Wolfville.....	49.57	60.45	48.50	52.84	28	75	29	69.83	11	34	12	39.30	3.8
MAINE—													
Cornish, [Guptill].....	48.87	59.00	49.67	52.51	25	80	25	73.00	2	d 36	17	37.00	5.2
Cornish, [West].....	48.06	57.74	48.32	51.37	25	81	25	70.33	11	33	11	37.67	5.5
Gardiner.....	56.64	61.61	51.45	56.57	25	81	25	66.00	1	41	11	43.67	6.4
Monson.....													5.8
Perry.....	44.03	55.39	45.52	48.31	24	70	31	60.33	12	33	11	39.67	5.4
Portland.....	48.44	56.69	49.10	51.41	25	75	25	65.77	1	39	17	42.57	5.7
Steuben.....	47.87	55.71	46.60	50.06	31	71	25	61.33	1	32	1	39.33	5.3
NEW HAMPSHIRE—													
Concord.....	50.10	64.32	52.20	55.54	24	87	25	70.67	1	35	16	42.33	5.4
Francetown, [Bixby].....	50.23	60.32	51.26	53.94	25	81	25	72.00	11	36	11	38.33	5.3
Manchester.....	50.62	61.79	53.62	55.34	25	86	25	72.33	1	37	11	41.67	5.7
North Barnstead.....													6.6
Shelburne.....	48.60	65.20	50.93	54.91	25	93	25	73.70	11	35	11	38.67	5.7
West Enfield.....	47.61	59.87	50.19	52.56	25	84	25	74.00	11	32	15	33.33	4.8
VERMONT—													
Brandon.....	47.59	60.25	50.94	52.93	25	83	25	71.50	11	31	11	35.16	5.3
Craftsbury.....	44.03	57.84	48.23	50.03	26	79	25	69.00	11	26	11	31.00	5.8
Norwich.....	47.74	62.00	50.68	53.47	26	86	25	69.33	11	33	11	36.33	---
Rupert.....	47.23	62.55	56.19	55.32	24	b 78	25	73.33	12	30	11	39.33	6.0
St. Johnsbury.....	42.33	61.94	48.42	50.90	26	84	26	67.33	12	25	11	33.00	5.3
Shelburne.....	51.03	61.07	49.10	53.73	25	85	27	72.33	11	30	11	33.33	4.9
West Fairlee.....	45.94	59.84	51.48	52.42	25	82	25	73.33	12	31	11	35.67	---
MASSACHUSETTS—													
Amherst.....	55.07	63.05	52.13	56.75	26	86	25	70.43	12	40	16	43.30	5.5
Bridgewater (e).....	50.84	59.19	52.68	54.24	26	77	24	62.67	1	41	16	44.17	4.6
Cambridge.....	50.45	62.13	51.94	54.84	25	86	25	69.00	17	37	17	40.00	5.3
Florida.....													6.2
Lawrence.....	48.45	61.52	52.61	54.19	25	86	25	70.67	12	36	17	40.00	4.1
Mendon.....	52.48	60.90	51.35	54.91	26	88	25	74.67	13	36	18	42.33	5.6
Nantucket.....	51.88	58.66	49.70	53.41	24	72	27	61.83	1	41	17	45.50	4.8
New Bedford.....	51.40	59.60	49.80	53.60	26	81	26	69.00	1	41	16	45.00	6.3
Newburyport.....	51.18	59.99	52.67	54.61	25	89	25	75.60	11	40	16	43.33	8.2
Southwick (f).....													4.8
Westfield.....	48.52	62.35	52.10	54.32	26	85	25	70.00	1	36	16	42.33	5.9
Weymouth.....	52.25		51.27		25	70	25	69.00	17	g 40	1	38.00	4.2
Worcester.....	51.13	61.90	53.10	55.38	26	85	25	71.33	19	39	16	42.00	6.5
RHODE ISLAND—													
Providence (h).....	46.50	59.70	49.20	51.80	26	85	26	66.00	1	34	1	41.33	5.3
CONNECTICUT—													
Columbia.....	53.58	61.75	50.71	55.35	26	86	26	74.00	16	37	16	42.67	5.6
New London.....	51.10	59.23	51.29	53.87	24	76	24	69.00	1	i 41	1	44.67	4.9
Norwich.....	51.32	63.00	53.03	55.78	26	81	26	70.33	12	38	20	44.33	4.7
Pomfret.....	49.30	59.50	48.90	52.57	26	81	24	b 66.60	12	37	16	41.20	5.4
Saybrook.....	49.97	56.94	51.00	52.64	26	74	26	63.00	1	41	19	45.33	5.7
Wallingford.....	49.20	62.80	51.65	54.55	26	84	26	68.67	1	36	1	42.33	4.7
NEW YORK—													
Angelica.....	47.48	60.77	47.13	51.79	24	j 83	26	68.33	11	30	11	31.00	4.8
Baldwinsville.....	47.77	58.87	51.29	52.64	26	81	26	70.33	11	32	11	34.33	5.2

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 25th.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Same temperature on the 12th.

e Observations taken at 7 a. m., 2 p. m., and 7 p. m.

f Incomplete.

g Same temperature on the 18th.

h Observations taken at 6 a. m., 1 p. m., and 10 p. m.

i Same temperature on the 12th and 17th.

j Same temperature on the 26th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
New York—Continued.	°	°	°	°		°		°		°		°	
Beverly (a).....	49.80?	64.93?	53.50?	56.08	25	81	?	-----	1	43	1	43.00	5.9
Blackwell's Island.....	54.13	61.42	55.42	56.99	25	77	25	70.00	1	b 44	19	45.00	5.3
Buffalo (c).....	41.26	53.96	43.17	46.13	25	75	-----	-----	12	28	12	33.67	6.0
Cazenovia.....	47.29	56.16	47.32	50.26	26	84	26	73.67	11	27	11	30.00	6.2
Clinton.....	50.90	61.29	50.26	54.15	26	89	26	77.67	11	32	11	36.00	6.4
Eden.....	50.94	57.65	51.16	53.25	9	d 82	23	73.00	11	29	11	34.00	6.0
Fishkill Landing.....	50.03	64.00	55.61	56.55	26	85	26	74.00	18	37	11	44.33	4.5
Flatbush.....	52.40	62.30	52.90	55.87	26	79	26	67.33	11	42	19	43.50	5.5
Lowville.....	-----	-----	-----	48.79	26	84	26	69.75	12	25	11	30.00	-----
McGrawville.....	49.30	57.29	49.34	51.98	26	78	26	70.40	11	29	11	32.43	5.8
Morrisania.....	53.65	68.74	54.35	58.91	25	93	25	75.00	11	41	19	44.67	4.7
New York city.....	55.10	64.54	57.03	58.89	25	82	23	72.56	19	43	19	44.33	5.2
Nichols (c).....	43.71	63.52	48.58	51.94	25	88	27	68.67	12	26	11	34.00	-----
Oswego.....	51.58	57.94	49.52	53.01	26	88	9	70.33	11	32	11	35.33	5.0
Ovid.....	49.55	58.55	51.16	53.09	26	85	25	73.67	11	28	11	32.00	5.6
Penn Yan (e).....	43.71?	61.19	51.19	52.03?	24	f 85	25	69.00	12	24	11	35.67	6.6
Plainville.....	50.58	62.68	48.65	53.97	26	92	26	72.00	11	31	11	33.00	7.5
Rochester, [Harkness].....	54.50	59.00	51.10	54.87	-----	85	-----	-----	-----	32	-----	-----	-----
Rochester, [Palmer].....	50.35	60.22	52.39	54.32	25	86	25	75.33	11	32	11	37.67	7.5
Sag Harbor.....	50.58	66.18	61.76	56.17	26	82	24	70.33	1	g 42	19	46.00	5.1
Saratoga.....	48.42	66.58	53.52	56.17	26	90	27	72.00	13	36	17	43.33	4.3
Spencertown.....	49.68	59.52	51.65	53.62	25	h 81	26	74.00	13	36	11	38.67	4.9
Utica.....	51.03	59.53	51.73	54.10	26	83	25	75.67	11	34	11	38.67	5.1
Wampsville.....	52.42	64.58	52.13	56.38	26	92	26	76.00	11	34	11	37.33	5.5
Waterford (i).....	52.11	63.01	53.04	56.05	26	86	26	75.33	11	39	11	42.00	5.8
Wellsville.....	47.03	57.32	46.34	50.23	25	89	24	67.67	11	26	11	31.67	6.9
West Concord.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.2
NEW JERSEY--													
Bloomfield.....	52.92	67.52	54.73	58.39	25	88	25	71.83	1	41	19	43.83	4.8
Burlington.....	53.61	65.87	57.26	58.91	26	81	26	73.00	19	43	19	44.00	5.2
Freehold.....	50.45	65.74	54.81	57.00	25	85	31	71.67	1	33	1	41.67	-----
Lambertville.....	53.22	70.62	54.88	59.57	26	90	26	73.80	1	29	19	41.70	4.6
Newark (j).....	-----	-----	-----	57.25	25	81	26	69.25	1	36	19	44.38	-----
Sergeantsville.....	52.19	69.26	59.81	60.42	26	87	31	79.67	1	35	1	42.00	3.8
PENNSYLVANIA--													
Bedford.....	51.27	67.00	55.08	57.78	25	88	25	73.67	7	k 40	19	41.67	5.5
Berwick.....	54.22	65.87	56.32	58.80	25	h 87	26	76.33	11	40	11	42.67	4.3
Cannonsburg.....	50.45	61.87	56.42	56.25	25	80	25	69.33	7	g 38	11	42.00	6.6
Charlisle.....	53.16	64.96	55.11	57.74	26	84	26	72.33	20	41	19	42.33	4.9
Chromedale.....	54.29	66.03	56.52	58.95	26	83	31	72.06	1	40	19	42.60	5.2
Easton.....	50.81	64.08	54.97	56.62	26	84	26	72.67	11	39	19	41.33	5.3
Fleming.....	48.51	63.18	53.87	55.19	25	84	26	68.00	12	33	1	45.33	5.6
Gettysburg.....	53.74	67.48	57.52	60.25	25	88	24	75.00	12	41	19	43.33	4.8
Harrisburg, [Heisely].....	55.81	68.42	61.42	61.88	26	89	26	77.33	20	43	19	46.33	4.6
Harrisburg, [Hickok].....	52.06	65.34	59.13	58.84	25	h 84	24	72.50	12	m 40	19	42.33	5.3
Lewisburg.....	50.97	64.91	55.81	57.23	26	85	26	73.43	12	37	11	41.73	6.3
Meadville.....	50.13	62.26	50.77	54.39	24	88	25	71.33	11	32	11	35.33	6.6
Morrisville.....	53.16	65.23	54.61	57.67	26	82	26	70.00	19	40	19	41.67	4.0
Murrysville.....	53.87	64.71	53.16	57.25	25	85	26	71.00	11	37	11	41.67	6.9
Nazareth.....	51.17	64.53	50.48	55.39	25	85	25	70.67	19	37	19	39.33	5.2
Norristown.....	51.96	62.57	54.63	56.39	26	81	26	71.33	18	40	19	42.93	5.6
North Whitehall (n).....	47.94	65.16	58.74	57.28	26	86	26	74.67	13	34	20	42.00	6.8
Paradise.....	-----	-----	-----	64.00	-----	-----	-----	-----	-----	-----	-----	-----	-----
Philadelphia.....	56.94	67.75	58.92	61.20	26	86	26	76.00	19	42	19	43.33	5.5
Pittsburg, [Wilson].....	49.94	62.45	54.39	55.59	9	87	9	73.67	11	32	11	37.00	-----

a Incomplete.

b Same temperature on the 11th, 12th, and 19th.

c Observations taken at 6 a. m., 1 p. m., and 9 p. m.

d Same temperature on the 23d.

e Observations taken at sunrise, 2 p. m., and sunset.

f Same temperature on the 25th and 26th.

g Same temperature on the 12th.

h Same temperature on the 26th.

i Observations taken at 1 p. m., instead of 2 p. m., on the 3d, 10th, 17th, 24th, and 31st.

j Observations taken at 7 a. m. and 6 p. m.

k Same temperature on the 11th and 19th.

l Same temperature on the 19th.

m Same temperature on the 20th.

n Observations taken at sunrise, noon, and sunset.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°		°		°		°		°	
Pocopson .....	53.68	65.35	56.32	58.45	24	85	31	73.00	11	40	19	43.00	5.7
Shamokin .....	45.35	62.45	55.77	54.52	25	90	25	<i>a</i> 72.00	12	<i>b</i> 28	12	38.67	5.7
Tarentum .....	50.26	66.10	53.77	56.71	25	88	31	72.00	11	35	11	40.67	5.8
West Haverford .....	53.03	67.29			26	85	26	73.50	20	38	19	41.00	5.3
DELAWARE—													
Newark .....	56.90	69.22	59.93	69.22	10	83	25	74.67	20	39	20	45.33	5.1
MARYLAND—													
Annapolis .....	56.80	70.80	58.60	62.07	26	82	31	74.16	20	43	19	45.33	4.2
Bladensburg .....	56.08	71.41	57.72	61.74	25	89	25	73.33	19	41	19	43.67	5.4
Frederick .....	57.02	66.78	58.34	60.71	25	83	26	73.33	19	41	19	43.00	5.3
Ridge (c) .....	63.69	65.15	60.64	63.16	25	85	25	79.00	20	44	19	48.50	3.6
Sykesville .....	57.90	68.58	58.10	61.53	25	82	25	74.00	19	39	19	41.67	4.7
DISTRICT OF COLUMBIA—													
Washington, [Smith. Inst.] ..	55.44	68.52	59.90	61.29	25	84	31	74.33	19	41	19	43.80	5.3
VIRGINIA—													
Alexandria .....	58.58	69.87	61.68	63.38	25	84	31	76.33	19	42	19	45.33	5.2
Berryville .....	53.58	64.13	58.68	58.80	10	<i>d</i> 79	26	71.33	19	40	19	42.33	5.6
Capon Bridge (e) .....	52.07	69.25	58.50	59.94	25	87	?		11	42	?		5.0
Crack Whip .....	51.45	63.39	53.26	56.03	25	82	25	70.33	19	34	19	36.67	4.4
Crichton's Store (f) .....	60.28	71.72	70.72	67.57	25	88	25	79.33	18	<i>g</i> 45	19	47.00	5.3
Kanawha .....	54.02	70.19	57.12	60.44	9	<i>h</i> 85	31	72.33	12	40	19	46.17	5.8
Lewisburg .....	49.97	64.68	53.74	56.13	25	<i>i</i> 77	31	73.00	19	39	19	41.00	5.4
Meadow Dale .....	45.16	59.94	54.94	53.35	25	<i>i</i> 74	31	66.67	19	32	19	35.67	
Montross .....	57.84	71.32	59.45	62.87	16	<i>i</i> 86	31	76.33	19	42	19	45.00	5.1
Mossy Creek .....	50.51	68.45	55.61	58.19	25	84	31	72.00	19	37	19	41.00	5.3
Poplar Grove .....	53.23	70.87	56.39	60.16	9	90	31	76.67	7	43	19	46.67	5.8
Portsmouth .....	59.51	73.54	59.77	64.27	25	90	26	<i>i</i> 76.33	13	40	20	46.33	3.6
Rougemont .....	58.52	72.00	62.77	64.43	10	89	24	77.67	19	41	19	44.33	5.7
Ruthven .....	58.64	70.16	58.54	62.45	10	87	31	76.00	19	<i>j</i> 43	19	<i>j</i> 47.00	3.7
Sistersville .....	51.50	66.87	53.03	57.13	24	<i>k</i> 86	31	70.00	11	38	11	40.00	5.5
Smithfield (e) .....	59.30	68.70	61.90	63.30	31	82	31	76.30	20	42	12	54.20	5.6
Winchester .....	57.00	70.03	57.42	61.48	25	86	25	<i>a</i> 74.00	19	40	19	42.00	4.4
Wirt Court House .....	49.35	65.58	56.00	56.98	9	86	31	70.00	12	31	11	<i>g</i> 44.00	5.6
NORTH CAROLINA—													
Chapel Hill .....	61.19	74.94	62.68	66.27	25	89	31	77.33	19	46	19	48.33	5.2
Gaston .....	55.29	71.39	64.10	63.59	25	86	31	78.33	1	43	19	47.67	
Murfreesborough .....	58.20	71.94	61.73	63.96	25	<i>i</i> 86	31	77.33	20	44	20	48.67	4.0
Warrenton .....													5.7
SOUTH CAROLINA—													
Aiken .....	64.61	74.65	67.29	68.85	30	86	30	77.67	20	50	18	<i>g</i> 56.33	
All Saints .....	65.16	73.65	67.32	68.71	29	83	31	78.67	20	54	20	59.00	4.6
Camden .....	62.97	75.35	64.58	67.63	30	86	14	<i>i</i> 77.00	19	51	18	54.33	5.1
Charleston, [Johnson] .....	66.71	77.65	68.74	71.03	28	87	31	79.33	20	54	19	<i>j</i> 61.33	
Charleston, [Dawson] .....	66.79	77.64	68.74	71.06	?	87			?	54			
GEORGIA—													
Athens .....	60.49	73.40	63.72	65.87	30	86	10	74.00	21	49	18	53.00	3.9
Factory Mills .....													5.1
Savannah .....	65.90	77.60	68.00	70.50	29	88	30	79.24	20	53	20	59.30	4.6
Sparta .....	58.90	77.03	66.23	67.39	31	91	31	78.00	20	46	20	55.33	4.9
The Rock .....	60.26	75.68	68.58	68.17	30	90	10	78.67	20	42	20	52.67	3.8
Whitemarsh Island .....	67.81	75.32	68.45	70.53	16	84	20	78.67	20	56	20	59.33	4.4
Zebulon .....	65.72	73.95	69.45	69.71	30	88	12	<i>l</i> 78.66	20	<i>m</i> 51	20	55.91	4.5
FLORIDA—													
Alligator .....	66.13	81.19	67.87	71.73	11	92	30	89.33	22	53	20	62.33	3.3
Atsena .....	69.07	74.77	72.04	71.96	14	79	14	<i>n</i> 76.67	21	60	19	<i>o</i> 66.00	3.0

*a* Same temperature on the 26th.*b* Same temperature on the 13th.*c* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*d* Same temperature on the 25th and 26th.*e* Imperfect.*f* Observations taken at 7 a. m., noon, and 6 p. m.*g* Same temperature on the 19th.*h* Same temperature on the 25th and 31st.*i* Same temperature on the 31st.*j* Same temperature on the 20th.*k* Same temperature on the 25th.*l* Same temperature on the 30th.*m* Same temperature on the 21st.*n* Same temperature on the 15th.*o* Same temperature on the 20th and 31st.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	°	°	°	°		°		°		°		°	
Belair .....	65.13	80.23	71.16	72.17	12	a 90	12	79.67	20	54	20	62.33	3.4
Gainesville (b) .....	65.74	80.19	72.27	72.73	11	c 88	13	79.67	29	55	20	63.00	3.1
Jacksonville .....	68.61	80.03	70.16	72.93	11	91	11	d 81.00	22	54	22	63.00	3.2
St. Augustine .....	73.23	76.00	71.58	73.60	11	85	14	e 78.00	7	f 64	7	g 68.00	3.3
Salt Ponds .....	75.58	80.29	-----	77.93	18	86	18	83.00	h 70	8	8	71.33	2.6
Warrington .....	69.61	75.45	73.13	72.73	28	e 83	29	79.00	4	58	4	62.67	3.0
ALABAMA—													
Ashville (i) .....	-----	-----	-----	63.50	-----	-----	30	77.00	-----	-----	22	52.00	-----
Auburn .....	63.43	74.76	67.45	68.55	10	e 85	30	77.67	20	51	19	j 55.00	4.3
Carlowville .....	65.42	76.52	67.29	69.74	12	88	15	78.33	18	f 52	19	j 56.33	3.7
Greene Springs .....	61.75	76.57	64.30	67.54	12	86	15	77.00	3	48	18	55.00	3.6
Greensborough .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.8
MISSISSIPPI—													
Columbus .....	60.21	75.41	65.18	66.93	30	85	13	77.43	4	47	3	53.16	4.1
LOUISIANA—													
Black River .....	63.78	79.13	70.65	71.19	39	88	15	79.33	19	51	3	57.33	4.5
Trinity .....	65.68	80.90	70.90	72.49	27	91	28	80.33	4	52	3	57.33	4.3
TEXAS—													
Austin .....	63.90	81.94	68.32	71.39	4	d 92	14	81.33	4	48	8	55.67	5.3
New Braunfels .....	66.74	86.90	72.30	75.31	14	k 97	14	83.33	4	50	18	66.00	5.0
Union Hill .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.9
Washington .....	66.65	86.36	66.29	73.10	29	99	29	82.67	19	48	18	59.00	4.0
TENNESSEE—													
Glenwood .....	55.05	68.62	60.17	61.23	13	84	13	73.27	11	44	18	48.83	5.7
Memphis .....	61.48	75.10	63.74	66.77	14	l 86	13	78.67	18	m 47	18	49.33	-----
KENTUCKY—													
Danville .....	58.42	70.68	58.16	62.42	23	n 85	11	74.67	11	o 47	19	49.67	4.3
Millersburg .....	54.90	65.94	58.39	59.74	26	86	26	74.33	13	34	12	45.33	5.7
Paris .....	53.65	59.38	55.97	56.33	24	80	25	71.67	11	41	19	44.67	4.8
Springdale (p) .....	48.21	68.37	59.45	58.68	24	86	14	70.67	12	33	11	46.67	5.5
OHIO—													
Cincinnati, [Harper] .....	55.23	70.26	58.45	61.31	24	92	24	77.67	12	38	11	45.33	5.5
Cincinnati, [Hurt] .....	55.19	67.35	59.97	60.84	24	89	24	q 76.67	12	38	12	31.33	4.6
Cleveland .....	49.74	60.10	51.87	53.90	25	84	24	72.00	11	34	11	38.83	6.5
College Hill .....	54.10	65.81	54.65	58.19	23	85	24	73.50	11	33	11	38.00	5.2
Collingwood .....	51.03	60.77	51.68	54.49	30	90	24	72.33	11	33	11	39.33	-----
Edinburg .....	52.87	61.03	52.06	55.32	24	84	25	77.33	11	32	11	35.33	5.9
Gallipolis .....	53.10	66.03	57.29	58.81	24	89	14	76.67	12	34	11	42.00	-----
Hillsborough .....	51.86	61.68	55.00	56.28	24	81	24	71.00	11	35	11	38.00	5.1
Hiram .....	49.35	60.16	52.00	53.84	24	84	25	73.00	11	31	11	35.00	7.0
Jefferson .....	50.32	55.62	51.40	52.45	23	r 80	11	72.00	11	o 32	11	34.67	9.0
Madison, [Atkins] (s) .....	48.10	52.70	46.00	48.93	9	82	9	75.33	10	34	11	38.33	7.0
Madison, [Cunningham] .....	50.26	59.42	48.16	52.61	25	88	25	74.00	12	28	11	36.00	6.2
Medina .....	51.81	61.31	51.15	54.76	24	82	30	84.67	18	30	11	33.85	6.9
New Lisbon .....	54.71	70.09	56.42	60.41	-----	84	26	76.67	-----	38	11	43.00	3.6
Oberlin .....	51.42	62.19	50.52	54.71	25	87	25	72.33	11	33	11	36.00	4.7
Perrysburg (t) .....	54.39	63.55	54.32	57.42	24	q 84	24	78.00	11	32	11	40.33	-----
Savannah .....	53.77	64.65	51.87	56.76	23	88	25	77.33	11	32	11	36.00	6.9
Sidney .....	52.02	63.03	53.19	56.08	24	q 83	25	73.00	11	33	11	36.00	7.4
Urbana .....	51.13	64.68	51.81	55.87	23	86	24	72.33	11	34	11	35.67	6.4
Welchfield .....	50.00	61.90	51.77	54.56	24	89	24	74.00	11	31	11	34.33	5.3
Windham .....	49.23	60.65	52.42	53.77	24	79	25	68.67	11	34	11	36.33	-----
MICHIGAN—													
Battle Creek .....	51.65	61.81	50.29	54.53	24	85	24	77.67	11	34	11	37.33	4.4

a Same temperature on the 28th.

b Observations taken at 5 a. m., 2 p. m., and 9 p. m.

c Same temperature on the 12th and 13th.

d Same temperature on the 14th.

e Same temperature on the 30th.

f Same temperature on the 19th and 20th.

g Same temperature on the 20th and 21st.

h Same temperature on the 20th and 21st.

i Hours of observation not reported.

j Same temperature on the 30th.

k Same temperature on the 29th.

l Same temperature on the 27th.

m Same temperature on the 19th.

n Same temperature on the 24th.

o Same temperature on the 13th.

p Observations taken at 7 a. m., 2 p. m., and 7 p. m.

q Same temperature on the 25th.

r Same temperature on the 26th.

s For the first 20 days of the month only.

t Observations taken at 7 a. m., 1 p. m., and 9 p. m.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	W'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Cooper	46.88	60.58	46.10	51.19	23	a 84	24	71.33	10	20	11	32.00	3.6
Copper Falls Mines	40.25	47.11?	39.39?	42.25?	22	76	23	67.40	10	17	10	20.40	4.9
Grand Rapids, [Currier]	47.13	62.29	50.94	53.45	24	88	24	74.00	10	b 30	10	34.00	4.5
Grand Rapids, [Streng]	49.35	64.35	51.29	55.00	23	a 84	24	72.67	10	b 30	10	36.00	5.9
Monroe													5.3
Port Huron (c)	50.71	60.33	51.29	54.11	24	d 87	25	74.00	11	33	11	34.33	4.9
INDIANA—													
Evansville	57.68	68.03	58.46	61.39	23	82	9	73.33	11	40	4	b 48.67	5.4
Logansport (e)	48.00	62.00	55.00	55.00	?	81			?	31			
Michigan City	51.35	56.70	47.91	51.99	24	85	24	76.33	2	28	10	35.33	5.0
New Albany	55.68	67.16	55.78	59.54	24	83	24	70.67	11	42	11	45.67	6.1
New Harmony	56.55	68.58	58.48	61.20	9	f 84	9	76.00	11	41	11	47.00	5.3
Richmond	50.31	60.65	54.23	55.06	23	81	9	70.00	11	33	11	35.00	6.0
ILLINOIS—													
Athens	50.03	67.80	53.19	57.01	23	86	24	71.00	12	31	11	41.67	4.7
Augusta	50.74	66.03	56.06	57.61	23	85	23	72.67	10	b 36	10	b 44.67	4.3
Batavia (g)	50.48	60.39	48.55	54.84	23	84	23	75.20	10	b 30	11	34.80	
Brighton	54.42	66.55	61.42	60.80	28	89	28	77.00	11	34	11	37.00	5.3
Chicago	49.22	56.37	47.54	51.04	23	85	24	73.8	10	30	16	40.33	5.0
Fremont Centre	52.06	60.42	47.74	53.41	23	83	22	72.00	10	b 28	11	32.00	5.6
Granville	50.40	64.98	51.30	55.56	23	85	24	2 59	11	33	11	38.10	4.4
Manchester (h)	52.10	67.97	53.45	57.84	23	86	20	75.33	11	35	11	41.33	5.3
Marengo	50.06	62.68	47.87	53.54	24	84	14	75.33	10	b 30	11	34.67	4.7
Ottawa	50.13	62.23	50.67	54.35	23	84	23	70.33	11	32	11	36.33	4.9
Peoria	52.33	69.16	55.21	58.90	23	89	23	75.58	11	36	10	b 44.75	4.4
Pekin	49.10	65.13	52.50	55.53	23	85	24	72.33	11	32	11	39.67	5.0
Riley	48.19	61.50	46.00	51.90	23	83	23	a 72.00	11	25	11	32.00	4.1
Upper Alton	54.94	68.55	56.26	59.92	23	82	23	73.23	11	38	11	44.33	3.9
Warsaw	54.61	66.61	56.39	59.20	8	i 87	23	76.33	10	37	11	46.00	5.2
West Salem	56.42	70.74	58.97	62.04	23	90	9	76.33	11	41	4	46.67	5.0
West Urbana	52.35	64.19	52.81	56.45	23	86	23	75.67	11	33	10	39.33	5.2
Winnebago													4.8
MISSOURI—													
Cape Girardeau (j)	52.16	67.97	60.02	60.23	9	84	13	69.62	5	40	11	46.90	5.3
Palmyra (k)	45.52	65.94	57.06	57.00	22	83	8	70.50	10	l 34	11	43.25	6.4
St. Joseph (m)	50.95	65.39	56.63	57.75	9	85	24	71.25	11	34	11	44.87	6.9
St. Louis	56.60	69.60	59.20	61.80	23	88	9	78.67	11	39	11	46.67	5.2
WISCONSIN—													
Appleton	45.97	62.26	46.52	51.58	23	84	23	77.00	11	29	10	35.33	4.3
Bay City	38.03	46.00	36.48	40.17	8	70	24	a 58.67	10	22	10	27.00	3.5
Beloit	47.77	62.10	48.10	52.66	23	84	23	72.00	12	29	11	36.33	3.8
Janesville	48.25	61.58	49.35	53.06	23	86	22	70.67	11	32	11	37.33	5.5
Kenosha	48.60	54.57	47.02	50.06	23	84	24	70.83	11	31	11	33.83	3.8
Madison, [Schue]	50.58	60.00	48.59	53.06	23	84	23	75.00	11	30	10	34.67	3.4
Madison, [Sterling]	48.55	58.63	50.26	52.48	23	80	23	73.00	10	23	10	33.33	4.2
Menitowoc	44.55	55.16	45.48	48.40	22	84	22	65.33	11	30	11	33.00	4.9
Milwaukee, [Pomeroy]	46.42	52.97	45.06	48.15	23	89	23	76.67	11	26	11	30.67	6.7
Milwaukee, [Winkler]	47.81	54.16	45.61	49.19	23	84	24	73.00	11	27	11	32.67	4.3
New London	42.48	61.45	49.45	51.13	23	86	23	76.00	12	25	10	34.33	4.4
Platteville	49.64	64.26	53.74	55.88	23	88	23	74.67	12	33	10	42.33	4.2
Racine	46.55	52.70	44.46	47.90	23	85	24	70.67	10	n 33	16	36.50	5.3
Waukesha, [Bean]	48.97	59.55	47.94	52.15	23	83	23	72.67	10	b 32	10	35.67	3.4
IOWA—													
Bellevue	48.26	63.64	51.71	54.54	23	84	23	71.00	11	33	11	41.33	
Border Plains	49.48	66.65	54.13	56.75	4	90	4	75.00	10	30	9	39.67	4.3

a Same temperature on the 24th.

b Same temperature on the 11th.

c For the last 91 days of the month only.

d Same temperature on the 25th.

e Observations taken at sunrise, noon, and sunset.

f Same temperature on the 23d and 21th.

g Observations taken at 7 and 9 a. m., 2, 6, and 9 p. m. Mean at 9 a. m., 59.84; mean at 6 p. m., 54.91.

h Observations taken at 7 a. m., 1 p. m., and 9 p. m.

i Same temperature on the 231.

j Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 60.76.

k Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 p. m., 59.46.

l Same temperature on the 20th.

m Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 58.13.

n Same temperature on the 16th and 17th.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Iowa—Continued.	■	○	○	○		■		○		○		■	
Fairfield.....	54.29	64.74	53.90	57.64	8	84	23	76.33	11	36	10	43.33	4.4
Fort Madison (a).....	48.39	64.55	57.68	56.87	8	84	E	74.33	10	b 35	10	42.00	4.8
Franklin.....	52.19	64.25	51.29	55.91	23	87	23	73.67	10	32	10	42.00	4.2
Mt. Vernon.....	54.14	63.54	53.53	57.07	23	80	23	73.33	10	34	10	38.00	---
Muscatine.....	44.20	62.80	52.60	53.20	8	83	8	68.33	12	29	10	42.33	3.6
Pleasant Plain.....	53.81	66.13	51.87	57.27	8	88	23	77.33	10	35	11	44.00	3.9
MINNESOTA—													
Hazlewood.....	50.29	57.41	50.50	52.73	8	82	8	68.00	D	29	D	33.00	4.8
Lake Winnibigoshish.....	44.33	62.00	47.25	51.19	22	77	24	65.33	D	c 22	9	31.00	5.3
Princeton.....	47.48	62.48	49.87	53.28	22	84	22	68.67	10	26	10	34.67	4.1
KANSAS—													
Council City.....	52.26	64.77	50.32	55.78	E	84	E	74.00	10	34	10	d 44.33	3.8
UTAH—													
Great Salt Lake City (e)....	51.10	65.55	54.87	58.00	28	85	28	72.50	9	30	8	40.50	6.9
OREGON—													
Salem (f).....				58.42									---
CALIFORNIA—													
Marysville.....	57.69	80.24	63.45	67.13	25	101	25	84.67	11	48	11	54.00	2.5
Sacramento.....	65.28	70.94	63.29	66.50	25	87	25	78.67	8	53	8	56.67	2.1
San Francisco.....	54.55	64.19	52.74	57.16	21	78	24	65.33	17	g 51	18	55.67	2.7
MEXICO—													
Mirador (h).....	76.24	88.20	76.37	80.27				91.09				69.35	---
Vera Cruz (i).....	75.03		78.65	76.83	1	90			5	65			---
WEST INDIES—													
St. George's, Bermuda.....				70.10	31	79			2	62			---
CENTRAL AMERICA—													
Guatemala (j).....				68.25		86				52½			---
SOUTH AMERICA—													
Catharina Sophia, Surinam (k)	75.16	84.42	81.42	80.33	1	l 88	7	82.50	4	71	m	77.00	5.3
AZORES—													
Horta, Fayal.....	60.06	62.42	57.29	59.92	19	71	18	65.67	3	51	4	55.67	6.7

a Observations taken at 6 a. m., noon, and 7 p. m.

b Same temperature on the 11th and 12th.

c Same temperature on the 23d.

d Same temperature on the 11th.

e Observations taken at sunrise, 9 a. m., 3 and 9 p. m. Mean at 9 a. m., 60.43.

f Hours of observation not reported.

g Same temperature on the 18th.

h Observations taken at 7 a. m., 2 p. m., and 8 p. m.

i Observations taken at 5 to 6 a. m., and 9 to 11 p. m.

j Register thermometer.

k Observations taken at 6 a. m., 2 p. m., and 6 p. m.

l Same temperature on the 4th and 31st.

m Same temperature on the 20th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Hamilton (a).....	61.93	-----	59.63	60.78	?	84	28	74.00	?	38	8	49.00	5.8
Montreal.....	61.11	68.01	61.93	63.68	26	79	28	70.83	5	51	5	54.33	5.8
Red River Settlement (b).....	60.06	69.39	62.50	63.98	23	81	24	74.00	16	52	16	52.67	4.6
Stanbridge.....	58.50	64.07	58.20	60.26	28	c 79	28	69.67	5	d 49	5	51.33	5.4
St. John's.....	51.37	55.97	49.47	52.27	24	70	24	65.67	10	e 39	10	41.67	-----
St. Martin.....	54.56	70.51	58.01	61.03	10	85	10	72.00	5	40	5	49.80	4.6
Toronto (f).....	53.52	61.85	54.84	56.74	28	74	26	68.42	5	41	5	48.35	6.9
Windsor.....	57.93	65.37	56.92	60.07	21	79	21	71.50	8	43	7	51.00	7.0
Wolfville.....	58.53	66.67	58.56	61.25	22	81	21	73.67	8	49	7	53.83	6.1
MAINE—													
Cornish, [Guptill].....	56.76	67.57	58.33	60.89	21	g 77	21	71.00	5	44	18	49.00	4.9
Cornish, [West].....	56.30	65.23	55.33	58.95	2	77	21	69.33	5	44	18	48.67	4.9
Gardiner.....	58.53	68.82	57.03	61.46	25	90	25	71.33	8	50	18	53.67	6.5
Monson.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.8
Perry.....	51.63	61.57	51.50	54.90	3	h 70	28	61.33	5	44	19	49.00	5.5
Portland.....	58.98	66.35	57.86	61.06	25	83	25	72.00	5	48	18	52.33	5.1
Steuben.....	56.87	63.97	55.50	58.78	27	74	28	66.33	5	d 47	6	50.33	6.3
NEW HAMPSHIRE—													
Concord.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.2
Francestown, [Bixby].....	58.40	67.97	58.37	61.58	28	81	28	70.33	5	49	18	51.33	5.0
Francestown, [Root].....	56.25	64.62	57.14	59.34	28	76	2	69.50	5	d 48	18	50.00	6.3
Manchester (i).....	60.50	71.82	61.52	64.61	21	e 6	21	75.67	5	50	6	e 55.33	5.7
North Barnstead.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.7
Shelburne.....	59.23	73.37	57.63	63.41	9	86	21	78.67	6	41	18	52.33	5.6
West Enfield.....	55.97	67.33	57.37	60.22	28	79	28	69.00	5	45	5	49.00	5.7
VERMONT—													
Brandon.....	56.81	66.67	57.82	60.43	29	80	28	c 69.00	7	48	7	52.00	5.8
Craftsbury.....	53.73	64.53	55.17	57.81	2	c 76	20	c 66.00	5	43	5	47.00	5.5
Norwich.....	58.97	69.64	57.90	62.17	29	82	28	72.33	8	47	5	53.33	-----
Rupert.....	57.67	72.20	67.13	65.67	28	90	28	76.67	3	j 50	8	54.67	7.1
St. Johnsbury.....	53.43	69.31	56.53	59.76	2	82	21	70.00	8	38	15	50.67	4.9
Shelburne.....	59.55	68.00	58.60	62.05	1	k 78	20	72.33	7	48	5	53.00	5.8
West Fairlee.....	55.30	67.26	58.20	60.25	28	79	21	69.33	6	44	6	50.67	-----
MASSACHUSETTS—													
Amherst.....	59.47	70.05	60.39	63.30	29	81	21	71.40	8	49	6	52.80	6.2
Cambridge.....	59.27	70.63	59.83	63.24	2	l 81	13	70.67	5	50	18	53.67	5.8
Florida.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.8
Lawrence.....	57.90	69.53	59.87	62.43	2	82	21	73.00	8	47	6	53.00	4.9
Mendon.....	61.50	68.83	60.20	63.51	1	m 79	20	73.33	5	n 52	18	53.00	5.5
Nantucket.....	60.34	67.07	58.20	61.87	26	g 76	26	69.83	8	50	7	56.17	5.3
New Bedford.....	60.22	68.10	58.95	62.42	25	o 81	26	71.00	5	p 53	5	55.67	6.9
Newburyport.....	59.47	67.37	60.95	62.63	27	83	27	73.40	8	q 52	18	54.50	8.6
Westfield.....	58.57	69.47	60.37	62.80	27	81	21	72.00	6	48	6	51.67	6.5
Weymouth.....	60.26	-----	61.03	60.64	27	72	27	70.00	6	51	5	51.50	8.8
Williamstown.....	59.30	66.45	58.63	61.46	20	78	21	69.80	8	43	7	49.83	6.5
Worcester.....	59.80	68.55	60.30	62.88	25	80	21	71.33	18	q 51	18	51.67	6.5
RHODE ISLAND—													
Providence (r).....	58.50	68.80	58.70	62.00	25	82	25	71.00	6	47	19	53.67	5.7
CONNECTICUT—													
Columbia.....	59.30	69.80	58.93	62.68	28	84	26	72.00	5	49	6	52.33	6.7
New London.....	59.13	68.10	59.43	62.22	26	82	26	70.67	5	s 52	6	56.00	5.7
Norwich.....	61.20	71.63	61.87	64.90	13	t 82	26	73.67	6	52	5	56.33	4.8
Pomfret.....	51.56	66.69	58.27	58.84	26	g 76	27	70.80	5	d 50	6	51.67	5.7

a Observations taken at 9 a. m. and 9 p. m.

b For the last 16 days of the month only.

c Same temperature on the 29th.

d Same temperature on the 7th.

e Same temperature on the 18th.

f Observations taken at 6 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 27th.

h Same temperature on the 13th and 28th.

i Incomplete.

j Same temperature on the 4th, 5th, 8th, and 15th.

k Same temperature on the 10th, 20th, 21st, and 28th.

l Same temperature on the 13th.

m Same temperature on the 20th and 27th.

n Same temperature on the 6th, 7th, 9th, and 18th.

o Same temperature on the 26th.

p Same temperature on the 6th and 16th.

q Same temperature on the 19th.

r Observations taken at 6 a. m., 1 p. m., and 10 p. m.

s Same temperature on the 16th.

t Same temperature on the 21st and 28th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	°		°		°		°		°	
Saybrook	59.10	65.80	59.62	61.51	21	82	26	72.00	11	52	6	a 55.33	5.7
Wallingford	58.68	69.68	59.48	62.61	26	b 82	26	70.83	11	49	11	52.50	5.5
NEW YORK—													
Angelica	60.70	72.33	60.41	64.48	28	92	28	78.67	11	50	18	46.33	6.3
Baldwinsville	57.03	66.07	59.07	60.72	28	77	28	70.67	5	c 47	5	51.00	6.2
Beverly (d)	64.79	69.20		66.99	27	85	28	77.00	10	55	10	55.00	6.0
Blackwell's Island	64.33	69.97	65.50	66.60	26	84	26	77.67	10	54	10	56.67	6.6
Cazenovia	56.57	63.31	56.47	58.78	1	75	28	69.67	6	43	5	47.67	6.9
Clinton	60.17	70.60	58.30	63.02	28	92	28	78.67	6	44	6	52.33	7.2
Eden	61.97	67.17	62.10	63.75	28	86	27	76.00	4	e 48	11	50.67	6.5
Flatbush	62.30	71.00	61.80	65.03	26	85	26	75.67	11	53	11	58.00	6.4
Lowville				58.17	29	80	28	68.50	5	40	5	47.00	
McGrawville	58.90	65.99	58.60	61.16	28	78	28	72.27	5	c 46	5	50.10	6.7
Morrisania	63.67	76.53	63.70	67.97	27	95	13	78.33	11	52	10	58.00	5.9
New York city	66.04	72.59	65.23	67.95	26	86	26	79.23	10	55	10	57.20	6.1
Nichols (f)	52.90	73.32	58.40	61.54	28	110	28	75.00	11	39	5	49.00	
Oswego	59.03	63.33	56.63	59.66	20	77	28	71.33	5	42	5	47.33	6.4
Ovid	60.47	66.80	59.47	62.25	27	85	27	75.67	5	47	5	50.67	6.2
Penn Yan (g)	54.43	69.27	60.77	61.49	28	85	28	73.00	5	43	4	53.33	7.2
Plainville	59.97	70.87	57.30	62.71	28	87	28	73.33	11	43	4	49.33	8.1
Rochester, [Harkness]	64.60	67.70	61.10	64.43		82				52			
Rochester, [Palmer]	59.80	68.30	61.50	63.20	28	86	28	77.33	5	48	5	51.00	7.4
Sag Harbor	62.11	73.15	61.04	65.43	29	84	25	73.00	5	51	6	58.33	6.0
Saratoga	59.33	70.57	64.13	64.68	21	h 82	21	75.00	11	43	11	55.33	4.4
Spencertown	58.77	66.17	59.63	61.52	21	b 77	21	72.33	5	45	6	48.33	5.4
Utica	59.83	67.14	62.30	63.09	28	82	28	75.33	11	45	5	51.33	6.9
Wampsville	61.87	70.80	60.47	64.38	27	84	28	75.33	5	c 48	4	52.67	6.7
Waterford	62.28	70.15	62.58	65.00	26	83	21	74.00	11	48	7	54.33	6.3
West Concord													5.8
NEW JERSEY—													
Bloomfield	62.03	73.45	62.60	66.03	27	91	26	74.33	5	50	10	57.83	5.2
Burlington	62.93	72.93	65.59	67.15	27	83	13	b 77.67	5	c 53	5	57.67	6.0
Freehold	60.57	73.20	63.18	65.65	27	85	27	76.50	6	46	9	55.50	
Lambertville	63.75	77.36	63.27	68.13	27	91.5	27	77.57	11	43.5	11	58.17	3.4
Newark (i)				65.48	27	85	27	74.50	6	50	10	55.75	
Sergeantsville	64.07	77.97	66.80	69.61	27	93	26	b 79.67	5	j 55	18	58.33	5.4
PENNSYLVANIA—													
Bedford	65.92	77.38	64.04	69.11	16	89	8	78.33	11	47	11	57.67	4.6
Berwick	64.33	73.47	64.37	67.39	28	87	26	h 78.33	7	52	7	57.33	4.9
Cannonsburg	60.70	70.40	65.33	65.48	16	b 82	16	75.00	6	48	4	55.33	5.9
Carlisle	64.31	70.07	64.61	67.33	28	85	27	78.33	11	52	5	57.83	4.9
Chromedale	65.55	74.40	65.61	68.52	28	84	28	77.67	5	51	5	57.00	6.3
Easton	60.57	72.21	63.24	65.34	27	86	27	74.33	6	51	11	56.33	6.4
Fleming	61.53	75.66	63.40	66.86	27	k 89	28	79.00	11	l 52	5	59.00	4.9
Gettysburg	64.55	77.67	67.03	69.75	28	110	28	80.33	5	53	5	58.33	5.2
Harrisburg, [Heisely]	66.77	76.63	71.34	71.58	28	91	28	84.00	11	57	9	63.33	5.3
Harrisburg, [Hickok]	62.68	73.38	67.63	67.90	28	89	28	80.33	11	54	5	59.00	6.0
Lewisburg	62.74	74.25	64.46	67.15	27	88	27	78.60	5	54	5	57.70	6.9
Meadville	61.97	72.27	60.23	64.82	27	k 92	28	77.67	5	45	4	52.00	6.1
Morrisville	62.70	72.83	63.17	66.23	26	b 86	13	72.67	5	m 54	9	m 56.67	4.9
Murrysville	62.90	75.47	62.43	66.93	28	87	16	77.00	5	48	11	55.67	5.2
Nazareth (d)	61.29	71.05	59.30	63.88	21	84	21	73.67	11	54	11	55.67	7.9
Norristown	61.80	72.30	64.90	66.33	27	87	27	76.00	5	c 53	5	57.30	5.8
North Whitehall (n)	58.10	71.97	66.23	65.43	27	86	27	73.67	6	44	11	56.00	7.0
Paradise				73.00									
Philadelphia	67.68	76.53	69.40	71.20	26	o 87	27	82.33	5	55	5	m 60.33	6.4

a Same temperature on the 17th.

b Same temperature on the 27th.

c Same temperature on the 6th.

d Imperfect.

e Same temperature on the 5th and 7th.

f Observations taken at 6 a. m., 1 p. m., and 9 p. m.

g Observations taken at sunrise, 2 p. m., and sunset.

h Same temperature on the 25th and 26th.

i Observations taken at 7 a. m. and 6 p. m.

j Same temperature on the 11th, 16th, and 30th.

k Same temperature on the 28th.

l Same temperature on the 8th.

m Same temperature on the 10th.

n Observations taken at sunrise, noon, and sunset.

o Same temperature on the 27th and 28th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 a. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	□	°	°	°	°	°	°	°	□			
Pittsburg, [Wilson] .....	62.07	71.23	63.43	65.58	28	90	16	78.67	6	43	4	54.33	---
Pocopson .....	64.40	76.87	66.17	69.15	28	90	28	80.67	5	a 55	6	59.33	6.2
Shamokin .....	54.60	72.80	62.83	63.41	26	b 92	28	74.00	6	38	6	53.00	6.1
Tarentum .....	62.70	77.27	62.77	67.58	28	94	16	78.00	5	a 48	4	c 55.00	5.0
West Haverford .....	61.57	76.33	-----	68.95	27	d 86	28	e 77.50	6	52	10	59.00	5.8
DELAWARE—													
Newark .....	66.14	75.31	68.27	69.91	28	87	27	79.67	5	a 56	5	59.33	5.9
MARYLAND—													
Annapolis .....	67.73	77.20	68.80	71.24	28	90	28	80.16	5	55	5	58.33	4.1
Bladensburg .....	68.04	81.23	65.77	71.68	28	96	13	79.00	5	50	5	56.67	5.3
Frederick .....	69.88	77.07	67.52	71.49	28	87	28	80.83	5	f 56	5	60.00	4.7
Ridge (g) .....	78.21	82.62	74.23	78.35	27	95	28	88.67	5	57	5	57.33	3.5
Sykesville .....	66.53	74.97	66.63	69.38	28	85	16	77.67	5	55	5	61.00	4.3
DISTRICT OF COLUMBIA—													
Washington, [Smith. Inst.] ..	67.35	77.97	69.37	71.56	28	91	28	80.50	5	54	5	59.30	4.3
VIRGINIA—													
Alexandria .....	70.33	80.57	71.23	74.04	28	90	28	82.00	5	55	5	60.00	4.1
Berryville .....	65.30	76.40	67.90	69.87	28	86	16	77.67	5	57	5	60.00	5.1
Crack Whip .....	63.06	73.60	60.26	65.64	16	86	16	75.33	5	46	5	51.67	5.3
Crichton's Store, (h) .....	72.14	86.75	81.19	80.03	27	99	27	88.67	6	59	5	63.67	3.9
Kanawha .....	63.92	79.63	64.60	69.38	27	93	27	78.67	6	52	5	59.67	4.9
Lewisburg .....	61.50	75.33	60.47	65.77	27	b 84	16	74.00	6	44	6	54.00	4.7
Meadow Dale .....	55.03	71.00	63.57	63.20	9	i 80	9	71.67	6	j 46	5	52.67	---
Montross .....	68.93	81.15	69.58	73.22	17	91	16	80.67	5	54	4	32.67	4.2
Mossy Creek .....	61.93	80.10	63.66	68.56	25	k 90	17	77.33	6	45	5	52.67	4.5
Poplar Grove .....	61.43	80.30	64.22	68.65	8	l 92	15	78.33	23	50	23	57.00	4.8
Portsmouth .....	71.83	85.86	70.53	76.07	16	m 95	28	85.00	5	52	6	59.67	2.6
Rougemon .....	71.20	81.75	71.63	74.86	17	91	27	85.00	5	56	5	61.33	4.5
Ruthven (n) .....	69.18	83.08	68.21	73.49	28	96	28	85.00	5	52	8	61.33	1.5
Sistersville (n) .....	64.52	78.50	64.55	69.19	27	94	8	79.17	5	51	4	57.83	5.9
Smithfield .....	69.70	82.20	72.90	74.93	14	91	28	81.50	23	60	23	o 67.20	4.4
Winchester .....	68.13	80.47	67.47	72.02	28	92	16	80.00	5	55	5	61.00	3.6
Wirt Court-House .....	63.21	78.03	66.52	69.23	27	93	8	81.33	5	p 50	4	55.67	5.0
NORTH CAROLINA—													
Chapel Hill .....	70.57	87.07	72.90	76.85	9	q 97	14	86.00	5	r 60	2	72.33	4.4
Gaston .....	68.93	84.53	74.90	76.12	15	96	17	b 84.00	6	52	5	58.00	---
Murfreesborough .....	71.59	83.83	73.23	76.22	8	s 94	14	86.67	6	55	5	61.00	2.8
Warrenton .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.7
SOUTH CAROLINA—													
Aiken .....	73.70	83.17	75.64	77.50	9	l 92	9	86.00	3	66	5	72.00	---
All Saints .....	74.60	80.24	76.63	77.16	11	87	15	83.00	6	66	8	69.33	4.2
Camden .....	73.30	84.80	73.63	77.24	9	95	9	85.67	6	p 64	23	70.00	5.4
Charleston, [Johnson] .....	75.73	84.67	77.73	79.38	14	t 92	14	u 84.33	6	70	6	p 71.67	---
Charleston, [Dawson] .....	75.70	84.66	77.74	79.37	?	92	-----	-----	?	70	-----	-----	---
GEORGIA—													
Athens .....	70.99	83.52	73.82	76.11	9	92	14	83.50	6	63	6	68.10	3.2
Factory Mills .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3.7
Savannah .....	74.50	86.40	77.00	79.30	9	97	9	86.33	7	68	6	72.47	4.8
Sparta .....	68.07	87.53	74.97	76.86	9	v 95	9	83.00	3	w 59	3	66.00	4.2
The Rock .....	68.23	84.00	76.50	76.24	9	93	9	84.00	3	59	6	68.33	3.6
Whitemarsh Island .....	75.61	84.18	76.55	78.78	11	92	11	84.00	6	p 70	6	71.00	4.5
Zebulon .....	74.38	83.75	77.95	78.69	9	91	14	88.00	3	63	5	70.83	4.2

a Same temperature on the 11th.

b Same temperature on the 23d.

c Same temperature on the 5th.

d Same temperature on the 29th.

e Same temperature on the 30th.

f Same temperature on the 9th.

g Observations taken at 7 a. m., 1 p. m., and 9 p. m.

h Observations taken at 6½ a. m., noon, and 6½ p. m.

i Same temperature on the 26th.

j Same temperature on the 20th, 23d, and 24th.

k Same temperature on the 14th.

l Same temperature on the 15th.

m Same temperature on the 17th.

n Imperfect.

o Same temperature on the 24th.

p Same temperature on the 23d.

q Same temperature on the 27th.

r Same temperature on the 6th and 23d.

s Same temperature on the 14th, 15th, and 16th.

t Same temperature on the 16th.

u Same temperature on the 15th and 16th.

v Same temperature on the 10th and 15th.

w Same temperature on the 4th.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—	°	°	°	°		°		°		°			
Alligator .....	75.13	85.13	76.83	79.03	10	a 92	17	88.67	2	60	1	69.67	5.6
Atsena (b) .....	77.07	80.53	78.07	78.56	30	85		?	18	c 74		?	5.4
Belair .....	72.91	84.45	77.01	78.12	11	93	28	84.00	2	68	1	71.67	3.5
Gainesville (d) .....	72.60	81.90	75.80	76.77	14	e 89	11	82.00	7	f 69	20	g 70.67	4.1
Jacksonville .....	77.93	84.65	78.22	80.27	11	e 91	11	75.33	1	73	21	75.00	5.2
St Augustine .....	78.20	80.70	76.70	78.53	11	90	11	84.33	20	g 73	20	73.67	4.3
Salt Ponds .....	79.70	84.47		82.08	13	e 87	13	83.50	11	f 78	6	80.50	4.6
Warrington .....	78.43	83.00	80.90	80.78	29	95	29	91.00	19	70	23	73.67	1.9
ALABAMA—													
Ashville (j) .....				70.93			16	76.50			2	63.50	
Auburn .....	72.80	84.75	76.63	78.06	11	k 92	11	84.00	19	64	6	69.33	3.4
Carlowville .....	72.30	90.83	73.80	78.98	26	196	11	86.67	18	60	18	m 73.00	2.6
Greene Springs .....	70.46	85.19	72.87	76.17	11	n 92	15	83.00	2	o 60	1	70.00	2.7
Greensborough .....	70.72	83.72	72.24	75.56	13	91	13	85.00	19	59		?	3.5
MISSISSIPPI—													
Columbus .....	68.65	84.15	72.34	75.05	13	93	13	82.40	19	60	18	67.87	3.7
LOUISIANA—													
Black River .....	72.73	85.93	75.93	78.20	12	93	8	84.67	19	64	24	72.00	3.9
Trinity .....	74.90	88.07	77.77	80.25	11	q 96	15	86.33	1	67	3	73.00	3.4
TEXAS—													
Austin .....	72.20	88.30	77.57	79.36	26	r 95	28	85.33	1	s 65	1	71.00	3.8
New Braunfels .....	79.14	98.41	80.94	86.16	12	t 104	27	93.33	2	f 70	11	78.67	3.2
Union Hill .....													3.8
Washington .....	75.43	93.59	73.90	80.97	27	104	28	90.67	2	62	1	67.67	3.3
TENNESSEE—													
Glenwood .....	65.51	77.24	68.90	70.55	13	87	8	80.67	6	55	18	61.67	4.8
Memphis .....	72.47	84.10	75.03	77.20	13	94	13	85.67	2	62	2	67.67	
KENTUCKY—													
Danville .....	69.30	81.37	68.03	72.90	13	89	15	80.00	4	57	11	u 64.00	3.4
Paris .....	64.30	70.44	65.03	66.59	15	v 86	15	78.67	5	54	4	60.33	4.4
Springdale (w) .....	58.72	80.42	69.92	69.69	8	93	15	78.67	2	x 46	4	56.00	5.1
OHIO—													
Cincinnati, [Harper] .....	66.33	78.87	70.07	71.76	8	y 91	11	83.00	4	z 56	4	58.00	4.2
Cincinnati, [Hurt] .....	67.20	75.16	70.60	70.99	8	91	8	83.33	6	53	5	60.00	3.4
Cleveland .....	61.18	70.52	63.10	64.93	8	88	16	77.80	4	48	11	51.33	6.1
College Hill .....	67.58	77.90	64.17	69.88	15	92	15	81.50	4	52	4	55.00	3.7
Collingwood .....	62.60	70.80	65.03	66.14	27	88	26	80.00	2	48	4	57.67	
Edinburg .....	63.67	72.07	61.00	65.58	16	184	27	78.00	5	x 50	5	z 54.67	6.0
Gallipolis .....	62.93	76.03	65.30	68.09	27	90	8	79.00	23	46	23	54.00	
Hillsborough .....	61.15	72.63	64.33	66.04	8	85	15	75.67	5	50	4	53.20	4.0
Hiram .....	61.29	71.07	61.50	64.62	8	186	27	78.33	4	aa 50	27	78.33	6.8
Jefferson .....	63.77	70.00	64.00	65.92	7	bb 80	8	cc 75.33	11	48	11	54.67	10.0
Madison, [Cunningham] .....	63.53	70.90	58.63	64.35	8	88	27	72.67	4	aa 46	4	58.00	5.9
Medina .....	64.12	71.37	61.90	65.80	27	87	26	78.67	5	44	4	50.67	5.9
New Lisbon .....	70.16	84.67	70.02	74.95		95	16	86.67		53	5	56.34	3.6
Oberlin .....	61.70	75.80	61.60	66.37	8	93	27	79.67	4	47	5	54.67	3.9
Perrysburg (dd) .....	67.40	77.67	65.57	70.31	8	89	9	180.33	4	51	22	60.33	
Savannah .....	66.13	78.00	63.30	69.14	27	97	27	85.00	5	x 47	5	55.67	6.0
Sidney .....	62.34	77.24	63.86	67.81	26	94	27	81.33	2	48	7	42.00	6.4
Urbana .....	63.13	77.60	63.30	68.01	8	91	8	82.00	5	50	11	aa 57.33	4.2

a Same temperature on the 14th and 17th.

b For the last half of the month only.

c Same temperature on the 19th, 21st, 23d, and 24th.

d Observations taken at 5 a. m., 2 p. m., and 9 p. m.

e Same temperature on the 15th.

f Same temperature on the 20th.

g Same temperature on the 21st.

h Same temperature on the 15th and 16th.

i Same temperature on the 11th.

j Hours of observation not reported.

k Same temperature on the 13th.

l Same temperature on the 27th.

m Same temperature on the 19th.

n Same temperature on the 12th and 13th.

o Same temperature on the 4th.

p Same temperature on the 6th and 18th.

q Same temperature on the 12th.

r Same temperature on the 27th and 28th.

s Same temperature on the 3d.

t Same temperature on the 23th, 27th, 28th, and 30th.

u Same temperature on the 18th.

v Same temperature on the 36th.

w Observations taken at 5 a. m., 2 p. m., and 8 p. m.

x Same temperature on the 6th.

y Same temperature on the 16th.

z Same temperature on the 6th and 23d.

aa Same temperature on the 5th.

bb Same temperature on the 8th, 10th, and 17th.

cc Same temperature on the 10th and 17th.

dd Observations taken at 7 a. m., 1 p. m., and 9 p. m.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°		°		°		°		°	
Welchfield .....	61.50	72.23	61.86	65.20	16	90	27	81.67	5	48	22	53.33	4.2
Windham .....	59.23	69.20	61.30	63.24	27	86	27	76.33	5	46	4	53.87	---
MICHIGAN—													
Ann Arbor .....	65.20	80.50	61.90	69.20	21	95	22	83.33	15	48	14	52.00	3.9
Battle Creek .....	62.10	74.40	62.13	66.21	27	90	27	78.00	4	48	2	55.33	4.7
Cooper .....	59.73	71.80	58.00	63.18	26	92	26	83.33	2	40	2	50.00	3.5
Copper Falls Mines .....	51.28	55.74	49.72	52.25	25	83	25	71.40	3	34	3	37.20	5.3
Grand Rapids, [Streng] .....	61.56	75.70	62.13	66.46	27	95	27	83.00	4	44	4	52.67	6.4
Grand Rapids, [Currier] .....	58.49	72.00	59.70	63.40	27	92	27	78.67	1	b 44	2	50.67	4.9
Port Huron .....	61.47	69.17	58.93	63.19	27	92	27	80.00	4	c 46	4	49.67	5.4
INDIANA—													
Evansville .....	68.40	77.03	68.87	71.43	8	87	15	79.00	4	56	4	56.33	4.6
Logansport (d) .....	57.00	74.00	66.00	66.00	!	89	---	---	?	41	---	---	---
Michigan City .....	63.70	71.47	58.99	64.72	7	88	7	e 78.00	5	39	5	48.33	4.8
New Albany .....	65.44	75.35	64.08	68.29	14	f 84	15	78.33	18	g 55	5	60.00	4.5
New Harmony .....	68.50	78.40	67.50	71.47	8	91	15	81.67	4	56	4	56.33	4.3
Richmond .....	63.15	71.75	63.60	66.17	8	86	8	80.20	4	51	4	53.20	4.7
ILLINOIS—													
Athens .....	62.27	78.16	62.73	67.72	25	97	25	80.00	4	44	4	54.67	4.1
Augusta .....	62.83	75.93	66.43	68.40	26	88	7	e 79.33	17	h 52	17	56.00	2.7
Batavia (i) .....	61.53	74.13	62.99	68.14	26	90	27	81.00	1	46	1	51.80	---
Brighton .....	67.79	83.97	77.79	76.52	23	92	3	85.67	18	50	18	61.00	3.0
Chicago .....	62.33	69.38	59.57	63.76	7	j 86	27	77.33	5	46	5	49.33	4.1
Edgington .....	59.17	77.07	64.50	66.91	27	91	27	77.67	2	c 46	18	56.00	4.3
Fremont Centre .....	65.67	76.93	60.23	67.61	26	89	26	81.67	3	49	1	53.00	4.8
Manchester (k) .....	62.37	76.53	64.10	67.67	15	90	15	78.67	4	c 50	18	53.67	3.9
Marengo .....	66.67	75.33	61.20	67.73	27	96	27	84.00	1	46	1	49.33	5.1
Ottawa .....	61.63	74.26	61.00	66.63	27	87	7	78.67	2	44	1	53.67	4.7
Pekin .....	63.83	78.13	63.13	68.36	14	l 90	15	79.00	2	49	2	49.00	4.3
Peoria .....	64.66	79.42	68.65	70.91	8	m 90	27	81.50	2	53	17	59.00	4.0
Riley .....	60.94	69.87	58.72	63.18	27	84	27	76.33	1	44	1	48.33	3.8
Upper Alton .....	67.10	76.93	65.83	69.95	28	85	15	80.00	4	c 50	4	53.67	3.1
Warsaw .....	66.47	77.77	66.00	70.08	7	n 90	7	83.00	1	o 53	1	56.33	4.8
West Salem .....	65.73	81.57	66.80	71.37	8	94	15	81.33	1	p 56	4	57.33	4.3
West Urbana .....	66.83	74.87	65.80	69.17	26	90	15	e 80.00	1	50	1	55.33	4.2
Winnebago .....													4.5
MISSOURI—													
Cape Girardeau (q) .....	61.96	78.92	69.73	70.74	13	90	13	80.25	2	48	18	58.62	6.5
Palmyra (r) .....	56.06	77.35	67.89	68.00	14	90	26	80.00	5	41	17	56.25	7.1
St. Joseph (s) .....	63.40	80.30	68.87	71.20	8	94	15	83.87	6	48	18	53.50	6.2
St. Louis .....	68.80	80.20	68.90	72.63	15	92	15	82.50	4	52	4	54.17	3.8
WISCONSIN—													
Appleton .....	58.74	70.67	59.87	63.09	27	89	27	79.33	2	46	1	47.67	5.3
Bay City .....	50.53	57.93	49.13	52.53	26	92	6	74.00	4	36	16	42.00	4.1
Beloit .....	60.63	73.60	61.46	65.25	26	90	7	e 77.33	1	b 46	1	50.00	3.3
Janesville .....	61.10	73.97	62.10	65.72	26	90	26	78.00	1	45	1	50.00	5.2
Kenosha .....	60.77	66.06	57.17	61.33	8	87	8	75.83	1	46	5	51.33	3.7
Madison, [Sterling] .....	60.59	70.57	62.50	64.55	27	84	27	82.67	1	45	1	46.33	4.3
Manitowoc .....	57.70	65.23	55.50	59.48	6	j 80	28	70.33	1	u 47	1	48.33	5.9
Milwaukee, [Pomeroy] .....	58.53	66.23	55.63	60.13	■	86	8	73.33	3	v 44	21	48.00	6.7
Milwaukee, [Winkler] .....	60.23	66.83	55.97	61.01	■	85	8	74.00	1	44	2	50.33	4.3
New London .....	54.00	69.67	59.40	61.02	7	l 92	27	79.33	2	42	2	w 46.67	4.5
Platteville .....	62.47	77.33	65.57	68.46	---	94	---	---	---	50	---	---	4.2

a Same temperature on the 4th.

b Same temperature on the 2d.

c Same temperature on the 5th.

d Observations taken at sunrise, noon, and sunset.

e Same temperature on the 26th.

f Same temperature on the 23d and 27th.

g Same temperature on the 20th.

h Same temperature on the 18th.

i Observations taken at 6 a. m., 9 a. m., 12 m., 4 p. m., and 9 p. m. Mean

at 9 a. m., 72.20. Mean at 4 p. m., 69.83.

j Same temperature on the 8th.

k Observations taken at 7 a. m., 1 p. m., and 9 p. m.

l Same temperature on the 15th and 23d.

m Same temperature on the 15th and 27th.

n Same temperature on the 14th, 26th, and 27th.

o Same temperature on the 17th.

p Same temperature on the 2d, 4th, 5th, and 20th.

q Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 72.37.

r Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 70.69.

s Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 72.24.

t Same temperature on the 27th.

u Same temperature on the 3d and 4th.

v Same temperature on the 21st.

w Same temperature on the 3d.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
	°	°	°	°		°		°		°		°	
IOWA—													
Bellevue .....	65.10	76.37	63.87	68.45	26	88	26	79.33	1	46	1	53.67	---
Border Plains .....	64.57	74.40	68.00	68.99	25	97	13	81.00	16	47	16	49.67	5.3
Fairfield .....	67.57	77.30	65.23	70.03	14	91	7	83.33	1	a 51	17	52.33	4.3
Fort Madison (b) .....	64.70	77.26	69.50	70.49	27	91	27	82.67	17	c 51	18	56.33	3.4
Franklin .....	61.57	74.70	61.10	65.79	7	d 90	7	78.33	2	48	17	52.67	4.2
Iowa City .....	64.11	74.60	65.73	68.15	14	e 86	27	80.00	5	50	4	56.00	4.1
Muscatine .....	57.00	76.10	62.97	65.36	26	89	15	78.33	5	38	5	51.67	3.1
Pleasant Plain .....	66.50	79.03	62.30	69.29	15	94	7	83.67	1	46	17	52.00	2.8
MINNESOTA—													
Hazlewood .....	61.83	70.27	60.73	64.28	26	88	26	72.67	17	42	17	46.67	4.1
Princeton .....	60.03	73.40	60.83	64.75	27	92	27	83.33	5	36	16	f 50.00	3.5
NEBRASKA—													
Bellevue (g) .....	66.75	77.92	67.00	70.56	14	87	14	80.33	17	50	17	52.83	3.2
Omaha .....													3.1
KANSAS—													
Council City .....	68.43	83.70	64.03	72.05	27	101	27	84.00	4	45	1	53.33	2.6
UTAH—													
Great Salt Lake City (h) .....	62.10	78.33	67.63	65.48	19	i 91	19	78.00	8	48	8	54.75	7.0
OREGON—													
Salem (j) .....				64.49									---
CALIFORNIA—													
Sacramento .....	68.60	77.53	69.67	71.93	17	98	17	87.00	7	k 61	2	65.00	1.5
San Francisco .....	58.47	68.43	56.47	61.12	16	98	16	79.00	22	53	8	l 56.33	3.7
MEXICO—													
Mirador (l) .....	77.74	86.69	76.75	80.39				86.90				72.27	---
Vera Cruz (m) .....	77.12		81.15	78.13	5	89			20	72			---
WEST INDIES—													
St. George's, Bermuda .....				75.40	23	83			7	67			---
CENTRAL AMERICA—													
Guatemala (n) .....				67.14		83				55			---
SOUTH AMERICA—													
Bogota, New Granada (o) .....	62.40	62.80	55.00	60.07	16	68	30	63.20	1	50	20	56.66	---
Cathar's Sophia, Surinam (p) .....	74.03	84.47	81.43	79.98	11	q 87	14	82.00	8	71	11	77.00	4.9
AZORES—													
Horta, Fayal .....	65.43	67.97	61.40	64.93	29	73	29	68.67	3	52	2	61.67	6.0

a Same temperature on the 17th.

b Observations taken at 6 a. m., noon, and 7 p. m.

c Same temperature on the 18th.

d Same temperature on the 14th and 27th.

e Same temperature on the 27th.

f Same temperature on the 19th.

g For the last 29 days of the month only.

h Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at

9 a. m., 71.53.

i Same temperature on the 20th.

j Hours of observation not reported.

k Same temperature on the 30th.

l Observations taken at 7 a. m., 2 p. m., and 8 p. m.

m Observations taken from 5 to 6 a. m. and from 9 to 10 p. m.

n Regi ter thermometer.

o Observations taken at 10 a. m., 4 p. m., and 10 p. m.

p Observations taken at 6 a. m., 2 p. m., and 6 p. m.

q Same temperature on the 19th, 23d, and 25th.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) .....	73.67	-----	71.45	72.56	-----	94	13	82.00	-----	52	2	51.50	-----
Montreal .....	71.04	78.83	70.46	73.44	14	92	13	84.33	1	60	1	62.67	5.8
Red River Settlement .....	67.13	79.76	70.19	72.36	6	b 91	6	b 83.00	27	51	?	?	?
St. John's .....	57.39	66.39	57.23	60.34	7	c 78	28	73.33	1	44	1	47.33	-----
St. Martin .....	65.65	82.49	66.43	71.52	14	98	15	81.90	5	45	1	61.70	4.1
Stanbridge .....	69.48	78.71	68.03	72.07	13	d 90	13	81.67	1	e 58	1	60.67	4.4
Toronto (f) .....	63.71	73.76	64.69	67.39	13	85	13	76.33	1	52	1	54.65	4.6
Wolfville .....	66.49	75.83	65.66	69.33	27	88	21	79.83	3	53	1	58.73	5.8
MAINE—													
Cornish, [Guptill] .....	65.51	76.09	67.83	69.81	27	88	27	81.00	1	53	1	54.00	6.3
Cornish, [West] .....	65.67	75.67	64.74	68.69	13	87	27	79.33	1	50	1	53.00	5.4
Gardiner .....	67.48	80.65	66.00	71.38	10	g 90	11	78.17	2	56	2	63.00	6.9
Monson .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.4
Perry .....	57.52	68.55	59.58	61.88	27	h 82	27	71.00	1	i 50	23	53.67	5.5
Portland .....	64.97	72.81	64.43	67.40	7	84	12	76.26	1	55	1	57.33	4.9
Steuben .....	61.83	71.79	61.32	64.98	11	85	27	72.00	1	53	23	56.33	7.0
NEW HAMPSHIRE—													
Concord .....	64.29	80.07	67.13	70.50	15	92	15	79.67	2	49	1	55.67	5.2
Francetown, [Root] .....	63.75	75.21	66.45	68.47	19	87	19	77.30	1	50	1	51.67	6.3
Manchester (j) .....	67.84	84.00	71.12	74.32	12	k 98	12	84.00	1	54	1	56.67	5.3
North Barnstead .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.5
Shelburne .....	66.90	84.78	67.74	73.14	12	m 98	15	81.33	1	54	1	57.67	5.7
West Enfield .....	66.55	79.55	66.84	70.98	19	92	19	80.33	1	51	1	56.00	4.8
VERMONT—													
Brandon .....	65.95	75.92	66.39	69.42	15	88	15	80.33	1	i 54	1	51.33	4.8
Craftsbury .....	62.81	74.39	64.58	67.26	15	87	14	n 76.00	3	52	1	56.00	4.6
Norwich .....	65.35	82.52	67.63	71.83	19	96	15	80.67	1	i 53	1	56.33	-----
Rupert .....	68.78	83.84	75.23	75.95	14	100	12	88.00	2	48	2	58.00	6.0
St. Johnsbury .....	61.81	79.68	64.03	68.52	15	92	27	77.33	1	o 50	2	54.00	3.6
Shelburn .....	68.43	77.33	67.16	70.97	15	91	15	82.33	1	53	1	54.67	4.4
West Fairlee .....	63.99	81.19	67.19	70.79	14	k 90	15	79.00	2	52	1	55.00	-----
MASSACHUSETTS—													
Amherst .....	65.37	78.86	67.65	70.63	12	90	19	78.40	1	53	3	54.90	5.7
Boston .....	65.82	77.37	69.64	70.94	26	g 89.5	-----	-----	2	50	-----	-----	-----
Cambridge .....	66.77	79.19	68.45	71.47	19	92	19	79.67	1	52	1	54.00	5.7
Florida .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.9
Lawrence .....	65.32	79.45	68.16	70.98	15	p 91	15	80.00	1	51	1	53.33	4.7
Mendon .....	68.61	78.74	68.42	71.92	11	q 89	12	80.00	1	r 53	1	53.67	5.5
Nantucket .....	66.52	74.53	64.94	68.66	12	84	26	74.00	2	53	1	i 55.83	6.0
New Bedford .....	66.70	75.80	66.20	69.57	12	86	12	75.00	1	53	1	55.67	7.6
Newburyport (s) .....	67.99	76.97	69.18	71.38	26	91	28	81.60	1	56	1	56.60	6.5
Princeton .....	64.05	73.23	65.20	67.49	20	86	19	77.00	1	47	1	50.00	6.2
Richmond .....	63.48	81.34	71.06	71.96	12	93	17	t 79.00	1	47	1	53.67	5.5
Westfield .....	64.06	76.84	67.13	69.34	19	90	19	78.00	3	53	3	54.33	6.1
Weymouth .....	67.22	-----	68.15	67.68	19	u 75	28	75.00	1	55	1	56.00	4.9
Williamstown .....	67.61	74.95	66.61	69.72	19	87	19	81.33	1	52	1	54.50	5.0
Worcester .....	66.41	77.22	69.40	71.01	14	89	12	d 79.00	4	51	3	57.00	6.0
RHODE ISLAND—													
Providence (v) .....	66.10	76.60	67.00	69.90	12	88	14	g 77.33	2	49	1	53.67	5.5
CONNECTICUT—													
Columbia .....	65.58	76.97	66.23	69.59	12	94	12	80.67	1	i 51	1	52.67	6.7
New London .....	66.19	76.13	65.58	69.30	15	84	16	74.67	1	53	1	55.33	6.2
Norwich .....	68.26	80.71	69.81	72.93	12	92	12	80.33	2	52	1	56.67	5.0

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 8th.

c Same temperature on the 20th, 25th, 27th, and 28th.

d Same temperature on the 14th.

e Same temperature on the 4th.

f Observations taken at 6 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 27th.

h Same temperature on the 30th.

i Same temperature on the 2d.

j Observations interrupted from the 20th to the 25th.

k Same temperature on the 15th.

l Same temperature on the 19th and 28th.

m Same temperature on the 28th.

n Same temperature on the 15th and 27th.

o Same temperature on the 10th.

p Same temperature on the 19th.

q Same temperature on the 12th, 13th, 14th, 18th, and 20th.

r Same temperature on the 3d.

s Imperfect.

t Same temperature on the 24th and 25th.

u Same temperature on the 27th and 28th.

v Observations taken at 6 a. m., 1 p. m., and 10 p. m.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Pomfret	64.94	74.22	65.71	68.29	12	84	12	76.90	1	50	3	50.00	6.1
Saybrook	66.00	74.03	65.52	68.52	18	84	18	74.67	1	a 54	2	55.33	5.9
Wallingford	65.34	77.20	66.70	69.75	12	90	11	76.67	1	52	3	53.67	4.9
NEW YORK —													
Angelica	64.90	81.03	66.55	70.83	15	94	19	79.33	4	50	1	54.67	3.0
Balltownville	65.42	75.87	68.97	70.09	19	87	27	80.00	2	b 55	1	57.67	4.9
Beverly (c)	68.42	81.83	70.00	73.42	13	94	18	82.67	3	54	3	54.00	5.5
Blackwell's Island	70.29	76.19	72.71	73.06	12	85	20	80.67	3	53	1	55.67	6.2
Cazenovia	66.06	74.86	65.13	68.68	14	d 87	18	79.00	2	50	1	53.00	4.8
Clinton	69.68	83.90	68.84	74.14	13	e 96	17	84.00	2	49	1	57.33	4.8
Eden	69.32	78.16	69.94	72.47	14	94	14	80.67	1	f 59	2	61.33	5.1
Flatbush	68.80	77.10	67.80	71.23	12	87	20	79.09	2	52	2	54.33	6.0
Lowville				66.32	14	90	15	73.50	30	50	15	57.00	---
Mcrawville	68.25	76.05	65.72	70.01	19	86	14	78.83	1	54	1	56.00	4.9
Morrisania	70.45	86.57	70.30	75.77	13	102	13	85.00	2	b 54	3	56.33	5.6
New York City	71.22	78.20	72.40	73.94	13	89	13	82.93	3	53	2	56.03	5.2
Nichols (g)	62.29	83.65	63.65	69.86	14	96	27	77.67	9	51	3	57.33	---
Oswego	70.09	76.00	68.00	71.33	19	93	19	83.33	3	54	1	58.00	4.0
Ovid	69.84	77.32	69.68	72.28	19	89	14	d 81.00	1	a 55	2	56.00	3.9
Penn Yan (h)	65.07	81.63	71.30	72.67	19	92	19	79.33	4	49	1	57.33	5.0
Rochester, [Harkness]	73.70	78.20	71.60	74.50		91				56			---
Rochester, [Palmer]	68.13	79.94	69.87	72.65	14	95	27	83.00	3	56	2	59.67	6.2
Sag Harbor	68.73	78.80	67.57	71.70	12	90	12	77.67	2	52	2	56.00	5.5
Saratoga	66.74	76.97	72.58	72.30	14	87	14	81.00	1	i 58	1	b 58.67	3.0
Spencertown	68.37	75.58	69.07	71.01	18	j 86	19	80.67	2	53	3	54.67	3.2
Townsendville	68.71	76.87	69.42	71.67	19	90	18	k 80.67	8	56	2	59.00	4.9
Wampsville	70.45	81.19	70.68	74.11	14	94	14	84.00	1	58	1	59.33	4.2
Waterford	69.93	80.47	71.79	74.06	19	93	19	85.50	1	57	1	59.00	4.8
Wellsville	67.08	80.27	66.23	71.19	19	90	19	81.67	30	54	29	60.00	5.5
West Concord													4.7
NEW JERSEY—													
Bloomfield	68.69	80.39	68.24	72.44	11	90	28	79.83	3	53	2	55.50	5.1
Burlington	68.84	80.26	69.42	72.84	13	m 90	27	n 79.67	3	54	2	56.67	5.0
Freehold	69.35	78.57	68.32	72.08	21	90	28	78.33	2	50	2	50.00	---
Lambertville	69.24	83.15	69.11	73.83	13	93	13	82.17	3	48.3	2	54.37	3.8
Newark (o)				71.76	13	87	27	79.75	3	51	2	54.25	---
Sergeantsville	68.97	84.71	70.90	74.86	26	97	12	82.33	2	55	2	57.07	5.4
PENNSYLVANIA—													
Belmont	67.98	80.83	68.04	72.28	9	92	17	79.33	2	56	2	57.83	5.1
Berwick	68.94	79.84	70.29	73.02	13	92	13	80.67	2	54	2	57.00	3.7
Cannonsburg	64.87	75.29	69.13	69.76	17	86	17	78.67	2	i 55	1	58.33	5.5
Chromola	71.11	80.19	70.08	73.79	20	89	20	80.90	3	55	2	57.20	5.7
Easton	66.61	79.10	69.00	71.57	19	89	19	80.33	3	52	2	54.33	6.0
Fleming	69.32	82.13	69.42	73.62	13	92	13	83.00	3	59	2	61.00	4.3
Gettysburg	68.29	81.03	71.26	73.53	13	91	13	81.00	2	b 55	2	55.33	5.5
Harrisburg, [Heisely]	72.03	81.72	77.59	77.11	13	91	13	84.00	2	58	2	59.33	4.8
Harrisburg, [Hickok]	68.94	78.94	71.81	72.23	13	89	26	81.00	2	55	2	56.33	5.9
Lewisburg	67.28	79.65	69.48	72.14	13	90	27	80.33	2	54	2	56.50	6.4
Meadville	66.71	82.19	67.16	72.02	10	94	19	82.33	4	52	1	58.33	---
Morrisville	67.23	78.48	68.68	71.46	12	p 89	12	p 78.67	3	52	2	53.67	4.6
Murrysville	67.00	80.32	67.90	69.41	10	j 89	10	79.67	1	54	2	56.67	5.1
Nazareth (e)	69.78	86.33	68.70	74.94	13	95	19	82.00	3	61	---	---	5.3
Norristown	68.50	77.70	68.90	71.70	13	87	13	78.70	2	52	2	54.33	5.7
North Whitehall (g)	66.03	79.58	73.23	72.95	13	90	16	d 79.67	2	b 53	3	56.67	6.2
Paradise				79.00									---

a Same temperature on the 2d and 3d.

h Same temperature on the 3d.

c Improbable.

d Same temperature on the 19th.

e Same temperature on the 15th.

f Same temperature on the 2d, 3d, and 4th.

g Observations taken at 6 a. m., 1 p. m., and 9 p. m.

h Observations taken at sunrise, 2 p. m., and sunset.

i Same temperature on the 3d and 4th.

j Same temperature on the 19th and 25th.

k Same temperature on the 14th.

l Same temperature on the 2d.

m Same temperature on the 18th.

n Same temperature on the 20th.

o Observations taken at 7 a. m. and 6 p. m.

p Same temperature on the 13th.

q Observations taken at sunrise, noon, and sunset.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°		°		°		°			
Philadelphia.....	73.74	82.11	75.94	77.26	20	90	19	84.33	3	56	3	59.67	6.3
Pocopson.....	70.42	82.43	71.26	74.70	19	a 92	20	82.67	2	54	2	56.33	6.1
Shamokin.....	60.52	79.55	69.00	69.69	13	96	19	79.33	4	48	2	53.67	5.5
Tarentum.....	67.42	83.35	68.06	72.94	15	b 94	27	80.33	1	c 54	1	55.33	4.6
West Haverford.....	67.19	82.81		75.00	18	d 92	19	83.00	3	52	2	56.00	5.9
Westtown.....	69.68	80.21	70.77	73.55	19	a 87	19	81.50	3	53	2	56.00	5.3
DELAWARE--													
Georgetown (e).....	73.58	80.42	76.71	76.90	20	93	19	86.67	3	59	3	60.33	....
Newark.....	71.47	79.52	71.65	74.21	13	90	20	81.67	2	f 56	2	58.00	6.1
MARYLAND—													
Annapolis.....	70.80	79.83	76.10	75.58	20	90	19	82.16	3	56	2	59.83	4.2
Bladensburg.....	71.56	84.23	70.62	75.47	19	95	26	81.33	2	f 57	2	60.00	5.6
Chestertown.....	71.48	80.72	70.90	74.37	18	89	19	81.33	2	f 56	3	58.67	5.5
Frederick.....	71.29	77.78	72.00	73.69	20	84	20	80.50	2	f 57	2	57.67	5.5
Sykesville.....	68.94	77.32	71.26	72.51	27	g 86	28	79.00	2	53	2	54.33	5.0
DISTRICT OF COLUMBIA—													
Washington, [Smiths'n Inst.]	70.45	80.71	73.05	74.74	13	b 88	19	81.20	3	56	2	59.60	5.4
VIRGINIA—													
Alexandria.....	73.26	81.34	74.34	76.31	20	89	13	82.67	3	58	2	60.67	5.1
Ashland.....	69.35	80.54	68.68	72.86	17	92	17	84.33	3	56	3	61.33	4.6
Berryville.....	63.55	77.30	69.60	70.15	19	88	20	79.60	3	54	2	56.30	5.5
Crack Whip.....	66.10	74.74	63.00	67.95	19	h 83	26	i 75.00	3	51	2	53.67	4.6
Crichton's Store (j).....	71.40	84.52	79.27	78.40	20	k 91	21	85.33	3	58	3	62.00	6.6
Lewisburg.....	63.61	75.58	64.52	67.90	18	85	18	75.67	1	52	1	58.00	5.0
Meadow Dale.....	56.55	74.16	64.97	65.23	17	83	27	71.67	4	42	4	53.67	....
Portsmouth.....	72.80	84.74	71.93	76.49	19	98	19	85.00	3	61	3	63.33	5.0
Rougement.....	73.48	84.61	73.26	77.12	18	92	19	82.00	2	f 60	2	62.00	6.2
Ruthven.....	74.00	79.70	70.58	74.76	18	91	18	82.00	3	58	3	60.00	3.9
Salem.....	71.61	78.35	74.48	74.81	29	85	16	79.33	4	63	1	67.33	5.8
Sistersville.....	67.74	82.68	68.81	73.08	15	m 96	15	82.00	2	n 57	3	61.50	5.4
Smithfield.....	71.00	78.73	72.85	74.19	19	88	19	80.80	3	60	3	62.90	6.7
Wirt Court-House.....	67.10	81.03	70.35	72.83	17	93	17	81.33	2	56	3	60.67	5.5
NORTH CAROLINA—													
Chapel Hill.....	70.84	84.10	72.58	75.84	19	95	19	83.67	3	58	3	61.33	6.1
Gaston.....	71.65	89.45	73.58	75.23	19	90	19	83.33	4	58	4	64.00	....
Murfreesborough.....	69.00	78.79	70.73	72.84	21	90	21	79.33	3	o 59	3	61.00	5.3
Warrenton.....													3.8
SOUTH CAROLINA—													
Aiken.....	73.50	80.97	74.53	76.40	19	p 86	30	81.33	4	64	4	67.33	....
All Saints.....	75.16	80.55	77.90	77.87	21	p 87	30	83.00	5	64	3	70.67	5.9
Camden.....	72.90	81.90	73.20	76.00	13	90	22	82.67	4	63	4	67.67	6.3
Charleston, [Johnson].....	75.03	82.71	77.16	78.30	21	q 88	21	r 82.33	4	64	4	66.33	....
Charleston, [Dawson].....	75.32	82.73	77.16	78.40	?	88			?	64			....
GEORGIA—													
Athens (s).....	70.03	81.14	72.72	74.63	12	b 91	19	82.50	4	78	6	59.40	4.9
Savannah.....	73.40	82.20	75.30	76.97	31	88	30	81.83	5	63	4	70.63	6.6
Sparta.....	69.16	84.87	83.68	79.24	12	93	12	81.67	2	59	3	64.00	6.2
The Rock.....	69.77	84.07	76.74	76.86	7	l 91	22	81.67	5	58	3	o 67.33	5.6
Whitemarsh Island.....	74.61	81.48	75.77	77.29	23	r 86	30	82.00	5	64	4	70.00	6.3
Zebulon.....	73.03	81.81	78.54	77.79	15	90	26	82.33	4	64	4	67.00	6.3
FLORIDA—													
Alligator.....	75.48	85.52	73.74	77.91	12	96	30	84.33	4	66	4	70.00	5.8
Atsena.....	77.46	83.00	79.06	79.84	25	88	25	83.00	5	68	4	u 75.33	4.9

a Same temperature on the 20th.  
 b Same temperature on the 19th.  
 c Same temperature on the 2d.  
 d Same temperature on the 21st.  
 e Observations taken at 8 a. m., and 1 and 6 p. m.  
 f Same temperature on the 3d.  
 g Same temperature on the 28th.  
 h Same temperature on the 26th.  
 i Same temperature on the 27th.  
 j Observations taken at 6½ a. m., noon, and 6 p. m.  
 k Same temperature on the 21st and 23d.

l Same temperature on the 2d and 4th.  
 m Same temperature on the 17th.  
 n Same temperature on the 3d and 4th.  
 o Same temperature on the 4th.  
 p Same temperature on the 30th.  
 q Same temperature on the 23d.  
 r Same temperature on the 30th and 31st.  
 s Imperfect.  
 t Same temperature on the 10th.  
 u Same temperature on the 5th.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	°	°	°	°		°		°		°			
B-lair (a) .....	72.71	85.48	54.48	70.89	1	b 92	15	82.67	3	64	3	73.67	---
Gainesville (c) .....	74.03	82.00	75.65	77.23	13	d 87	30	81.83	5	67	22	73.67	6.0
Jacksonville .....	77.18	82.58	78.55	79.44	1	e 89	13	82.00	4	68	4	72.83	6.5
Salt Ponds .....	79.74	83.74	.....	81.74	23	f 88	21	g 85.00	3	72	4	74.50	5.1
St. Augustine .....	76.90	82.39	77.68	78.99	21	92	20	h 83.67	3	73	4	75.43	5.4
Warrington .....	79.60	84.50	79.50	81.20	21	i 88	22	83.70	3	73	27	77.70	3.0
ALABAMA—													
Ashville (j) .....	.....	.....	.....	72.63	.....	.....	19	77.00	.....	.....	5	64.50	---
Auburn .....	73.19	83.60	75.29	77.36	11	92	11	83.67	4	63	4	65.67	5.0
Carlowville .....	75.10	83.52	75.16	77.93	11	92	11	83.00	4	62	4	65.33	4.9
Greene Springs (k) .....	71.70	82.96	74.05	76.24	18	90	18	88.33	3	60	3	70.67	5.0
Greensborough (l) .....	69.81	82.32	71.64	74.59	8	88	27	78.17	3	m 62	3	67.67	5.5
MISSISSIPPI—													
Columbus .....	71.36	86.53	74.85	77.58	19	nn	18	84.23	3	52	3	68.80	4.7
LOUISIANA—													
Black River .....	75.06	87.90	78.68	80.55	16	n 96	16	87.67	4	65	3	71.00	4.2
Trinity .....	77.10	89.19	78.68	81.66	16	99	15	o 88.67	4	65	4	72.00	3.7
TEXAS—													
Austin, [Jennings] .....	74.61	90.68	80.13	81.81	18	100	18	89.33	4	69	4	p 76.00	5.1
New Braunfels .....	80.07	100.03	84.23	88.11	18	108	18	94.67	5	q 75	10	79.33	4.5
Union Hill .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.3
Washington .....	78.42	94.42	77.73	83.52	17	106	17	92.67	4	70	7	77.33	3.3
TENNESSEE—													
Glenwood .....	67.87	79.16	71.52	73.08	19	89	19	81.50	3	p 59	3	61.50	4.5
KENTUCKY—													
Danville .....	71.39	82.35	71.68	75.14	17	91	17	81.67	1	61	2	r 65.67	3.2
Paris .....	67.77	78.45	69.42	71.88	17	88	19	80.33	1	55	2	59.33	4.8
Springdale (s) .....	61.81	86.32	72.93	73.70	12	n 96	18	81.67	1	47	1	61.33	4.4
OHIO—													
Bowling Green (t) .....	62.17	80.06	68.97	77.07	13	93	18	78.00	1	u 54	1	57.33	---
Cincinnati, [Harper] .....	73.65	82.52	77.35	77.84	25	95	20	86.00	1	57	1	61.67	6.0
Cleveland .....	67.73	75.97	68.37	70.69	13	87	26	80.00	1	55	1	57.70	5.2
Collingwood .....	66.42	76.52	69.65	70.86	12	v 88	12	79.00	1	m 55	1	56.33	---
Edinburg .....	67.42	79.78	67.16	71.45	17	90	17	80.67	1	53	2	56.69	5.2
Gallipolis .....	66.00	80.52	68.90	71.83	17	92	19	82.00	3	52	3	59.00	---
Hillsborough .....	65.31	76.02	68.31	69.88	17	87	17	78.50	1	53	1	56.33	4.4
Hiram .....	67.06	76.74	68.06	70.62	13	88	13	79.33	1	53	1	55.00	6.1
Jefferson .....	68.19	77.87	72.16	72.74	10	w 82	17	x 79.33	21	y 60	21	i 62.67	9.9
Madison, (Atkins) .....	72.90	77.07	71.46	73.81	27	93	27	84.67	1	58	22	66.00	5.8
Madison, [Cunningham] .....	70.48	79.14	64.78	71.47	14	95	27	81.33	1	54	1	57.67	4.5
Medina .....	69.31	76.32	66.29	70.64	13	88	13	80.00	2	54	1	60.33	5.8
New Lisbon .....	72.58	88.41	72.58	77.86	.....	94	20	85.00	.....	59	1	64.67	3.5
Oberlin .....	69.74	79.79	66.90	72.14	26	94	26	82.00	1	z 56	1	60.33	3.4
Perrysburg (aa) .....	72.48	81.39	72.03	75.30	12	b 92	13	83.67	1	z 60	1	62.67	---
Savannah .....	71.78	84.26	66.74	74.26	26	98	26	84.00	1	54	2	58.00	6.3
Sidney .....	71.87	80.96	69.82	74.22	13	98	17	84.67	1	54	1	61.00	6.0
Urbana .....	67.39	82.10	69.03	72.84	17	92	17	80.70	1	54	1	58.30	4.9
Welchfield .....	72.51	82.10	67.64	74.04	13	100	13	85.60	1	55	1	58.00	3.0
Windham .....	66.81	77.31	67.34	70.49	19	87	19	78.67	2	55	2	56.33	---
MICHIGAN—													
Ann Arbor .....	69.00	85.42	69.87	74.76	13	bb 97	17	85.67	20	58	1	65.67	2.6
Battle Creek .....	68.16	80.94	68.74	72.61	12	b 92	12	81.00	1	z 56	1	57.00	3.5

a For the first 21 days of the month only.

b Same temperature on the 13th.

c Observations taken at 5 a. m., 2 p. m., and 9 p. m.

d Same temperature on the 14th, 25th, and 30th.

e Same temperature on the 3th.

f Same temperature on the 24th.

g Same temperature on the 23d and 24th.

h Same temperature on the 21st.

i Same temperature on the 22d.

j Hours of observation not reported.

k Imperfect

l Same temperature on the 5th and 6th.

m Same temperature on the 4th.

n Same temperature on the 17th

o Same temperature on the 16th.

p Same temperature on the 6th.

q Same temperature on the 10th and 11th.

r Same temperature on the 3d.

s Observations taken at 5 a. m., 2 p. m., and 7 p. m.

t Observations taken at sunrise, 2 p. m., and 9 p. m.

u Same temperature on the 3d and 5th.

v Same temperature on the 18th.

w Same temperature on the 11th, 17th, 18th, and 19th.

x Same temperature on the 18th and 19th.

y Same temperature on the 22d, 23d, 24th, 25th and 26th.

z Same temperature on the 2d.

aa Observations taken at 7 a. m., 1 p. m., and 9 p. m.

bb Same temperature on the 25th.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°		°		°		°			
Cooper	68.52	76.26	65.61	70.13	11	94	11	82.00	2	50	1	52.67	1.9
Copper Falls Mines	63.50	71.09	61.83	65.47	26	95	25	80.00	1	a 49	1	52.15	3.3
Grand Rapids, [Currier]	66.71	81.47	68.94	72.37	11	94	17	80.67	1	52	1	54.67	3.8
Grand Rapids, [Streng]	67.90	83.22	68.77	73.30	13	97	13	83.00	1	53	1	54.30	4.6
Monroe													3.9
New Buffalo (c)													5.2
Port Huron	68.52	80.00	68.87	72.46	13	95	13	83.00	2	55	2	58.00	4.5
INDIANA—													
Evansville	72.55	81.82	76.81	77.06	17	90	17	84.33	3	58	2	65.00	4.1
Logansport (d)	63.00	83.00	74.00	73.00	?	99			?	51			
Michigan City	70.37	79.85	67.25	72.49	12	100	26	85.67	2	52	1	54.00	4.4
New Harmony	72.90	84.00	73.40	76.77	17	92	11	82.60	3	58	2	62.00	4.6
Richmond	67.39	78.74	68.98	71.70	17	90	17	80.90	1	54	1	56.80	4.9
ILLINOIS—													
Augusta	68.87	85.64	74.13	76.21	16	f 98	18	87.67	2	58	2	63.67	2.1
Athens	69.93	88.32	70.32	76.19	16	g 100	16	85.67	3	54	2	65.00	3.7
Batavia (h)	67.68	81.48	67.84	73.91	17	95	17	83.00	1	a 54	2	61.60	
Brighton	79.58	90.81	85.81	85.40	16	106	16	97.33	1	68	3	72.00	3.2
Edgington	66.58	87.90	72.71	75.73	18	98	17	84.33	1	54	2	62.67	3.4
Fremont Centre	74.58	83.07	68.00	75.22	9	i 92	18	85.33	1	53	2	61.67	3.5
Manchester (j)	70.03	82.52	71.90	74.82	17	93	17	85.67	2	55	2	58.67	2.2
Marengo	75.20	86.93	70.73	77.62	17	100	17	86.67	1	54	1	62.00	3.7
Ottawa	69.63	81.29	71.03	73.98	17	f 93	17	85.00	1	a 58	2	62.00	3.9
Peoria	71.17	89.25	74.72	78.33	17	99	17	89.37	2	59	2	65.00	3.2
Pekin	69.87	84.32	71.32	75.17	17	97	17	87.33	1	k 56	2	63.33	2.8
Riley	66.56	82.00	66.73	71.76	12	94	12	82.33	4	48	2	61.00	2.8
Warsaw	74.13	87.33	73.52	78.35	16	f 102	18	89.00	3	61	2	64.33	3.5
West Salem	70.52	86.71	72.32	76.52	17	96	17	85.00	3	58	2	63.00	4.0
West Urbana	72.45	83.45	71.61	75.84	17	97	18	85.33	2	55	2	57.33	4.2
Winnebago													3.0
MISSOURI—													
Cape Girardeau (l)	67.89	83.33	75.00	76.03	16	g 92	17	85.50	3	56	2	63.00	6.2
Palmyra (o)	61.79	87.00	74.65	76.14	19	101		?	2	p 49		?	7.3
St. Joseph (m)	64.15	87.28	71.95	78.28	18	100	18	87.75	3	52	3	65.44	6.6
St. Louis	75.20	86.90	76.30	79.47	17	101	17	91.67	2	59	2	63.67	3.1
Springfield (n)	65.76	83.78	72.75	74.16	17	97	12	85.00	4	51	3	63.17	7.8
WISCONSIN—													
Appleton	68.26	81.84	68.19	72.76	9	93	18	82.33	1	56	1	58.67	2.9
Bay City	65.55	75.39	63.52	71.49	6	92	25	81.33	2	52	2	55.33	1.4
Beloit	67.51	83.70	67.70	72.97	9	93	17	81.67	1	57	2	62.00	2.1
Janesville	67.87	85.06	70.29	74.41	9	95	9	80.67	1	q 60	2	63.00	3.6
Kenosha	67.55	75.19	65.98	69.57	17	96	17	82.00	1	54	2	56.67	2.4
Lind													3.4
Madison, [Sterling] (r)	72.90	80.10	72.30	75.10	15	95	15	86.00	1	a 60	2	63.67	1.7
Manitowoc	66.91	76.45	65.06	69.47	7	92	7	79.33	1	54	1	59.33	4.6
Milwaukee, [Pomeroy]	64.68	75.00	63.16	67.61	31	87	19	76.00	1	a 50	1	54.33	5.2
Milwaukee, [Winkler]	68.42	78.26	64.00	68.89	17	s 88	17	79.00	1	51	1	a 57.67	2.9
New London	64.83	81.45	69.06	71.78	9	98	8	82.00	22	56	21	60.67	3.1
Platteville	71.03	88.68	74.45	78.05	17	102	17	91.67	2	u 60	1	67.33	2.6
Waukesha	68.13	80.52	66.78	71.81	8	92	17	78.67	1	54	1	59.33	3.7
IOWA—													
Bellevue	69.90	85.58	69.19	74.89	8	97	18	82.33	1	k 52	2	66.00	2.9
Border Plains	69.13	86.19	71.00	75.44	15	g 96	15	84.67	1	46	1	65.00	3.2

a Same temperature on the 2d.

b Same temperature on the 17th.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Observations taken at sunrise, noon, and sunset.

e Same temperature on the 13th and 16th.

f Same temperature on the 18th.

g Same temperature on the 17th.

h Observations taken at 6 a. m., 9 a. m., 12 m., 6 and 9 p. m. Mean at 9 a. m., 77.71; mean at 6 p. m., 74.84.

i Same temperature on the 17th and 18th.

j Observations taken at 7 a. m., 1 p. m., and 9 p. m.

k Same temperature on the 3d.

l Observations taken at sunrise, 9 a. m., 3 p. m., and 9 m. Mean at 9 a. m., 77.90.

m Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 79.73.

n Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

o Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 81.10.

p Same temperature on the 1st.

q Same temperature on the 2d and 3d.

r Imperfect

s Same temperature on the 18th and 25th.

t Same temperature on the 9th.

u Same temperature on the 25th.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Iowa—Continued.	°	°	°	°		°		°		°			
Dubuque	76.17	84.48	74.86	78.50	17	92	16	86.33	2	67	1	69.33	3.1
Fairfield	76.00	86.65	72.03	78.23	18	94	18	88.33	1	59	1	63.33	3.1
Fort Madison (a)	71.16	88.09	76.77	78.67	16	b 104	15	86.00	1	c 59	2	64.33	3.8
Franklin	70.13	83.10	70.06	74.43	9	d 93	17	82.67	1	60	2	64.67	2.8
Iowa City	73.16	84.32	72.58	76.69	17	95	17	88.00	2	e 62	2	64.67	3.1
Muscataine	60.97	85.35	68.19	71.50	18	97	15	81.00	1	45	2	59.33	2.5
Pleasant Plain	77.13	89.35	57.03	74.50	16	f 102	16	90.67	2	61	2	66.00	2.4
MINNESOTA—													
Princeton	73.26	85.65	69.87	76.26	1	d 96	10	86.67	28	58	28	62.67	2.2
NEBRASKA—													
Bellevue	73.74	83.35	72.94	76.68	17	f 93	15	g 84.33	1	60	1	63.67	2.9
Omaha													2.6
KANSAS—													
Council City	76.90	94.13	71.00	80.38	19	112	19	95.33	1	h 56	1	69.33	2.9
Lawrence	75.60	90.90	79.71	82.07	18	105	18	93.00	3	65	3	71.00	2.0
UTAH—													
Great Salt Lake City (i)	65.45	82.97	72.03	74.02	22	111	19	81.25	4	56	2	62.75	9.1
OREGON—													
Fort Thompson (j)	14.79	25.20	12.40	17.52	14	38	16	29.67	23	—11 k	24	— 4.67	....
Salem (l)				67.10									
CALIFORNIA—													
Sacramento	67.13	76.87	70.42	71.47	25	90	25	80.67	1	m 62	2	65.00	0.4
San Francisco	56.97	66.84	55.94	59.92	3	g 73	3	g 64.00	27	53	23	57.00	3.2
MEXICO—													
Mirador (n)	76.57	84.65	76.36	79.19				84.42				75.27	---
Vera Cruz (o)	76.51		80.36	78.43	23	85			5	74			---
WEST INDIES—													
St. George's, Bermuda				78.60	30	111			3	72			---
CENTRAL AMERICA—													
Guatemala (p)				66.09		81				54			---
SOUTH AMERICA—													
Catharina Sophia, Surinam (q)	74.03	84.48	81.10	79.87	16	r 89	19	s 81.50	4	t 71	10	77.00	5.0
AZORES—													
Horta, Fayal	71.90	73.10	67.26	70.75	23	u 79	23	74.33	3	v 64	3	65.33	6.2

a Observations taken at 6 a. m., noon, and 7 p. m.

b Same temperature on the 17th.

c Same temperature on the 2d and 3d.

d Same temperature on the 10th and 16th.

e Same temperature on the 1st.

f Same temperature on the 18th.

g Same temperature on the 16th.

h Same temperature on the 3d.

i Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at

9 a. m., 75.65.

j Observations taken at 9 a. m., 1 p. m., and 9 p. m.

k Same temperature on the 25th.

l Hours of observation not reported.

m Same temperature on the 2d.

n Observations taken at 7 a. m., 3 p. m., and 8 p. m.

o Observations taken at 5 a. m. to 6 a. m., and 9 p. m. to 10 p. m.

p Register thermometer.

q Observations taken at 6 a. m., 2 p. m., and 6 p. m.

r Same temperature on the 17th and 19th.

s Same temperature on the 27th.

t Same temperature on the 17th and 23d.

u Same temperature on the 30th.

v Same temperature on the 5th, 7th, and 27th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) -----	70.16	-----	68.70	69.43	?	96	13	84.00	?	49	23	62.50	-----
Montreal .....	64.00	72.30	65.20	67.17	14	85	14	76.90	17	56	24	59.06	5.5
Red River Settlement (b) ---	58.74	72.41	66.06	65.74	1	84	?	?	28	50	?	?	4.7
St. John's.....	59.13	73.60	63.50	65.41	8	85	10	79.00	22	45	22	53.33	3.8
St. Martin .....	57.06	66.10	58.39	60.50	9	75	15	69.00	13	35	13	52.67	-----
Stanbridge .....	58.90	76.14	61.88	65.57	7	88	4	74.70	18	c 47	17	55.40	4.2
Toronto (d).....	61.64	71.52	62.26	65.14	14	84	14	77.00	24	48	24	53.67	5.5
Wolfville .....	59.40	71.96	62.75	64.70	13	85	13	76.38	24	50	24	57.93	4.7
	62.35	72.87	63.97	66.40	8	84	27	72.80	17	52	12	59.30	5.0
MAINE—													
Cornish, [Guptill] -----	62.19	71.45	64.58	65.07	14	86	14	76.67	17	e 54	17	56.67	5.4
Cornish, [West]-----	60.58	70.45	60.74	63.92	14	84	14	73.00	17	f 53	17	55.33	5.0
Gardiner .....	63.29	73.34	63.13	66.59	14	87	14	76.33	19	52	20	60.67	6.0
Monson .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.0
Perry .....	57.52	66.27	58.48	60.76	7	74	7	67.67	24	50	24	54.00	4.3
Portland .....	62.30	70.81	63.47	65.53	14	87	14	72.50	25	56	17	59.16	5.5
Steuben .....	59.87	68.03	59.13	62.34	15	79	15	70.67	21	50	22	55.67	5.7
NEW HAMPSHIRE—													
Concord .....	60.90	74.42	63.00	66.10	14	87	9	77.67	25	52	17	57.67	4.5
Francestown, [Bixby]-----	62.48	70.84	64.44	65.92	14	84	14	79.00	18	g 55	17	57.33	4.5
Manchester .....	62.07	78.12	66.26	68.82	14	94	14	80.00	25	51	17	60.00	5.1
North Barnstead .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.1
Shelburne .....	60.90	77.90	61.55	66.78	14	92	14	77.33	19	50	17	58.67	5.9
West Enfield .....	61.06	73.52	61.90	65.49	14	87	14	79.67	19	52	17	54.33	4.9
VERMONT—													
Brandon .....	59.68	71.70	62.52	64.63	14	86	14	78.33	19	51	18	55.34	5.1
Craftsbury .....	57.97	68.65	59.55	62.06	14	81	14	74.00	17	h 50	24	52.00	4.8
Rupert .....	67.61	76.10	68.71	70.80	4	100	4	86.00	19	54	19	59.00	6.6
St. Johnsbury .....	53.64	72.59	59.11	61.78	14	84	14	76.33	25	43	17	54.00	3.7
Shelburn .....	63.03	71.33	62.10	65.49	4	83	14	76.00	24	51	18	55.00	5.0
West Fairlee .....	59.48	72.35	62.70	64.84	4	i 83	8	76.67	25	51	17	54.67	-----
MASSACHUSETTS—													
Amherst .....	62.54	75.00	64.16	67.23	14	90	14	81.33	19	54	24	59.00	5.3
Cambridge .....	63.77	74.16	66.29	68.07	14	89	14	82.00	25	56	18	61.67	5.1
Florida .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.5
Lawrence .....	74.71	65.64	67.66	69.34	14	91	14	79.00	25	51	19	59.33	3.2
Mendon .....	64.22	75.19	65.61	68.34	14	92	14	82.33	25	49	18	58.33	5.2
Nantucket .....	67.58	73.01	64.73	68.44	14	84	14	77.50	20	58	20	62.57	4.0
New Bedford .....	65.20	73.45	65.32	67.99	14	88	14	79.67	18	j 57	18	59.67	5.4
Newburyport .....	65.28	74.16	66.80	68.75	14	93	14	80.33	25	54	23	65.20	6.3
Princeton .....	60.81	70.37	62.28	64.49	14	85	14	78.17	24	51	24	55.67	5.1
Richmond .....	64.19	76.35	66.35	68.96	15	87	10	k 75.33	12	54	17	60.00	5.3
Westfield .....	60.71	74.71	64.16	66.53	14	91	14	79.67	27	52	24	60.33	5.0
Weymouth .....	64.20	-----	67.00	65.60	14	82	13	71.50	18	l 58	18	58.00	4.0
Williamstown (m) .....	60.59	71.47	63.39	65.15	14	84	14	78.70	19	49	24	57.20	5.9
Worcester .....	64.07	73.70	65.93	67.90	14	90	14	82.67	25	55	18	57.67	5.7
RHODE ISLAND—													
Providence (n) .....	62.50	73.30	64.70	66.83	14	86	14	79.00	31	54	18	59.33	5.0
CONNECTICUT—													
Columbia .....	64.71	75.45	64.16	68.11	14	91	14	80.33	24	55	24	61.33	5.6
New London .....	66.71	77.68	65.55	69.98	14	90	15	82.00	10	58	25	64.67	3.9
Norwich .....	65.48	78.84	67.81	70.71	14	92	14	83.00	19	53	18	c 63.00	3.7
Pomfret .....	62.55	71.39	63.61	65.85	14	85	14	76.50	25	54	24	59.70	5.2
Saybrook .....	66.58	74.84	66.94	69.45	9	83	14	78.00	25	57	22	62.00	4.2
Wallingford .....	62.11	76.22	64.77	67.70	14	90	14	81.00	31	52	30	63.17	4.1

a Observations taken at 9 a. m. and 9 p. m.

b Incomplete.

c Same temperature on the 19th.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e Same temperature on the 18th, 19th, and 24th.

f Same temperature on the 18th.

g Same temperature on the 21st.

h Same temperature on the 24th and 25th.

i Same temperature on the 8th and 14th.

j Same temperature on the 25th.

k Same temperature on the 14th.

l Same temperature on the 20th.

m Imperfect.

n Observations taken at 6 a. m., 1 p. m., and 10 p. m.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
NEW YORK—	°	°	°	■		■		°		□		°	
Baldwinsville	60.52	70.19	64.39	65.03	15	84	15	77.00	24	52	24	55.00	4.3
Bellport	67.61	74.10	66.52	69.41	14	86	14	83.33	30	54	30	60.00	4.3
Beverly (a)	67.65	83.22	69.00	73.29	14	94	---	?	31	59	---	?	4.5
Blackwell's Island	70.81	76.81	70.68	72.77	14	89	14	85.00	22	b 65	18	c 67.00	4.6
Cazenovia	60.87	68.61	59.10	62.86	14	81	14	75.33	24	48	24	53.33	5.9
Clinton	62.26	78.94	64.45	68.55	7	92	14	81.00	25	43	24	56.33	5.6
Eden	65.26	74.13	65.39	68.26	4	89	9	78.00	23	48	23	55.00	5.3
Flatbush	67.20	77.12	67.32	70.55	14	90	14	82.90	25	56	25	64.50	4.7
Houseville	60.81	72.58	60.26	64.55	4	d 86	13	77.00	24	50	24	54.67	5.8
Lowville				62.54	13	84	13	74.25	25	49	24	54.00	---
McGrawville	61.09	71.63	61.27	64.66	14	85	14	78.33	31	49	24	54.43	4.8
Morrisania	69.77	84.90	69.58	74.75	9	99	14	85.67	25	60	24	66.33	3.7
New York city	71.11	77.75	72.66	73.84	14	90	14	85.20	25	62	24	66.20	4.3
Nichols (e)	56.58	79.20	59.39	65.06	14	92	14	79.33	25	41	24	55.67	---
Oswego	64.74	73.16	65.55	67.82	7	f 87	14	81.00	24	55	24	59.00	4.5
Ovid	68.32	77.65	65.52	70.46	14	94	4	83.00	18	54	30	60.00	6.0
Penn Yan (g)	58.81	73.78	64.78	65.79	14	89	14	80.67	19	47	19	58.00	4.3
Rochester, [Harkness]	68.90	73.50	67.70	70.03	---	86	---	---	---	56	---	---	---
Rochester, [Palmer]													7.2
Sag Harbor	67.87	78.94	67.45	71.42	14	90	14	83.00	19	h 60	24	66.00	4.3
Saratoga	64.06	73.65	72.00	69.90	14	87	14	79.67	25	55	17	62.33	2.1
Spencertown	63.74	75.13	66.13	68.33	14	92	14	82.00	25	52	24	61.00	4.2
Townsendville	64.84	73.81	63.55	67.40	13	88	13	79.00	24	h 54	24	57.00	4.8
Wampsville	62.29	72.84	62.61	65.91	13	85	13	77.00	24	52	24	58.00	4.8
Waterford (j)	65.27	74.30	66.00	68.52	14	92	14	82.34	24	58	24	60.67	4.6
Wellsville	62.61	73.68	60.48	65.59	14	90	14	82.33	22	47	24	56.00	5.5
West Concord													4.2
NEW JERSEY—													
Bloomfield	67.31	80.69	67.18	71.73	14	93	14	85.67	30	58	30	65.50	4.1
Burlington	66.81	78.97	69.20	71.66	14	91	14	83.00	25	56	24	k 65.00	4.6
Freehold	66.92	78.55	67.63	71.03	14	91	14	85.17	25	56	23	63.75	---
Lambertville	66.46	82.37	66.93	71.92	14	94	14	84.57	25	43	30	63.10	5.5
Newark (l)				69.77	14	89	14	79.14	25	51	25	62.37	---
Sergeantsville (m)	69.81	85.30	74.23	76.45	14	n 96	15	86.67	24	61	24	67.33	3.2
PENNSYLVANIA—													
Bedford	65.23	78.77	66.19	70.06	14	91	14	82.67	25	50	25	62.67	4.4
Berwick	65.03	77.35	69.00	70.46	14	90	14	82.33	21	o 54	24	62.67	3.4
Cannonsburg	64.50	75.52	68.16	69.39	7	86	13	76.67	23	o 57	13	76.67	4.9
Chromedale	67.25	77.61	67.76	70.87	14	89	14	82.50	26	56	25	60.20	4.1
Easton	63.71	76.78	66.63	69.04	14	87	14	80.17	25	51	30	60.83	4.5
Fleming	63.74	76.97	65.51	68.74	11	p 88	14	80.00	31	52	24	60.00	4.1
Gettysburg	66.39	80.10	68.52	71.67	14	92	14	83.33	25	53	24	60.00	3.7
Harrisburg, [Heisely]	71.00	76.43	76.11	74.51	14	91	14	86.67	25	59	22	63.33	4.1
Harrisburg, [Hickok]	66.16	77.97	71.02	71.72	13	89	14	83.17	25	53	25	62.83	4.6
Lewisburg	63.61	77.37	68.14	69.71	14	91	14	83.23	25	50	24	62.07	5.4
Meadville	63.32	43.68	63.32	56.77	13	89	13	80.67	24	50	30	60.00	4.6
Morrisville	65.55	77.19	67.19	69.98	14	90	14	81.00	25	q 56	25	64.67	2.9
Mount Joy	70.03	83.11	71.47	74.87	14	95	14	88.00	25	58	25	67.67	3.2
Murrysville	64.26	78.68	65.94	69.63	14	88	14	81.00	25	50	24	58.00	4.5
Nazareth (r)	64.67	76.00	64.25	68.31	14	89	14	78.67	24	54	23	61.67	4.6
Norristown	65.60	76.02	68.11	69.91	14	88	14	81.70	25	53	24	61.70	5.6
North Whitehall (s)	63.67	77.77	71.33	70.92	14	92	14	84.00	25	50	24	63.00	5.9
Paradise				77.00									---

a Imperfect.

b Same temperature on the 24th and 25th.

c Same temperature on the 24th.

d Same temperature on the 13th.

e Observations taken at 6 a. m., 1 p. m., and 9 p. m.

f Same temperature on the 8th.

g Observations taken at sunrise, 2 p. m., and sunset.

h Same temperature on the 30th.

i Same temperature on the 14th.

j Observations interrupted from the 3d to the 13th of the month, inclusive.

k Same temperature on the 25th.

l Observations taken at 7 a. m. and 6 p. m.

m Incomplete.

n Same temperature on the 15th.

o Same temperature on the 31st.

p Same temperature on the 13th and 14th.

q Same temperature on the 26th.

r For the last 23 days of the month only.

s Observations taken at sunrise, noon, and sunset.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Philadelphia	71.86	80.97	72.97	75.27	14	94	14	87.00	24	61	24	66.00	5.0
Pittsburg, [Martin]	66.61	75.32	70.48	70.80	14	85	14	80.67	25	53	25	60.00	5.3
Pocopson	69.13	81.47	69.06	73.22	14	95	14	86.00	25	57	25	a 66.00	4.8
Shamokin	57.71	76.77	65.87	66.78	14	94	14	80.67	25	39	24	54.67	5.9
Tarentum	65.10	79.58	65.16	69.95	8	92	14	81.67	25	51	24	60.00	4.8
West Haverford	69.10	81.32		50.14	14	93	15	85.00	25	60	24	68.00	2.9
Westtown	67.74	77.48	68.54	71.25	14	91	14	83.83	25	54	24	b 63.83	4.0
DELAWARE—													
Georgetown (c)	73.53	79.65	75.52	76.23	14	d 91	15	b 87.67	31	65	24	b 70.33	---
Newark (e)	70.02	79.23	70.81	73.35	14	94	14	86.17	25	57	25	63.00	4.3
MARYLAND—													
Annapolis	69.97	79.31	75.48	74.92	14	93	14	86.33	31	59	30	67.50	3.6
Bladensburg (e)	67.07	83.05	67.75	72.62	15	98	14	85.17	25	56	25	64.33	3.8
Frederick	69.12	76.65	69.96	71.91	15	86	13	82.83	25	55	25	63.50	4.2
Sykesville	66.77	75.81	69.16	70.58	14	f 85	14	81.33	21	g 57	22	63.67	3.8
DISTRICT OF COLUMBIA—													
Washington	69.44	79.31	71.89	73.55	15	91	14	84.80	25	59	22	66.50	4.5
VIRGINIA—													
Alexandria	72.93	80.46	73.57	75.65	14	91	14	86.33	25	60	25	67.67	5.0
Ashland	68.65	81.12	68.97	72.91	13	h 90	14	82.33	21	i 56	30	62.67	2.9
Berryville	66.18	77.08	69.17	70.81	15	91	14	81.90	25	55	21	62.90	4.8
Crack Whip (e)	63.91	72.82	61.27	66.00	12	j 88	17	75.67	30	49	30	57.00	5.4
Crichton's Store (k)	74.07	84.78	81.90	80.25	15	98	15	92.00	22	a 62	20	71.00	4.6
Lewisburg	63.00	78.35	65.22	68.86	15	88	16	78.33	25	a 54	24	62.00	4.6
Meadow Dale	58.74	72.61	66.26	65.87	13	l 82	14	75.33	31	44	22	57.00	---
Poplar Grove	68.19	80.39	69.10	72.56	13	91	14	81.00	31	54	30	64.00	5.3
Portsmouth	73.00	84.48	72.54	76.67	18	97	15	e 6.67	31	62	31	68.33	3.7
Rose Hill													4.9
Rougemont	73.22	82.37	74.16	76.58	14	d 94	14	d 88.33	30	64	27	66.67	5.4
Ruthven (e)	72.00	83.90	70.00	75.30	18	96	17	m 83.00	30	58	30	66.00	2.8
Salem													5.3
Smithfield	70.70	80.67	74.32	75.23	14	92	15	85.10	31	58	31	67.50	5.5
Wirt Court-House	67.73	80.17	67.23	71.71	17	94	14	n 82.00	21	o 56	24	p 62.33	6.0
NORTH CAROLINA—													
Ashville (g)	67.81	72.81	69.35	69.99	16	80	16	75.67	30	55	31	60.67	---
Chapel Hill	72.39	85.19	74.93	77.50	17	99	15	r 87.67	30	63	30	67.00	4.9
Gaston	70.64	84.71	72.45	75.93	16	100	16	88.00	21	58	21	66.00	---
Murfreesborough	71.07	83.15	72.60	75.61	15	96	15	87.67	21	62	20	66.00	4.1
Warrenton	73.09	81.55	76.03	76.89	15	r 92	15	s 86.00	31	60	22	68.67	2.7
SOUTH CAROLINA—													
Aiken	76.29	82.83	80.45	79.86	15	t 92	16	88.00	22	u 69	21	73.67	---
All Saints	76.16	80.45	78.71	78.44	28	88	28	83.33	21	67	28	83.33	4.7
Camden	73.83	84.48	75.22	77.84	16	95	16	87.00	22	65	21	71.33	5.1
Charleston	77.03	84.39	79.03	80.15	16	92	16	86.00	21	68	21	74.00	---
Charleston, [Dawson]	77.32	84.38	78.96	80.22	?	92			?	68			---
GEORGIA—													
Savannah	74.62	85.28	76.75	78.88	19	96	19	86.20	22	67	21	71.90	4.8
Sparta				78.50									5.1
The Rock	71.16	83.19	75.93	76.76	15	92	14	t 83.33	20	62	19	w 69.67	4.7
Whitemarsh Island (v)	75.83	83.18	76.23	78.41	16	91	16	84.00	21	67	21	72.33	5.3
Zebulon	74.66	83.92	80.04	79.54	18	91	18	85.41	22	66	20	70.55	5.7
FLORIDA—													
Alligator	77.45	87.84	76.55	80.61	16	100	16	89.33	22	65	21	69.33	4.8

- <sup>a</sup> Same temperature on the 31st.  
<sup>b</sup> Same temperature on the 25th.  
<sup>c</sup> Observations taken at 8 a. m., 1 p. m., and 6 p. m.  
<sup>d</sup> Same temperature on the 15th.  
<sup>e</sup> Imperfect.  
<sup>f</sup> Same temperature on the 15th and 17th.  
<sup>g</sup> Same temperature on the 22d and 25th.  
<sup>h</sup> Same temperature on the 14th.  
<sup>i</sup> Same temperature on the 30th and 31st.  
<sup>j</sup> Same temperature on the 13th and 14th.  
<sup>k</sup> Observations taken at 7 a. m., noon, and 6 p. m.  
<sup>l</sup> Same temperature on the 14th and 15th.

- <sup>m</sup> Same temperature on the 18th.  
<sup>n</sup> Same temperature on the 15th and 16th.  
<sup>o</sup> Same temperature on the 24th and 31st.  
<sup>p</sup> Same temperature on the 29th.  
<sup>q</sup> Observations taken at 7 a. m., noon, and 9 p. m.  
<sup>r</sup> Same temperature on the 17th.  
<sup>s</sup> Same temperature on the 16th and 17th.  
<sup>t</sup> Same temperature on the 16th.  
<sup>u</sup> Same temperature on the 30th.  
<sup>v</sup> No observations after the 22d of the month.  
<sup>w</sup> Same temperature on the 22d.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	°	°	°	°		°		°		°			
Arsena .....	79.52	83.81	80.65	81.33	17	90	16	a 85.67	19	72	19	77.33	6.1
Belair .....	74.87	84.19	78.94	79.33	26	b 92	27	86.67	21	c 69	21	72.33	6.3
Gainesville .....	74.58	83.52	77.97	78.69	16	90	16	84.00	22	c 69	21	73.67	4.8
Jacksonville .....	77.00	85.42	78.66	80.36	29	95	16	84.83	22	c 72	21	74.67	5.0
St. Augustine .....	80.16	82.87	78.48	80.50	28	93	29	85.33	11	74	22	c 75.33	3.9
Salt Ponds .....	80.74	86.03		83.39	26	d 89	26	86.00	22	77	22	78.50	5.4
Warrington .....	79.16	83.16	79.26	80.53	18	89	18	84.67	21	73		75.00	3.4
ALABAMA—													
Ashville (e) .....				74.33			18	j 77.50			30	65.50	
Auburn .....	74.55	83.79	75.28	77.87	18	92	18	84.67	24	67	30	73.67	4.7
Carlowville .....	75.29	86.84	75.58	79.24	17	g 91	24	82.33	1	70	1	h 73.67	3.3
Greene Springs .....	74.54	84.70	75.61	78.28	14	i 92	13	84.00	31	60	20	68.00	3.9
Greensborough (j) .....													4.2
MISSISSIPPI—													
Columbus .....	72.43	85.72	75.19	77.78	18	92	14	82.07	31	62	30	69.13	4.0
LOUISIANA—													
Black River .....	75.77	87.06	85.84	82.89	8	k 92		83.00	31	64	30	72.00	4.5
New Orleans (m) .....	83.32	84.55	84.65	84.17	17	n 90	29	88.00	11	76	11	78.00	
TEXAS—													
Austin .....	76.45	92.61	81.52	83.53	28	97	9	87.00	30	70	13	79.33	4.9
New Braunfels .....	81.71	101.16	87.10	89.99	10	108	31	87.00	30	76	1	92.33	4.5
Union Hill .....													5.3
Washington .....	80.13	91.97	79.39	83.83	5	o 100	6	88.00	30	72	15	80.00	3.7
TENNESSEE—													
Glenwood .....	69.30	78.59	71.75	73.21	17	87	14	80.67	31	56	30	64.33	5.4
KENTUCKY—													
Danville .....	70.90	81.90	71.06	74.62	13	p 90	14	q 82.33	31	60	30	67.33	3.5
Paris .....	67.35	78.39	69.58	71.77	17	89	14	82.00	31	51	30	61.67	4.3
Springdale (r) .....	62.76	84.06	74.01	73.61	14	95	14	84.00	30	48	29	64.00	4.7
OHIO—													
Bowling Green (s) .....	60.39	76.55	67.06	68.00	14	91	14	81.67	21	48	29	56.67	
Cincinnati, [Harper] .....	74.30	78.45	76.65	76.47	17	92	8	87.00	31	58	29	u 68.00	4.7
Cleveland .....	65.10	75.00	66.63	68.91	13	91	13	83.33	30	53	29	61.00	5.1
Collingwood .....	64.26	75.22	66.90	68.79	7	89	13	78.67	29	v 53	29	57.33	
Edinburg .....	65.77	76.45	64.97	69.06	14	89	13	81.00	24	54	24	60.00	4.7
Gallipolis .....	67.12	80.29	69.39	72.27	8	v 90	13	82.33	21	w 50	20	w 62.00	
Hillsborough .....	64.66	75.79	67.92	69.46	14	85	14	79.00	30	52	30	59.33	3.4
Hiram .....	63.26	73.42	65.00	67.29	13	85	13	78.33	24	x 54	23	58.00	4.2
Jefferson .....	39.29	52.71	38.90	43.63	12	66	12	52.00	2	y 34	17	z 38.00	9.9
Madison, [Atkins] .....	68.83	74.59	66.00	69.81	13	90	13	84.67	23	53	23	57.67	4.6
Madison, [Juniingham] .....	65.94	74.82	62.07	67.61	13	92	13	81.00	20	52	23	58.33	4.5
Medina .....	67.15	75.90	63.47	68.84	14	88	13	81.67	31	51	20	60.00	5.6
New Lisbon .....	68.83	88.03	68.64	75.17		95	14	86.00		56	24	64.00	2.8
Perrysburg (aa) .....	68.03	78.32	69.65	72.00	13	90	14	83.00	21	52	29	64.67	
Savannah .....	67.23	81.90	64.87	71.33	13	98	13	86.33	20	53	29	59.67	5.0
Sidney .....	68.29	77.19	66.03	70.50	13	89	13	81.00	29	52	29	58.67	6.0
Urbana .....	65.25	82.42	66.42	71.36	14	93	14	81.67	29	u 50	29	58.33	4.7
Welchfield .....	66.90	78.19	62.20	69.10	13	91	8	77.67	29	53	23	57.33	3.2
Windham .....	64.32	74.74	66.29	68.45	13	86	13	78.67	26	52	25	61.67	
MICHIGAN—													
Battle Creek .....	64.48	78.81	67.42	70.24	8	bb 90	13	84.00	20	53	29	61.33	3.8
Cooper .....	66.45	73.13	62.77	67.45	12	88	12	78.67	22	x 54	29	56.67	3.1

a Same temperature on the 17th.

b Same temperature on the 27th and 28th.

c Same temperature on the 23d.

d Same temperature on the 27th.

e Hours of observation not reported.

f Same temperature on the 19th.

g Same temperature on the 28th.

h Same temperature on the 3d.

i Same temperature on the 15th and 18th.

j Imperfect.

k Same temperature on the 18th.

l Same temperature on the 18th, 26th, and 27th.

m Observations taken at 9 a. m., noon, and 3 p. m.

n Same temperature on the 27th and 28th.

o Same temperature on the 6th, 9th, 27th, and 28th.

p Same temperature on the 14th, 15th, and 16th.

q Same temperature on the 15th and 16th.

r Observations taken at 5 a. m., 2 p. m., and 7 p. m.

s Observations taken at sunrise, 2 p. m., and 9 p. m.

t Same temperature on the 14th.

u Same temperature on the 30th.

v Same temperature on the 13th.

w Same temperature on the 31st.

x Same temperature on the 29th.

y Same temperature on the 17th, 19th, 21st, 23d, and 25th.

z Same temperature on the 19th and 25th.

aa Observations taken at 7 a. m., 1 p. m., and 9 p. m.

bb Same temperature on the 9th and 13th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	○	○	○	○		○		○		○			
Copper Falls Mines.....	59.24	67.56	58.45	61.75	6	84	6	73.00	29	47	28	50.50	4.3
Grand Rapids, [Streng].....	63.35	78.19	64.00	68.51	3	a 92	13	83.00	20	48	16	58.67	4.6
Grand Rapids, [Currier].....	52.90	75.97	64.32	64.40	8	92	13	81.33	20	50	20	58.67	4.1
Monroe.....													5.1
New Buffalo (b).....													5.1
Port Huron.....	64.67	73.77	65.03	67.82	13	92	13	81.33	29	50	29	57.33	4.3
INDIANA—													
Evansville.....	72.13	80.32	74.81	75.75	14	90	8	c 83.00	30	62	30	d 62.00	3.8
Logansport (e).....	63.00	81.00	71.00	72.00	?	96		?	46				
Michigan City.....	65.71	78.28	65.72	69.90	12	95	13	84.92	29	51	29	59.16	4.4
New Harmony.....	72.29	81.90	73.19	75.79	14	91	14	f 84.67	29	g 61	29	65.00	4.8
Richmond.....	65.97	79.04	68.24	71.08	14	87	14	80.67	30	51	30	59.00	4.6
ILLINOIS—													
Athens.....	67.87	84.00	68.90	73.59	15	98	13	83.67	29	h 56	29	63.67	4.2
Augusta.....	65.45	79.16	70.06	71.56	7	c 92	14	83.67	30	50	29	60.33	3.4
Batavia (i).....	67.16	78.23	65.37	71.07	13	92	13	85.67	20	56	20	61.60	---
Brighton.....	81.19	87.94	82.71	83.95	2	j 99	13	94.00	30	70	21	d 72.00	2.7
Edgington.....	65.94	81.29	68.58	71.94	13	94	13	85.67	31	55	17	k 63.00	4.7
Fremont Centre.....	69.74	79.26	65.68	71.56	4	j 92	13	85.33	22	57	16	61.33	4.5
Manchester (b).....	66.00	78.81	68.10	70.97	14	92	2	l 79.00	29	52	29	58.00	4.3
Marengo.....	66.58	79.81	60.84	69.08	14	94	14	85.00	20	52	16	m 62.00	6.3
Ottawa.....	65.13	77.35	67.63	70.04	12	j 91	13	82.67	31	52	20	60.67	5.1
Pekin.....	68.42	80.16	67.71	72.10	3	93	3	j 82.33	28	56	23	63.00	3.8
Peoria.....	68.07	83.25	71.49	74.27	13	c 95	13	85.62	30	50	29	63.87	4.5
Riley.....	63.84	76.56	63.10	67.83	13	n 88	13	81.33	29	53	29	55.33	3.8
Warsaw.....	68.74	81.39	70.03	73.39	1	95	13	84.33	29	54	17	o 61.33	4.6
West Salem.....	71.00	84.26	71.19	75.45	14	94	13	84.00	29	h 60	29	65.00	4.6
West Urbana.....	70.84	81.10	70.84	74.26	8	94	13	83.67	28	59	29	64.33	4.3
Winnebago.....													4.2
MISSOURI—													
Cape Girardeau (p).....	68.11	81.10	73.11	74.58	15	89	16	81.25	29	57	29	64.62	6.2
Palmyra (q).....	62.63	80.60	69.63	72.18	13	95	13	84.00	30	43	---	?	6.7
St Joseph (r).....	66.00	81.33	69.31	73.08	13	95	13	83.25	29	49	29	60.19	6.5
St. Louis.....	72.84	82.11	73.90	76.28	14	98	12	86.00	29	59	29	65.83	4.0
Springfield (s).....	64.58	79.08	68.97	70.88	16	88	16	79.00	30	46	---	?	7.8
WISCONSIN—													
Appleton.....	63.20	75.16	62.26	66.87	2	l 86	13	81.00	19	51	16	57.00	2.8
Bay City.....	60.32	69.16	60.32	63.27	2	88	2	74.67	19	50	19	50.67	2.4
Beloit.....	62.52	76.94	63.87	67.78	13	98	13	81.67	29	h 53	29	59.67	3.6
Janesville.....	65.77	77.19	65.26	69.41	12	j 92	13	83.00	28	55	16	61.33	4.9
Kenosha.....	65.23	72.68	64.97	67.63	13	90	13	83.67	29	53	29	58.83	3.4
Madison, [Sterling].....	65.38	73.70	66.04	68.37	13	89	13	82.67	16	u 57	16	59.33	5.0
Manitowoc.....	63.03	72.87	62.84	66.25	13	94	13	83.00	20	h 54	29	58.67	5.0
Milwaukee, [Pomeroy].....	65.52	71.84	64.42	67.26	12	j 90	13	84.00	16	50	16	55.33	5.3
Milwaukee, [Winkler].....	63.84	75.58	63.03	67.48	13	93	13	82.33	29	53	29	59.67	3.6
New London.....	57.96	74.22	62.77	64.98	7	j 86	13	77.33	23	h 46	19	55.67	3.7
Platteville.....	66.65	81.07	69.42	72.38	13	99	13	86.33	30	54	29	61.67	4.3
Waukesha.....	62.61	75.71	63.81	67.38	13	90	13	81.00	19	51	16	59.33	4.4
IOWA—													
Bellevue.....	65.16	78.55	65.32	69.68	13	92	13	82.00	30	50	29	62.00	4.9
Border Plains.....	65.90	80.94	68.13	71.66	13	97	---	---	29	44	---	---	4.7
Dubuque.....	67.06	77.63	68.73	71.14	13	94	13	84.67	29	54	29	60.67	4.2

a Same temperature on the 12th and 13th.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Same temperature on the 14th.

d Same temperature on the 31st.

e Observations taken at sunrise, noon, and sunset.

f Same temperature on the 16th.

g Same temperature on the 30th and 31st.

h Same temperature on the 30th.

i Observations taken at 6 a. m., 9 a. m., 2 p. m., 6 p. m., and 9 p. m.

Mean at 9 a. m., 72.83. Mean at 6 p. m., 71.76.

j Same temperature on the 13th.

k Same temperature on the 23d.

l Same temperature on the 3d, 12th, 13th, and 14th.

m Same temperature on the 17th and 20th.

n Same temperature on the 20th.

o Same temperature on the 29th.

p Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at

9 a. m., 76.02.

q Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at

9 a. m., 75.88.

r Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at

9 a. m., 75.69.

s Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

t Same temperature on the 9th and 13th.

u Same temperature on the 19th and 29th.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Iowa—Continued.	☐	☐	○	○		○		○		○		○	
Fairfield .....	70.00	79.90	68.48	72.79	7	94	13	84.00	29	56	17	<i>a</i> 61.00	4.8
Fort Madison ( <i>b</i> ).....	66.84	80.51	71.16	72.84	7	94	13	84.00	29	52	29	61.33	3.5
Franklin .....	64.52	76.84	67.13	69.50	13	92	13	81.67	28	55	28	59.67	4.3
Iowa City .....	67.25	78.22	68.39	71.29	13	90	13	83.33	29	54	29	57.76	3.8
Muscatine .....	61.84	78.39	66.42	68.88	3	<i>c</i> 92	13	82.00	30	47	29	55.67	3.7
Pleasant Plain.....	67.97	80.42	67.03	71.81	7	94	12	<i>c</i> 84.67	29	52	29	58.33	3.8
Sioux City .....	67.13	79.22	66.35	70.90	13	95	12	85.33	<i>d</i> 50	50	29	57.67	2.9
MINNESOTA—													
Hazlewood ( <i>d</i> ) .....	62.90	72.95	63.43	66.43	12	89	11	83.00	28	50	28	55.67	3.5
Lapham .....													3.3
Princeton .....	65.81	77.81	64.10	69.24	<i>e</i>	93	2	82.00	29	51	29	55.00	3.4
NEBRASKA—													
Omaha .....													4.7
KANSAS—													
Council City.....	70.35	85.29	67.90	74.51	9	100	6	85.67	28	53	24	62.67	3.6
Lawrence .....	71.10	84.47	75.81	77.13	7	98	13	88.00	29	54	28	63.33	2.7
DACOTAH—													
Fort Union.....	59.60	78.50	64.40	67.50	1	98	1	92.70	28	<i>a</i> 45	15	52.70	2.5
UTAH—													
Great Salt Lake City ( <i>e</i> )....	65.48	84.58	69.32	74.17	<i>e</i>	<i>f</i> 94	<i>e</i>	<i>g</i> 87.50	27	56	27	65.00	7.8
OREGON—													
Salem ( <i>h</i> ) .....				69.30									
CALIFORNIA—													
Sacramento .....	65.45	77.35	49.00	63.93	<i>e</i>	92	9	83.00	12	60	26	67.33	1.0
San Francisco .....	56.48	67.39	55.52	59.80	<i>e</i>	97	9	75.67	15	<i>i</i> 53	16	<i>j</i> 56.67	4.4
MEXICO—													
Mirador ( <i>k</i> ) .....	76.77	85.25	77.11	79.71				83.14				77.29	---
Vera Cruz ( <i>l</i> ) .....	78.54		80.93	79.33	22	90½			29	73			---
CENTRAL AMERICA—													
Guatemala ( <i>m</i> ) .....				66.38		81				53½			---
WEST INDIES—													
St. George's, Bermuda ( <i>n</i> )....				79.90	10	88			28	74			---
SOUTH AMERICA—													
Cathar'a Sophia, Surinam ( <i>n</i> )	75.52	87.48	83.06	82.02	8	<i>o</i> 91	<i>e</i>	84.50	1	71	1	77.50	3.7
AZORES—													
Horta, Fayal.....	69.87	74.29	68.45	70.87	12	<i>p</i> 80	13	76.00	25	62	25	64.00	5.3

*a* Same temperature on the 29th.*b* Observations taken at 6 a. m., noon, and 7 p. m.*c* Same temperature on the 13th.*d* For the last 21 days of the month only.*e* Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 77.32.*f* Same temperature on the 9th and 10th.*g* Same temperature on the 10th.*h* Hours of observation not reported.*i* Same temperature on the 16th, 17th, 20th, 21st, and 22d.*j* Same temperature on the 17th.*k* Observations taken at 7 a. m., 2 p. m., and 8 p. m.*l* Observations taken from 6 to 8 a. m. and from 9 to 11 p. m.*m* Register thermometer.*n* Observations taken at 6 a. m., 2 p. m., and 6 p. m.*o* Same temperature on the 9th and 31st.*p* Same temperature on the 14th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) .....	63.06	-----	62.26	62.66	?	90	11	79.00	?	40	30	46.00	-----
Montreal .....	56.03	64.22	58.23	59.49	4	b 81	3	83.00	29	40	29	42.67	5.5
Moose Factory .....	-----	-----	-----	46.10	-----	-----	-----	-----	-----	-----	-----	-----	-----
Red River Settlement .....	50.71	63.78	-----	57.24	1	80	?	?	18	30	?	?	?
St. John's .....	51.30	55.63	50.53	52.52	3	78	3	69.33	22	38	19	44.67	-----
St. Martin .....	50.99	66.70	54.49	57.39	4	91	4	74.30	18	33	18	38.00	4.3
Stanbridge .....	53.37	64.70	55.33	57.80	2	82	14	72.67	30	36	29	40.67	4.8
Toronto (c) .....	53.13	65.51	55.70	58.11	11	81	11	70.92	29	37	29	41.32	4.3
Windsor .....	62.90	66.53	56.12	58.52	4	82	4	71.67	30	38	30	44.67	5.3
Wolfville .....	55.16	66.18	56.33	59.22	3	83	4	74.00	30	41	30	43.33	3.4
MAINE—													
Cornish, [Guptill] .....	54.87	65.33	57.10	59.10	11	84	11	75.33	29	d 38	30	41.33	3.9
Cornish, [West] .....	52.67	65.00	53.96	57.21	11	83	11	72.67	30	32	30	41.00	3.3
Gardiner .....	53.67	68.59	56.37	59.54	2	86	5	73.67	30	37	30	44.00	4.7
Monson .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.0
Perry .....	51.87	62.43	52.67	55.66	3	80	3	72.33	30	35	30	39.67	3.8
Portland .....	55.45	65.67	57.20	59.44	11	87	14	74.57	30	35	30	43.33	3.8
Steuben .....	51.17	62.93	53.47	55.86	4	85	4	72.67	30	33	30	42.00	4.4
NEW HAMPSHIRE—													
Claremont (e) .....	50.25	59.96	56.58	55.60	13	87	15	74.00	30	31	30	40.00	4.5
Concord .....	52.77	68.97	55.50	59.08	3	f 86	11	74.00	30	32	30	40.00	3.9
Francestown, [Bixby] .....	56.03	65.92	57.80	59.92	3	f 82	11	74.00	30	36	30	42.00	4.2
Francestown, [Root] .....	53.85	66.28	56.81	58.98	11	83	11	74.67	30	35	30	41.16	4.7
Manchester (g) .....	53.67	69.00	58.62	60.43	5	86	5	74.67	30	34	30	42.33	3.8
North Barnstead .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.8
Shelburne .....	53.27	69.10	55.50	59.29	2	90	11	75.00	8	d 36	30	42.00	4.7
West Enfield .....	53.50	64.83	55.07	57.80	1	87	14	73.33	30	33	30	38.33	4.1
VERMONT—													
Brandon .....	51.83	64.29	55.28	57.13	2	81	14	72.67	30	34	29	41.50	4.5
Craftsbury .....	50.53	62.00	53.53	55.35	2	h 80	5	71.00	29	d 34	29	36.00	4.4
Rupert .....	56.47	70.73	62.00	63.07	2	i 90	2	76.00	30	28	30	43.00	5.7
St. Johnsbury .....	48.63	65.72	51.79	55.38	4	87	14	72.33	30	32	30	38.33	4.2
Shelburne .....	54.07	62.60	56.11	57.59	4	b 80	5	74.00	30	37	29	42.00	4.4
West Fairlee .....	51.60	66.00	56.27	57.96	11	85	11	72.33	30	32	30	41.00	-----
MASSACHUSETTS—													
Amherst .....	53.56	68.19	57.74	59.83	11	86	11	74.33	30	32	30	41.33	4.3
Boston .....	56.93	70.52	60.80	62.75	11	86	-----	-----	30	38	-----	-----	-----
Cambridge .....	56.83	69.10	59.77	61.90	11	87	11	76.67	30	39	30	45.33	4.0
Florida .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.8
Lawrence .....	52.86	68.90	57.70	59.82	11	85	11	76.33	30	31	30	40.67	3.8
Mendon .....	55.77	68.33	58.50	60.87	11	86	11	75.67	30	32	1	42.00	3.6
Nantucket .....	62.49	68.62	60.83	63.98	4	80	4	72.07	30	49	30	51.83	3.7
New Bedford .....	58.40	67.60	58.00	61.33	4	78	14	71.00	30	38	30	44.33	4.9
Newburyport .....	57.74	69.68	59.97	62.46	11	91	11	76.70	30	37	30	44.30	6.3
Princeton .....	54.74	64.65	55.10	58.16	2	83	4	73.33	30	31	30	39.17	4.2
Richmond (j) .....	52.08	71.54	61.50	61.71	4	f 84	4	76.00	29	28	29	41.00	2.9
Westfield .....	52.93	68.53	57.50	59.65	11	87	11	76.00	30	34	30	41.33	4.6
Weymouth .....	59.30	-----	59.26	59.28	11	k 74	11	71.00	30	41	30	42.50	2.6
Williamstown .....	51.59	66.01	57.02	58.21	11	84	11	74.67	30	29	30	40.20	4.2
Worcester .....	56.20	66.86	58.41	60.49	11	85	11	75.00	30	37	30	42.33	4.6
RHODE ISLAND—													
Providence (l) .....	55.30	68.60	56.90	60.27	11	84	11	74.33	30	36	30	44.00	3.7
CONNECTICUT—													
Columbia .....	59.47	69.90	56.20	61.86	2	m 84	11	75.33	30	34	30	45.00	3.8
New London .....	57.20	71.23	58.90	62.44	2	83	5	72.00	19	d 44	19	49.67	3.8
Norwich .....	55.87	71.97	60.00	62.61	4	k 85	5	76.00	30	34	30	42.00	2.4

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 5th.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Same temperature on the 30th.

e For the last 24 days of the month only.

f Same temperature on the 11th.

g Incomplete.

h Same temperature on the 4th.

i Same temperature on the 3d.

j Imperfect.

k Same temperature on the 14th.

l Observations taken at sunrise, 1 p. m., and 10 p. m.

m Same temperature on the 3d, 4th, and 11th.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	°		°		°		°	□		
Pomfret .....	55.06	65.26	55.99	58.77	11	80	11	71.10	30	36	30	40.90	4.9
Saybrook .....	59.10	67.79	60.70	62.53	4	79	5	71.33	30	40	30	47.33	3.9
Wallingford .....	54.07	70.17	57.82	60.69	11	84	11	72.00	30	32	30	40.67	3.4
NEW YORK—													
Baldwinsville .....	54.67	64.33	59.60	59.53	11	80	11	75.00	30	40	29	45.00	3.6
Bellport .....	60.43	68.03	60.13	62.86	5	a 76	5	72.67	30	40	30	49.00	3.6
Blackwell's Island .....	62.90	70.07	66.13	66.37	5	81	5	76.67	30	45	30	50.67	5.0
Canton .....	55.78	69.30	56.72	60.60	3	b 88	10	74.67	29	36	30	44.33	4.5
Cazenovia .....	53.28	63.90	55.70	57.63	12	82	11	71.67	30	36	29	39.67	4.5
Clinton .....	55.83	72.87	58.80	62.50	11	92	11	80.33	7	c 39	30	43.33	5.3
Eden .....	58.43	69.10	60.27	62.60	13	85	13	75.67	30	38	30	42.33	4.6
Flatbush .....	58.90	70.40	60.40	63.23	11	82	5	73.00	30	41	30	47.20	4.2
Lowville .....				55.40	12	83	11	71.75	19	32	11	37.75	---
McGrawville .....	53.95	66.22	55.77	58.65	12	83	11	73.23	30	36	29	41.07	4.7
Morrisania .....	60.60	78.67	62.67	67.31	4	103	4	79.33	30	43	30	49.33	3.7
New York city .....	63.22	70.72	63.90	65.95	5	81	5	77.03	30	43	30	50.00	3.9
Nichols (d) .....	41.13	54.65	43.61	46.46	13	78	13	64.00	22	25	20	e 34.33	---
Oswego .....	57.67	67.10	59.97	61.53	5	85	5	74.67	30	41	19	f 47.00	5.2
Ovid .....	57.73	67.57	59.23	61.51	12	87	11	76.00	30	38	29	42.00	4.3
Penn Yan (g) .....	52.97	69.37	59.97	60.77	11	87	11	75.67	30	36	30	42.67	4.2
Rochester, [Harkness] .....	61.70	68.90	61.40	64.00		85				39			---
Rochester, [Palmer] .....	57.30	70.70	61.20	63.07	11	h 88	11	h 77.00	30	40	29	45.00	7.1
Sag Harbor .....	60.33	73.47	61.83	65.21	8	83	5	h 73.33	30	43	30	50.00	4.2
Saratoga .....	53.30	67.13	62.07	61.83	11	84	5	74.33	30	34	19	46.67	2.7
Spencertown .....	54.43	68.20	59.47	60.70	11	88	5	77.33	30	30	30	39.67	3.8
Townsendville .....	57.07	68.67	59.27	61.67	11	i 85	12	77.67	29	j 38	30	42.33	4.3
Wampsville .....	54.87	67.67	58.20	60.25	3	k 82	11	75.67	21	40	29	43.67	4.2
Waterford .....	56.93	69.81	60.96	62.57	11	86	14	75.00	30	37	30	44.33	3.9
Weilsville .....	55.00	68.00	55.90	59.63	11	90	11	75.33	30	34	30	39.33	5.2
NEW JERSEY—													
Bloomfield .....	59.57	73.83	60.62	64.67	9	88	5	75.50	30	42	30	49.33	3.2
Burlington .....	59.23	72.73	62.10	64.69	1	l 83	5	m 74.67	30	43	30	49.67	4.6
Freehold .....	58.57	71.70	60.75	63.67	5	83	5	74.67	30	40		?	---
Lambertville .....	57.93	75.45	60.23	64.54	5	90	5	76.40	30	34	30	46.27	5.2
Newark (n) .....				62.80	5	o 81	5	73.00	30	39	30	47.25	---
Sergeantsville .....	63.61	80.75	69.14	71.17	14	87	5	76.33	24	46	29	57.33	3.6
PENNSYLVANIA—													
Bedford .....	54.12	74.80	60.04	62.99	17	87	17	77.33	30	38	30	44.33	3.1
Cannonsburg .....	57.83	73.56	64.17	65.19	11	85	17	75.67	30	44	30	50.33	4.3
Chromedale .....	59.00	71.03	60.35	63.46	4	79	14	73.90	30	40	30	47.40	4.4
Easton .....	54.69	70.86	59.92	61.82	5	k 84	5	73.83	30	36	30	45.00	4.6
Fleming .....	55.63	72.00	58.10	61.91	10	k 83	12	72.00	24	j 40	30	45.33	3.0
Gettysburg .....	57.90	74.75	61.70	64.78	17	90	17	79.00	24	41	30	51.33	3.5
Harrisburg, [Heisely] .....	62.70	73.50	63.22	68.14	17	86	17	78.33	30	47	30	53.00	4.5
Harrisburg, [Hickok] .....	58.20	72.07	63.53	64.60	17	86	17	74.67	30	44	30	48.33	4.4
Lewisburg .....	55.19	72.46	61.04	62.10	11	88	5	74.53	30	40	30	44.27	4.8
Meadville .....	56.33	73.33	57.33	62.36	11	i 83	17	74.33	30	40	29	j 46.00	3.8
Morrisville .....	57.87	71.97	60.67	63.47	1	l 81	17	71.67	30	44	30	46.67	3.7
Mount Joy .....	60.03	76.37	65.43	67.29	16	90	13	77.83	25	41	30	53.33	3.0
Murrysville .....	56.57	72.20	59.03	62.60	17	85	17	75.33	30	41	30	46.33	4.0
Nazareth (p) .....	57.76	72.75	58.46	62.99	11	83	5	71.67	23	q 45	19	49.00	4.7
Norristown .....	57.30	70.50	60.60	62.80	5	80	17	73.50	30	42	30	47.30	3.3
North Whitehall (r) .....	54.33	70.53	63.23	62.70	1	l 82	5	74.00	30	35	30	45.67	5.6
Paradise .....				72.00									---
Philadelphia .....	64.58	75.47	67.47	69.17	5	85	5	78.33	30	46	30	53.33	5.5

a Same temperature on the 14th.

b Same temperature on the 4th.

c Same temperature on the 19th.

d Observations taken at 6 a. m., 1 p. m., and 9 p. m.

e Same temperature on the 21st.

f Same temperature on the 29th.

g Observations taken at sunrise, 2 p. m., and sunset.

h Same temperature on the 13th.

i Same temperature on the 12th.

j Same temperature on the 30th.

k Same temperature on the 11th.

l Same temperature on the 5th.

m Same temperature on the 17th.

n Observations taken at 7 a. m. and 6 p. m.

o Same temperature on the 10th.

p Incomplete.

q Same temperature on the 24th.

r Observations taken at sunrise, noon, and sunset.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°		°		°		°			
Pittsburg, [Martin] .....	59.71	71.93	64.50	65.38	17	86	17	78.67	21	a 48	29	b 52.67	4.9
Pocopson .....	60.14	74.79	59.18	64.77	1	c 84	5	75.67	30	41	30	47.67	4.4
Shamokin .....	49.97	69.57	60.80	60.11	11	86	11	d 71.33	24	b 32	30	39.33	4.1
Tarentum .....	56.63	75.00	60.47	64.03	4	e 89	17	77.00	21	41	29	47.00	3.5
West Haverford .....	60.17	73.80		66.98	5	85	5	78.50	30	42	30	51.00	4.1
Westtown .....	58.54	71.44	61.56	63.85	5	81	5	74.25	30	40	30	46.73	4.1
DELAWARE—													
Georgetown (f) .....	66.50	76.07	71.10	71.22	5	g 88	5	81.67	30	54	29	57.00	----
Newark .....	60.88	73.37	62.71	65.65	17	82	17	76.33	30	43	30	48.67	4.3
MARYLAND—													
Annapolis .....	62.80	73.88	69.60	68.76	17	89	17	80.16	30	43	30	52.50	3.5
Bladensburg (h) .....	60.85	78.53	62.36	67.25	18	89	18	79.67	30	43	----	?	4.5
Frederick .....	58.77	72.42	62.70	64.63	17	88	17	77.33	30	45	30	50.00	3.7
Sykesville .....	59.17	71.80	63.10	64.69	17	84	18	75.00	30	43	30	46.33	4.0
VIRGINIA—													
Alexandria .....	62.52	74.23	65.21	67.34	17	84	18	76.33	24	b 48	30	52.00	3.8
Ashland .....	59.20	77.63	62.63	66.49	17	89	18	78.00	30	40	30	49.00	3.0
Berryville .....	57.50	72.30	61.30	63.70	17	89	17	78.00	30	41	30	47.00	4.3
Crack Whip .....	53.70	68.86	54.90	59.15	17	83	17	71.67	30	34	30	41.00	4.3
Crichton's Store (i) .....	62.17	78.35	74.62	71.71	18	92	18	86.00	30	51	30	59.33	4.3
Kanawha .....	58.90	75.57	62.60	65.69	5	88	17	75.00	30	41	30	47.67	3.3
Lewisburg .....	53.20	71.47	56.50	60.39	17	82	17	70.33	30	33	30	41.00	2.5
Meadow Dale .....	50.33	69.23	61.50	60.35	10	g 78	17	69.33	30	31	30	41.67	----
Mossy Creek .....	57.36	76.33	57.40	63.70	5	d 88	14	76.33	30	34	30	46.67	3.3
Poplar Grove .....	59.00	77.50	63.37	66.62	11	90	17	77.67	30	40	30	48.33	3.5
Portsmouth .....	68.30	77.90	67.23	71.14	18	90	18	82.67	29	49	30	55.00	3.4
Rose Hill .....													4.6
Rougemont .....	65.20	77.39	65.33	69.50	17	90	17	80.00	30	48	30	52.67	4.3
Ruthven .....	65.32	76.80	65.00	69.04	18	90	4	76.00	30	45	30	51.33	3.7
Salem .....	66.77	74.23	67.83	69.61	17	e 86	17	81.67	30	42	30	53.67	3.9
Sistersville .....	59.24	75.77	61.33	65.45	17	89	17	76.00	30	41	30	48.67	2.4
Smithfield .....	65.00	75.40	69.10	69.83	18	89	18	79.67	30	47	30	56.10	5.5
Wirt Court-House (j) .....	55.09	68.73	58.46	60.76	18	90	17	78.00	30	35	30	45.67	4.2
NORTH CAROLINA—													
Ashville (k) .....	60.90	68.57	63.83	64.43	15	l 76	16	m 72.67	30	42	30	46.33	----
Chapel Hill .....	66.43	79.33	69.13	71.63	19	93	18	82.33	30	46	30	53.67	6.5
Gaston .....	64.70	79.07	66.20	69.99	5	n 90	18	79.33	30	42	30	48.00	----
Murfreesborough (h) .....	64.06	76.28	66.50	68.95	18	88	18	78.67	30	47	30	51.33	3.7
Warrenton .....	66.90	76.75	70.43	71.36	18	87	18	81.67	30	50	30	55.33	2.6
SOUTH CAROLINA—													
Aiken .....	69.48	81.17	74.73	75.13	13	o 90	18	p 84.00	30	53	30	59.00	----
All Saints .....	71.07	79.03	75.53	75.21	18	84	16	80.33	30	54	30	60.33	4.3
Camden .....	68.36	80.90	72.10	73.79	18	93	18	83.67	30	47	30	55.33	4.1
Charleston, [Dawson] .....	72.00	80.83	75.23	76.02	?	87			?	57	----	----	----
Charleston, [Johnson] .....	72.00	80.83	75.23	76.02	13	q 87	20	82.00	30	57	30	62.00	----
GEORGIA—													
Hillsborough .....	66.71	82.94	72.74	74.13	16	93	16	84.17	30	51	30	58.00	3.7
Savannah .....	70.90	82.70	75.20	76.27	20	92	15	82.57	30	57	30	62.17	6.7
Sparta .....	66.20	85.27	72.53	74.67	19	96	17	83.67	30	51	30	57.67	3.0
The Rock .....	64.80	83.17	74.60	74.19	15	93	15	r 83.00	23	a 52	30	62.00	2.7
Zebulon .....	69.20	80.28	75.45	74.98	15	90	16	84.33	30	49	30	58.33	4.0
FLORIDA—													
Alligator .....	74.67	84.80	77.20	78.89	15	s 92	16	86.00	30	64	30	68.33	3.7

a Same temperature on the 24th and 30th.

b Same temperature on the 30th.

c Same temperature on the 5th.

d Same temperature on the 12th.

e Same temperature on the 17th.

f Observations taken at 8 a. m., 1 p. m., and 6 p. m.

g Same temperature on the 11th and 17th.

h Imperfect.

i Observations taken at 7½ a. m., noon, and 6 p. m.

j Observations interrupted from the 9th to the 15th of the month, inclusive.

k Observations taken at 7 a. m., noon, and 9 p. m.

l Same temperature on the 16th, 17th, 18th, and 19th.

m Same temperature on the 17th, 18th, and 19th.

n Same temperature on the 6th and 18th.

o Same temperature on the 14th, 15th, 16th, 18th, and 19th.

p Same temperature on the 19th.

q Same temperature on the 18th.

r Same temperature on the 16th.

s Same temperature on the 21st.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	°	°	°	°		°		°		°			
Atsena	77.45	83.10	79.53	80.03	3	a 83	3	a 84.00	30	67	30	70.67	---
Belair	72.93	87.38	80.28	80.20	15	93	15	89.00	30	62	30	63.67	2.6
Gainesville (b)	72.53	84.03	76.50	77.69	15	90	15	83.33	30	63	30	67.00	2.3
Jacksonville	76.37	82.77	76.98	78.71	15	92	?	?	30	64	?	?	4.3
St. Augustine	80.10	82.90	79.27	80.76	14	93	13	c 84.33	30	72	30	72.67	3.7
Salt Ponds	82.00	85.06	---	83.53	15	d 89	15	d 85.50	30	77	30	78.00	4.5
Warrington	76.10	82.70	77.10	78.63	22	91	17	84.33	24	63	24	70.07	1.3
ALABAMA—													
Ashville (e)	---	---	---	67.46	---	---	18	78.00	---	---	29	f 50.00	---
Auburn	71.37	83.64	74.27	76.43	15	91	7	86.00	30	54	30	62.33	2.5
Carlowville	70.37	82.77	72.00	75.05	6	c 89	6	80.00	24	59	24	64.67	2.5
Greene Springs	65.35	82.00	69.90	72.42	16	d 91	17	81.33	30	49	23	57.33	3.1
Greensborough (g)	62.26	80.40	68.33	70.33	19	89	17	80.33	30	47	---	?	2.0
MISSISSIPPI—													
Columbus	63.71	81.99	70.19	71.96	16	89	7	79.70	30	46	30	58.27	3.0
LOUISIANA—													
Black River	67.90	83.53	71.87	74.43	6	h 90	6	i 80.67	24	52	24	61.00	2.9
Trinity	73.07	88.20	76.43	79.23	6	j 94	6	86.00	24	f 53	23	k 68.33	3.0
TEXAS—													
Austin	71.10	83.50	75.30	76.63	8	l 94	3	85.00	23	58	23	66.67	4.2
New Braunfels	72.64	86.83	76.29	78.59	12	94	12	86.00	24	m 56	24	63.67	5.6
Union Hill	---	---	---	---	---	---	---	---	---	---	---	---	5.3
Washington	73.90	87.93	72.80	78.21	11	n 98	5	87.00	24	56	23	63.67	4.2
TENNESSEE—													
Glenwood	61.58	76.40	65.98	67.99	17	86	17	77.83	30	42	29	53.33	3.5
Memphis	67.33	79.53	70.53	72.46	17	o 87	17	81.33	30	55	22	62.00	4.0
KENTUCKY—													
Danville	67.07	81.19	67.74	71.97	17	o 89	17	79.00	24	50	22	p 60.33	2.6
Paris	58.69	75.50	63.23	65.81	18	87	17	76.67	30	37	30	48.67	3.1
Springdale (q)	55.68	81.30	71.35	69.69	17	93	17	80.00	30	32	29	52.07	3.8
OHIO—													
Bellefontaine	61.22	75.65	62.20	66.36	11	88	17	77.00	29	f 40	29	47.67	5.6
Bowling Green (r)	54.87	73.69	60.93	63.16	11	87	11	75.00	29	34	29	46.00	---
Cincinnati, [Harper]	63.73	79.77	71.23	71.58	12	91	17	83.67	30	45	29	53.67	3.4
Cleveland	59.83	73.00	62.20	65.00	12	89	17	79.67	29	44	29	48.00	4.4
Collingwood	62.40	72.03	62.07	65.83	2	88	2	s 74.67	29	35	29	41.67	---
Edinburg	60.01	73.23	60.90	64.71	11	t 86	11	77.00	29	42	30	43.00	3.4
Gallipolis	57.93	77.00	66.80	67.24	17	90	17	81.33	30	35	22	49.67	---
Hillsborough	58.31	71.43	63.57	64.44	17	82	17	73.67	29	f 41	29	48.33	2.9
Hiram	58.33	71.76	61.55	63.88	11	86	11	m 77.00	30	40	29	46.33	4.8
Jefferson	41.87	49.87	40.90	---	13	68	14	v 50.00	19	w 34	1	38.00	7.8
Lancaster (z)	57.73	76.75	55.00	63.36	13	91	10	71.67	30	37	30	46.33	3.3
Madison, [Atkins]	63.90	73.30	60.97	66.06	11	92	11	81.67	30	42	30	50.00	3.6
Madison, [Cunningham]	59.60	71.56	56.70	62.62	12	88	12	76.00	30	40	29	f 48.67	3.6
Medina	60.93	73.15	63.83	65.97	12	t 87	11	79.67	30	39	30	45.00	6.0
New Lisbon	61.26	77.33	62.26	66.95	---	94	17	81.34	---	43	29	51.66	4.1
Perrysburg (y)	60.47	75.93	63.33	66.58	11	90	11	79.33	29	40	29	50.00	---
Savannah	58.60	79.27	60.37	66.08	13	95	13	81.00	30	37	30	45.67	4.3
Urbana	57.00	77.73	61.43	65.39	12	d 91	17	77.00	30	34	29	44.67	3.9
Welchfield	58.13	73.60	59.36	63.70	12	91	12	77.67	30	39	29	43.33	2.5
Windham	56.57	74.03	61.00	63.87	12	87	17	77.33	21	45	23	z 51.33	---

a Same temperature on the 16th.

b Observations taken at 5½ a. m., 2 p. m., and 9 p. m.

c Same temperature on the 14th.

d Same temperature on the 17th.

e Hours of observation not reported.

f Same temperature on the 30th.

g For the last half of the month only.

h Same temperature on the 7th.

i Same temperature on the 7th, 14th, 15th, and 17th.

j Same temperature on the 7th, 15th, and 17th.

k Same temperature on the 24th and 30th.

l Same temperature on the 4th.

m Same temperature on the 25th.

n Same temperature on the 5th and 18th.

o Same temperature on the 16th.

p Same temperature on the 23d and 24th.

q Observations taken at 5½ a. m., 2 p. m., and 9 p. m.

r Observations taken at sunrise, 2 p. m., and 9 p. m.

s Same temperature on the 13th.

t Same temperature on the 13th and 17th.

u Same temperature on the 13th.

v Same temperature on the 15th.

w Same temperature on the 21st.

x Imperfect.

y Observations taken at 7 a. m., 1 p. m., and 9 p. m.

z Same temperature on the 25th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—	°	°	°	°		°		°		°			
Battle Creek.....	58.50	71.93	61.03	63.82	10	89	10	78.33	30	41	29	46.00	3.0
Cooper.....	59.43	66.57	55.87	60.62	13	84	3	73.00	22	a 40	30	38.00	2.9
Grand Rapids, [Currier].....	57.20	69.30	57.40	61.30	4	88	10	76.67	29	37	29	43.00	3.8
Grand Rapids, [Streng].....	56.50	71.53	58.00	62.01	10	88	10	77.33	29	34	29	41.67	4.4
Marquette.....	54.91	64.98	56.21	58.70	3	86	3	75.26	28	38	18	45.20	4.4
Monroe.....													3.0
New Buffalo.....													5.0
Port Huron (b).....	59.36	71.44	59.08	63.29	3	c 86	13	78.00	30	39	29	47.33	4.2
INDIANA—													
Evansville.....	65.40	76.83	70.30	70.84	17	88	17	81.33	29	50	23	d 58.00	3.8
Logansport (e).....	59.00	74.00	65.00	66.00	?	87			?	39			
Michigan City.....	61.66	75.93	61.38	66.32	10	94	10	80.83	29	37	29	51.67	3.8
New Albany.....	65.27	79.80	67.80	70.96	18	91	17	81.33	30	43	30	55.50	4.2
New Harmony.....	64.53	77.43	67.70	69.89	17	88	17	81.00	30	47	29	56.00	4.3
Richmond (f).....	51.40	75.33	58.97	61.90	2	g 87	18	72.33	30	30	29	40.23	---
ILLINOIS—													
Athens.....	62.63	79.27	62.47	64.12	2	92	10	h 79.67	29	42	29	49.33	4.2
Augusta.....	60.17	74.86	64.67	66.57	9	g 88	11	78.33	29	41	29	51.33	3.8
Batavia.....	54.63	77.35	58.63	63.54	9	i 92	10	77.00	30	31	29	43.33	4.2
Brighton.....	66.23	76.87	73.17	72.09	13	89	13	84.67	23	35	24	50.67	2.4
Chicago (j).....	56.10	71.83	63.93	63.95	10	87	10	77.67	30	37	29	48.00	---
Edgington.....	58.57	75.43	64.33	66.11	9	k 89	10	l 77.33	29	40	21	m 51.33	4.9
Fremont Centre.....	60.80	75.67	61.00	65.82	4	g 89	4	78.67	30	39	29	53.00	3.5
Manchester (n).....	62.27	75.67	64.23	67.39	16	86	12	h 76.33	22	46	22	53.00	4.1
Marengo.....	60.53	73.13	59.20	64.29	10	88	10	80.00	29	36	29	45.33	4.5
Ottawa.....	58.67	68.37	63.11	63.38	10	86	10	77.67	29	35	29	45.00	4.9
Pekin.....	61.70	75.10	61.47	66.09	17	88	10	h 76.33	28	43	28	d 53.67	4.0
Peoria.....	62.76	76.82	66.93	68.84	10	90	10	80.75	29	45	29	53.75	4.4
Riley.....	58.72	70.83	57.91	62.49	9	o 85	10	76.00	23	37	22	47.00	3.3
Warsaw.....	62.97	77.30	65.23	68.50	10	91	10	79.33	22	48	21	52.33	4.4
West Salem.....	64.37	80.70	66.70	70.59	10	h 90	17	81.33	30	45	29	54.00	4.0
West Urbana.....	63.83	76.53	64.90	68.42	12	90	10	80.33	22	p 49	22	52.33	4.7
Winnebago.....													4.2
MISSOURI—													
Cape Girardeau (g).....	62.92	76.62	67.45	69.46	16	h 86	16	79.00	30	44	29	56.25	6.1
Palmyra (r).....	62.94	80.54	70.87	72.06	9	g 89		?	16	56		?	6.4
Springfield (s).....	66.61	77.65	69.25	71.07		85		?	1	55			6.0
St. Joseph (t).....	60.03	74.88	63.73	66.09	9	g 85	10	77.75	22	45		?	5.9
St. Louis.....	65.50	79.30	69.10	71.30	17	93	10	81.33	29	48	29	57.67	4.7
WISCONSIN—													
Appleton.....	57.03	69.97	58.90	61.97	10	89	10	79.33	29	u 42	28	47.00	3.9
Bay City.....	51.13	63.90	56.17	57.07	9	88	9	78.00	20	34	29	41.33	3.7
Beloit.....	55.83	71.90	59.40	62.38	10	l 86	10	76.00	30	33	29	46.00	3.7
Janesville.....	58.83	72.37	60.83	64.01	10	88	10	77.67	30	40	29	48.67	4.4
Kenosha.....	60.20	66.87	60.09	62.39	10	v 83	11	77.67	30	37	22	48.33	3.3
Lind.....													4.3
Madison, [Sterling].....	58.83	69.68	61.30	63.27	9	g 84	10	76.67	29	41	29	48.33	4.7
Manitowoc.....	55.73	66.77	56.73	59.74	10	86	10	75.33	30	40	29	47.67	5.1
Milwaukee, [Lapham].....	53.63	68.90		61.26	10	w 85	11	76.50	29	40	29	46.50	---
Milwaukee, [Pomeroy].....	56.93	64.60	57.83	59.79	10	l 84	10	77.00	30	36	21	47.67	5.9
Milwaukee, [Winkler].....	57.43	68.67	57.03	61.04	9	g 87	10	77.67	22	u 39	29	46.00	3.5
New London.....	53.60	69.30	57.60	60.17	10	86	10	l 76.33	30	37	22	46.00	3.3

a Same temperature on the 29th and 30th.

b Imperfect.

c Same temperature on the 11th, 12th, and 13th.

d Same temperature on the 29th.

e Observations taken at sunrise, noon, and sunset.

f Observations taken at sunrise, 2 p. m., and 9 p. m.

g Same temperature on the 10th.

h Same temperature on the 17th.

i Same temperature on the 10th and 11th.

j Observations taken at 6 a. m., noon, and sunset.

k Same temperature on the 10th and 12th.

l Same temperature on the 11th.

m Same temperature on the 22d.

n Observations taken at 7 a. m., 1 p. m., and 9 p. m.

o Same temperature on the 10th and 14th.

p Same temperature on the 22d and 29th.

q Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 70.87.

Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 73.91.

Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 65.73.

u Same temperature on the 30th.

v Same temperature on the 19th.

w Same temperature on the 27th.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
WISCONSIN—Continued.	°	■	°	■		°		■		■		°	
Platteville .....	59.53	74.53	63.40	65.82	4	a 90	10	80.00	30	38	29	47.33	4.4
Waukesha .....	58.93	73.04	59.60	63.86	10	88	10	78.00	30	35	29	49.00	?
IOWA—													
Bellevue .....	57.60	75.03	60.50	64.38	10	87	10	b 77 67	29	c 33	29	47.00	4.2
Border Plains .....	59.30	73.57	60.97	64.61	9	d 87	10	79.00	30	44	28	53.67	4.1
Dubuque .....	61.57	72.58	62.82	65.66	9	88	9	83.00	23	e 44	28	49.33	3.5
Fairfield .....	62.28	74.46	63.97	66.90	10	86	10	78.67	29	45	29	53.00	4.8
Fort Madison (f) .....	60.16	74.10	65.80	66.69	10	87	11	78.33	29	43	20	52.33	3.8
Franklin .....	57.73	71.90	61.27	63.63	1	88	10	78.33	30	40	28	49.33	4.6
Muscatine .....	56.73	72.50	61.50	63.58	■	88	11	76.67	30	36	21	48.00	3.9
Pleasant Plain .....	61.06	74.76	61.23	65.68	4	g 86	11	79.33	21	h 42	21	i 50.33	4.1
Sioux City (j) .....	63.83	71.93	61.50	65.75	2	89	10	78.33	18	k 48	18	50.83	6.6
MINNESOTA—													
Hazlewood .....	58.00	66.93	57.03	60.32	9	84	10	78.67	28	38	28	48.00	3.9
Princeton .....	55.50	68.17	55.77	59.81	■	90	9	81.33	29	36	29	41.33	3.9
NEBRASKA—													
Bellevue .....	72.20	81.57	72.03	75.27	13	96	13	86.33	23	l 60	23	64.67	1.7
Omaha .....													4.1
KANSAS—													
Lawrence .....	65.57	78.40	67.77	70.58	8	90	■	81.17	19	51	19	m 56.17	2.5
DACOTA—													
Fort Union .....	47.09	68.00	54.40	56.80	7	86	7	70.00	18	30	18	41.00	6.8
UTAH—													
Great Salt Lake City (n) .....	55.97	74.07	62.93	64.72	■	90	■	79.25	18	42	16	53.24	9.3
OREGON—													
Salem (o) .....				65.23									
CALIFORNIA—													
Sacramento .....	61.83	74.13	67.83	67.93	3	p 84	27	74.00	16	q 58	16	62.67	1.3
San Francisco .....	59.73	68.83	58.33	62.33	27	92	27	77.67	3	r 54	5	57.00	3.7
MEXICO—													
Mirador (s) .....	76.62	85.32	76.14	79.36				82.69				74.59	
Vera Cruz (t) .....	77.93		81.12	79.52	4	93			27	73			
CENTRAL AMERICA—													
Guatemala .....				66.13		78				54½			
SOUTH AMERICA—													
Catharina Sophia, Surinam (u) .....	75.37	88.70	84.03	82.70	24	92	24	v 84.50	12	72	26	78.00	3.2
AZORES—													
Horta, Fayal .....	64.77	69.47	63.73	65.99	■	w 74	13	70.67	■	58	29	62.00	6.2

a Same temperature on the 9th.

b Same temperature on the 11th.

c Same temperature on the 30th.

d Same temperature on the 10th.

e Same temperature on the 22d and 28th.

f Observations taken at 6 a. m., noon, and 7 p. m.

g Same temperature on the 9th, 10th, and 11th.

h Same temperature on the 29th.

i Same temperature on the 22d.

j For the first 20 days of the month only.

k Same temperature on the 19th and 20th.

l Same temperature on the 25th.

m Same temperature on the 21st.

n Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 65.90.

o Hours of observation not reported.

p Same temperature on the 27th.

q Same temperature on the 17th and 20th.

r Same temperature on the 5th and 30th.

s Observations taken at 7 a. m., 2 p. m., and 8 p. m.

t Observations taken at 6 to 8 a. m., and 9 to 11 p. m.

u Observations taken at 6 a. m., 2 p. m., and 6 p. m.

v Same temperature on the 27th.

w Same temperature on the 12th.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
°	°	°	°	°	°	°	°	°	°	°	°	°	
BRITISH AMERICA—													
Hamilton (a) .....	48.42		49.20	48.81	?	74	12	59.50	?	31	20	36.00	
Montreal .....	42.01	50.04	45.36	45.80	13	66	13	58.86	22	31	28	32.86	6.0
Moose Factory .....				35.70									
Red River Settlement .....	39.48	51.71		45.59	7	b 72	?	?	20	13	20	23.33	?
St. John's .....	44.87	48.77	43.71	45.78	17	68	17	66.00	23	c 34	23	37.67	
St. Martin .....	38.03	52.58	41.87	44.16	11	69	10	58.60	22	24	28	31.40	5.2
Stanbridge .....	39.29	50.13	42.19	43.87	8	63	13	58.00	10	28	28	31.33	6.2
Toronto (d) .....	41.21	50.93	43.88	45.34	13	61	12	57.03	22	29	20	32.82	6.2
Windsor .....	44.82	55.87	47.63	49.44	14	75	17	67.70	24	25	24	31.30	6.9
Wolfville .....	46.85	56.17	48.98	50.67	16	74	16	69.67	23	27	23	34.50	5.5
MAINE—													
Cornish, [Guptill] .....	42.71	52.32	46.13	47.05	13	71	13	66.00	22	25	22	31.00	6.0
Cornish, [West] .....	40.00	51.38	43.77	45.05	13	71	13	62.33	22	20	22	27.67	5.0
Gardiner .....	42.65	54.58	46.53	47.92	13	70	14	61.67	23	24	22	33.00	5.8
Monson .....													6.2
Perry .....	41.74	51.61	45.26	46.20	8	62	16	54.57	23	28	22	30.33	4.9
Portland .....	44.77	54.98	47.55	49.10	13	68	13	63.50	22	28	22	34.50	5.8
Steuben .....	41.94	52.00	45.65	46.53	13	68	13	58.33	23	23	22	31.00	6.6
NEW HAMPSHIRE—													
Claremont .....	42.36	53.96	45.29	47.20	13	69	15	60.00	23	25	22	33.00	5.9
Concord .....	42.22	56.03	45.97	48.07	13	76	14	63.00	23	24	21	e 34.33	5.7
Francestown, [Bixby] (f) ..	44.24	51.68	45.97	47.30	13	72	13	63.00	23	29	22	34.00	7.2
Francestown, [Root] .....	42.78	53.45	44.38	46.87	13	72	13	62.83	23	27	22	33.83	5.9
Manchester (g) .....	41.94	53.42	46.24	47.20	2	61	15	58.67	22	28	22	34.33	6.2
North Barnstead .....													7.3
Shelburne .....	39.48	55.42	44.32	46.41	13	75	14	63.33	23	16	22	30.67	6.6
VERMONT—													
Brandon .....	40.55	50.37	43.18	44.70	13	65	13	58.67	22	24	22	30.67	6.9
Craftsbury .....	38.61	49.52	42.58	43.57	12	i 63	13	57.00	28	26	21	e 29.00	6.3
Rupert .....	44.55	55.55	49.87	49.99	13	76	13	66.00	22	28	22	38.00	6.7
St. Johnsbury .....	38.52	52.03	45.26	45.27	15	68	15	60.33	23	23	21	32.33	6.4
Shelburn .....	41.62	48.35	43.24	44.40	12	64	13	60.00	22	27	28	32.00	5.4
West Fairlee .....	41.42	52.32	45.58	46.44	13	67	15	60.00	22	26	21	e 32.67	
MASSACHUSETTS—													
Amherst .....	42.62	56.42	46.86	48.63	13	73	14	65.10	22	25	21	34.70	5.5
Bridgewater (j) .....	44.90	56.88	50.39	50.72	13	75	13	62.17	22	26	22	37.50	6.6
Cambridge .....	46.26	57.48	50.00	51.25	13	76	13	k 65.00	22	l 31	21	e 37.33	5.5
Florida .....													6.2
Lawrence .....	42.71	54.56	47.61	48.29	14	68	2	56.67	23	25	22	34.33	4.9
Mendon .....	44.26	57.00	47.90	49.72	13	74	13	63.00	23	26	22	33.00	5.1
Nantucket .....	53.11	58.15	52.74	54.67	13	74	13	62.17	22	38	22	41.57	4.9
New Bedford .....	48.17	57.86	49.84	51.99	13	73	13	63.50	22	30	22	37.40	5.8
Newburyport .....	45.98	56.41	50.49	50.96	16	80	8	62.30	23	31	22	38.70	8.0
Princeton .....	43.70	51.47	45.64	46.94	13	70	13	62.00	21	26	21	31.00	5.7
Westfield .....	42.52	56.32	46.95	48.60	13	k 72	14	65.33	22	25	22	34.67	5.4
Weymouth .....	46.16		49.90	48.03	13	66	13	62.00	22	30	21	32.00	4.0
Williamstown .....	41.32	51.86	44.75	45.98	13	70	13	61.33	22	27	22	32.67	6.0
Worcester .....	44.70	55.94	47.00	49.21	13	74	14	63.00	23	29	6	46.00	5.3
RHODE ISLAND—													
Providence (m) .....	45.20	57.90	48.40	50.50	13	72	16	k 62.33	22	29	21	36.33	5.1
CONNECTICUT—													
Columbia .....	45.32	60.00	46.71	50.68	9	n 76	15	64.00	21	e 30	21	34.33	5.3
New London (o) .....	48.26	60.26	50.29	52.94	9	n 73	14	63.00	21	32	21	37.33	4.8
Norwich .....	44.52	60.32	50.84	51.89	13	76	14	66.00	22	26	22	35.00	4.7

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 8th and 9th.

c Same temperature on the 24th.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e Same temperature on the 22d.

f Observations interrupted from the 7th to the 12th, and from the 18th to the 20th, inclusive.

g Incomplete.

h Same temperature on the 16th.

i Same temperature on the 15th.

j Observations taken at 7 a. m., 2 p. m., and 7 p. m.

k Same temperature on the 14th.

l Same temperature on the 23d.

m Observations taken at sunrise, 1 p. m., and 10 p. m.

n Same temperature on the 13th.

o Observations interrupted from the 10th to the 12th, inclusive.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	○	□	■	○	○	○	○	□	□	■	■		
Pomfret .....	44.33	54.73	47.54	48.87	13	71	16	63.30	22	27	21	33.30	5.4
Saybrook .....	49.81	57.81	51.48	53.03	■	69	14	63.00	21	<sup>a</sup> 32	21	37.00	5.1
Wallingford .....	44.11	57.89	48.87	50.29	■	72	14	63.83	23	27	21	36.50	5.0
NEW YORK—													
Baldwinsville .....	44.16	50.74	46.90	47.27	12	<sup>b</sup> 64	13	61.67	22	30	20	34.00	6.5
Bellport .....	49.84	56.77	50.45	52.35	9	70	15	64.00	22	35	■	<sup>c</sup> 38.00	4.8
Blackwell's Island .....	52.19	58.48	54.35	53.34	2	<sup>d</sup> 70	9	65.00	28	39	28	43.00	6.9
Canton .....	43.13	52.93	44.77	45.94	12	72	12	62.67	22	26	28	32.67	6.6
Cazenovia .....	40.90	48.11	42.55	43.85	12	64	13	58.67	22	23	20	29.33	7.2
Clinton .....	48.71	54.68	44.16	49.18	11	74	14	59.00	20	<sup>a</sup> 31	21	34.67	7.1
Eden .....	46.58	52.71	46.61	48.63	12	70	12	64.00	20	33	26	34.00	6.6
Flatbush .....	48.78	58.21	50.79	52.29	13	73	14	63.17	21	<sup>a</sup> 35	21	39.50	6.2
Lowville .....				43.40	13	64	13	58.00	22	23	21	29.50	
Madrid .....	40.06	51.63	43.09	44.93	12	68	7	57.60	21	25	27	30.83	6.8
Morrisania .....	49.48	64.93	52.13	55.51	12	89	2	67.00	21	34	27	39.67	6.0
New York city .....	51.63	59.29	54.59	55.17	9	72	13	65.13	21	37	21	41.86	5.9
Nichols ( <sup>e</sup> ) .....	41.13	54.65	43.61	46.46	13	78	13	64.00	22	25	20	<sup>c</sup> 34.33	
Oswego .....	44.03	52.13	46.87	47.68	12	71	12	62.00	22	29	20	34.00	6.8
Ovid .....	43.29	51.16	46.16	46.87	12	68	12	61.00	21	32	20	<sup>g</sup> 34.00	6.8
Penn Yan ( <sup>h</sup> ) .....	40.19	51.78	46.39	46.12	10	67	12	56.33	26	23	26	35.00	7.0
Pompey .....	41.60	47.23	42.74	43.86	12	64	13	58.67	20	25	20	27.00	6.8
Rochester, [Harkness] .....	45.08	52.01	46.90	48.27		73				31			
Rochester, [Palmer] .....	44.35	52.50	47.45	48.10	12	72	12	62.10	22	30	21	35.33	8.6
Sag Harbor .....	50.45	61.68	52.00	54.68	14	76	14	64.33	21	36	21	40.67	5.2
Saratoga ( <sup>i</sup> ) .....	42.36	52.04	47.54	47.31	13	70	13	62.67	22	24	21	34.33	4.7
Spencertown .....	43.13	52.23	45.81	47.16	13	71	13	65.67	25	23	25	32.33	6.5
Townsendville .....	42.74	51.16	45.16	46.35	12	68	13	61.00	20	30	20	32.00	7.1
Wampsville .....	43.55	51.87	44.90	46.77	12	69	13	62.67	22	26	20	31.00	7.0
Waterford .....	44.60	54.31	47.34	48.75	13	73	13	64.00	23	31	21	36.67	6.3
Wellsville .....	41.52	52.65	44.42	46.20	13	75	13	65.00	22	29	20	32.00	7.1
NEW JERSEY—													
Bloomfield .....	48.39	60.90	51.65	53.65	8	81	13	64.00	22	33	21	38.33	4.9
Burlington .....	49.52	62.00	52.07	54.53	13	74	13	64.67	22	34	22	41.67	7.1
Lambertville .....	46.30	61.04	49.36	52.23	13	76.4	13	65.57	22	25.8	21	37.97	4.2
Newark ( <sup>j</sup> ) .....				52.59	9	70	14	61.88	22	33	21	39.25	
Sergeantsville ( <sup>k</sup> ) .....	52.58	78.37	57.53	62.83	4	86	8	67.67	19	40	19	55.33	4.4
PENNSYLVANIA—													
Bedford ( <sup>l</sup> ) .....	46.05	61.24	52.33	53.21	13	77	14	69.33	22	22	21	36.67	6.3
Cannonsburg .....	46.39	54.76	50.65	50.60	12	71	12	<sup>f</sup> 62.33	21	32	20	37.33	8.0
Chromedale .....	48.31	59.10	50.14	52.52	13	72	14	64.90	22	28	22	37.40	6.1
Easton .....	45.00	56.80	48.93	50.24	14	73	14	65.67	22	31	21	37.67	6.1
Fleming .....	44.51	55.54	47.45	49.17	13	75	13	64.00	22	25	21	35.00	6.7
Gettysburg .....	47.03	61.61	51.10	53.25	14	87	14	72.67	22	25	21	37.00	5.8
Harrisburg, [Heisely] .....	51.58	59.68	55.65	55.64	14	74	14	70.33	22	36	21	42.33	5.2
Harrisburg, [Hickok] .....	48.65	58.52	51.97	53.05	14	73	14	63.17	22	33	21	40.50	4.7
Lewisburg .....	44.56	56.21	48.62	49.80	13	74	13	67.00	22	27	21	35.50	7.4
Meadville .....	44.10	55.74	45.65	48.50	10	72	12	61.33	20	<sup>c</sup> 30	20	33.00	6.6
Morrisville .....	47.81	58.94	50.74	52.50	8	<sup>f</sup> 72	8	62.67	22	33	21	38.67	4.7
Mount Joy .....	48.69	61.39	53.81	54.63	■	79	13	69.67	22	28	21	38.67	5.9
Murrysville .....	45.03	55.68	46.77	49.16	12	<sup>f</sup> 72	13	<sup>m</sup> 61.00	22	27	22	31.00	6.6
Nazareth ( <sup>n</sup> ) .....	44.92	55.35	45.87	48.71	6	<sup>o</sup> 67	15	61.67	22	33	21	37.33	7.2
Norristown .....	48.01	57.06	50.48	51.85	13	71	13	63.70	22	32	21	38.33	6.2
North Whitehall ( <sup>p</sup> ) .....	45.45	58.65	52.48	52.19	9	80	14	63.00	22	28	21	<sup>a</sup> 40.00	7.6
Paradise .....				57.00									
Philadelphia .....	51.21	62.27	55.10	56.19	13	76	13	68.00	22	36	21	41.70	6.6

<sup>a</sup> Same temperature on the 22d.<sup>b</sup> Same temperature on the 12th.<sup>c</sup> Same temperature on the 21st.<sup>d</sup> Same temperature on the 9th.<sup>e</sup> Observations taken at 6 a. m., 1 p. m., and 9 p. m.<sup>f</sup> Same temperature on the 13th.<sup>g</sup> Same temperature on the 28th.<sup>h</sup> Observations taken at sunrise, 2 p. m., and sunset.<sup>i</sup> For the last twenty-two days of the month only.<sup>j</sup> Observations taken at 7 a. m. and 6 p. m.<sup>k</sup> For the first nineteen days of the month only.<sup>l</sup> Imperfect.<sup>m</sup> Same temperature on the 14th.<sup>n</sup> Incomplete.<sup>o</sup> Same temperature on the 10th.<sup>p</sup> Observations taken at sunrise, noon, and sunset.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Pittsburg, [Martin] .....	46.97	55.16	50.45	50.86	12	69	13	62.67	22	31	22	36.67	7.3
Pocopson .....	48.03	60.53	50.00	52.85	13	78	13	67.00	22	32	21	38.00	6.4
Shamokin .....	41.81	55.03	48.70	48.51	14	72	14	62.67	22	22	21	35.67	6.6
Tarentum .....	45.45	58.13	48.58	50.72	12	78	13	64.33	22	28	20	36.00	6.8
West Haverford (b) .....	48.19	60.22		54.20	13	76	13	66.00	22	33	21	40.00	3.7
Westtown .....	51.75	62.61	53.96	56.11	13	73	15	63.00	1	39	26	48.67	5.8
DELAWARE—													
Georgetown (c) .....	53.68	62.68	58.00	58.12	13	83	13	74.33	22	36	21	42.67	---
Newark .....	49.60	62.05	51.84	54.50	13	77	13	66.67	22	33	21	39.67	6.0
MARYLAND—													
Annapolis .....	50.30	60.70	56.65	55.88	2	71	14	67.67	21	31	21	40.83	5.3
Bladensburg (b) .....	50.13	67.31	53.05	56.83	2	76	14	69.00	21	29	22	42.00	5.5
Frederick .....	47.89	59.03	51.05	52.66	14	73	14	67.17	21	34	21	40.00	6.0
Sykesville .....	46.74	57.16	49.97	51.29	9	d 72	14	66.33	22	26	21	35.67	4.7
DISTRICT OF COLUMBIA—													
Washington, [Smith Inst.] .....	49.69	60.87	53.23	54.60	9	72	14	66.67	22	33	21	40.33	5.4
VIRGINIA—													
Alexandria .....	51.13	62.26	53.87	55.75	14	74	14	69.00	22	32	21	41.67	4.4
Ashland .....	46.52	59.90	49.00	51.81	11	e 78	13	67.33	21	26	28	33.67	5.8
Berryville .....	47.57	58.24	52.08	52.63	14	72	14	66.67	31	31	21	38.20	5.0
Crack Whip (f) .....	44.06	56.55	48.67	49.76	13	g 69	14	62.00	21	22	21	28.33	5.9
Crichton's Store (h) .....	53.84	62.33	61.91	59.36	2	i 74	13	j 71.00	21	38	29	51.00	5.9
Lewisburg .....	41.26	56.35	45.06	47.56	12	d 72	12	62.67	21	21	21	33.33	5.9
Meadow Dale .....	39.35	53.81	47.74	46.97	14	74	14	64.00	22	22	20	34.00	---
Mossy Creek (k) .....	40.06	53.06	40.65	44.59	20	68	15	58.67	31	25	21	35.67	6.5
Portsmouth .....	54.80	65.39	55.80	58.66	2	i 76	13	70.67	30	36	21	44.67	4.1
Rose Hill .....	52.48	62.92	57.82	57.74	13	77	13	71.67	22	39		?	6.3
Rougemont (m) .....	52.29	64.95	55.70	57.65	13	g 74	13	68.67	20	32	21	38.00	5.8
Ruthven (b) .....	50.78	62.79	51.67	55.08	13	76	14	66.34	21	n 32	21	38.00	2.9
Salem .....	52.23	56.03	54.90	54.39	14	68	14	67.00	21	39	21	40.67	5.1
Sistersville .....	45.28	57.29	48.97	50.51	12	77	13	67.33	21	n 29	20	36.50	6.6
Smithfield .....	51.85	63.22	55.39	56.82	13	j 75	13	70.30	30	32	21	40.80	5.0
Winchester .....	48.65	61.42	51.77	50.61	14	76	14	68.00	22	31	20	42.67	5.0
Wirt Court-House .....	45.52	55.41	51.07	50.67	12	74	12	65.33	21	26	20	36.33	5.9
NORTH CAROLINA—													
Chapel Hill .....	49.81	64.00	54.42	56.08	2	o 77	13	g 67.00	21	n 35	21	42.33	8.0
Gaston .....	51.55	63.16	53.00	55.90	2	76	14	69.67	21	34	21	39.33	---
Murfreesborough .....	50.90	62.90	54.65	56.15	13	78	13	70.00	22	33	21	40.00	4.4
Warrenton .....	53.00	61.52	57.95	57.49	14	74	14	71.67	22	33	21	43.00	3.7
SOUTH CAROLINA—													
Aiken .....	54.30	69.89	61.41	61.87	14	78	14	73.00	21	40	21	46.67	---
All Saints .....	58.32	68.52	62.26	63.03	3	77	13	74.67	21	43	21	49.33	4.7
Camden .....	51.29	67.29	55.51	58.03	14	79	14	72.67	22	37	22	44.33	5.7
Charleston, [Dawson] .....	59.41	67.83	62.67	63.30	?	77			?	46			---
Charleston, [Johnson] .....	59.42	67.84	62.68	63.31	12	77	12	73.00	21	46	21	52.00	---
GEORGIA—													
Hillsborough .....	52.74	67.17	58.32	59.41	2	78	13	70.77	29	40	30	48.43	5.8
Savannah .....	57.75	68.74	62.46	62.65	3	80	13	72.40	27	45	21	52.47	5.9
Sparta .....	52.90	69.16	58.74	60.27	3	83	3	71.33	22	p 41	29	50.00	5.5
The Rock .....	53.58	67.97	60.94	60.83	2	81	1	74.00	29	q 40	30	49.00	4.6
Whitemarsh Island .....	58.27	67.97	61.83	62.69	3	77	2	71.67	30	45	21	52.00	5.1
Zebulon .....	57.06	66.77	66.34	63.49	2	s 78	3	71.33	30	45	30	51.00	6.1
FLORIDA—													
Alligator .....	59.87	74.00	64.90	66.26	19	83	3	76.00	31	38	30	53.33	5.2

a Same temperature on the 21st.

b Imperfect.

c Observations taken at 8 a. m., 1 p. m., and 6 p. m.

d Same temperature on the 13th and 14th.

e Same temperature on the 12th.

f For the first 21 days of the month only.

g Same temperature on the 14th.

h Observations taken at  $\frac{1}{2}$  a. m., noon, and  $\frac{1}{2}$  p. m.

i Same temperature on the 13th.

j Same temperature on the 15th.

k For the last 17 days of the month only.

l Same temperature on the 31st.

m Observations interrupted from the 23d to the 29th, inclusive.

n Same temperature on the 22d.

o Same temperature on the 19th.

p Same temperature on the 27th.

q Same temperature on the 30th and 31st.

r Same temperature on the 30th.

s Same temperature on the 3d.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	○	○	○	○		○		○		□		□	
Atsena .....	65.03	73.26	69.68	69.32	13	82	13	77.33	6	47	26	60.33	3.5
Belair .....	61.52	77.06	67.52	68.70	9	90	2	79.33	31	42	30	52.67	6.1
Gainesville (a) .....	61.06	73.68	65.42	66.72	2	82	13	74.33	31	43	31	56.33	3.8
Jacksonville .....	64.21	72.29	64.35	66.95	2	c 81	15	77.33	31	42	30	54.67	4.3
St Augustine .....	69.77	74.42	69.42	71.20	9	d 82	2	78.33	31	51	30	58.33	4.6
Salt Ponds .....	73.13	76.58	---	74.85	7	83	7	79.00	26	e 68	26	f 69.00	3.8
Warrington .....	65.29	74.97	67.64	69.30	15	86	15	77.33	30	51	30	56.03	2.6
ALABAMA—													
Ashville (g) .....	---	---	---	60.56	---	---	---	h 57.00	---	---	29	i 47.50	---
Auburn .....	54.81	67.97	60.10	60.96	---	79	13	70.33	29	40	30	48.67	5.4
Carlowville .....	54.26	72.94	57.71	61.64	13	81	5	72.00	27	42	27	46.33	3.4
Greene Springs .....	52.13	68.34	57.83	59.43	1	80	4	71.67	29	32	29	44.33	5.4
Greensborough (j) .....	53.12	67.25	58.64	59.67	1	80	4	72.33	17	39	30	49.67	7.2
MISSISSIPPI—													
Columbus .....	52.02	67.28	57.88	59.06	4	80	4	72.40	29	35	29	45.37	5.0
LOUISIANA—													
Black River .....	58.19	72.13	61.90	64.07	2	k 82	4	76.00	29	41	29	51.00	5.8
New Orleans (l) .....	70.65	74.45	74.77	73.29	2	m 84	11	82.67	29	57	29	61.00	---
TEXAS—													
Austin .....	62.30	74.02	62.29	66.20	3	89	3	81.91	17	45	16	57.50	6.0
New Braunfels .....	62.61	75.85	65.67	68.04	3	91	3	82.33	17	44	16	58.00	5.4
Union Hill .....	---	---	---	---	---	---	---	---	---	---	---	---	5.6
Washington .....	62.97	77.70	63.37	68.01	3	92	3	83.00	17	46	31	57.67	5.9
TENNESSEE—													
Glenwood .....	49.26	62.16	52.90	54.77	1	n 73	12	67.00	21	31	20	39.17	6.6
Memphis .....	54.00	66.10	57.23	59.11	10	o 79	11	71.00	29	36	20	45.00	5.5
KENTUCKY—													
Millersburg .....	49.29	60.48	54.26	54.68	10	p 74	13	67.33	21	30	20	40.00	6.2
Paris .....	44.90	58.27	49.55	50.91	10	73	12	65.00	21	25	20	36.00	5.9
Springdale (q) .....	44.44	63.45	57.08	54.99	11	80	5	68.00	21	22	20	39.00	6.2
OHIO—													
Belle Centre .....	43.58	55.78	45.57	48.31	11	70	12	63.00	21	24	20	31.00	4.9
Bellefontaine .....	45.48	60.90	47.06	51.15	11	73	12	65.00	21	26	20	34.67	7.1
Bowling Green (r) .....	43.23	56.61	48.10	49.31	10	72	12	64.00	28	26	20	s 34.00	---
Cincinnati, [Harper] .....	50.00	63.00	54.45	55.82	10	o 80	12	69.00	21	33	20	40.00	6.1
Cincinnati, [Hurt] .....	47.42	62.23	50.90	53.52	11	85	11	68.67	21	29	21	36.33	5.1
Cleveland .....	45.39	56.29	48.85	50.18	10	74	12	63.33	22	32	20	36.50	6.8
Collingwood .....	47.35	55.23	47.33	49.97	5	t 68	12	64.00	21	28	20	34.67	---
Edinburg .....	45.06	56.65	45.61	49.11	12	74	12	63.00	27	26	20	34.00	6.9
Hillsborough .....	46.52	55.02	50.48	50.67	5	66	12	62.70	21	s 32	20	37.33	5.5
Hiram .....	44.80	54.35	47.30	48.82	10	70	4	58.33	20	30	20	32.33	7.5
Jefferson .....	34.19	37.81	33.74	35.25	2	u 40	5	38.67	17	22	17	25.33	8.5
Lancaster (j) .....	45.35	55.38	49.31	50.01	10	71	12	62.67	21	26	21	36.67	6.5
Madison, [Atkins] .....	46.16	54.94	48.58	49.89	12	70	12	64.33	27	28	21	35.00	6.8
Madison, [Cunningham] .....	45.71	53.90	46.03	48.55	12	70	13	58.67	27	29	20	v 36.33	3.9
Medina .....	45.27	53.84	47.84	48.98	4	w 70	12	62.00	28	28	20	30.00	6.9
New Lisbon .....	46.35	58.30	50.00	51.55	---	69	13	65.00	---	30	20	38.00	4.2
Perrysburg (z) .....	45.97	58.03	48.71	50.90	12	74	12	68.00	28	29	20	35.00	---
Ripley (y) .....	47.55	61.14	51.67	53.45	11	71?	11	61.67	27	33	25	47.33	6.9
Savannah .....	44.26	58.39	47.84	50.16	4	77	12	66.00	21	23	20	32.33	7.0
Urbana .....	42.94	59.23	47.84	50.00	10	o 74	12	64.00	21	22	20	33.67	5.7

a Observations taken at 6 a. m., 2 p. m., and 9 p. m.

b Same temperature on the 14th.

c Same temperature on the 3d and 14th.

d Same temperature on the 15th.

e Same temperature on the 28th and 31st.

f Same temperature on the 31st.

g Hours of observation not reported.

h Same temperature on the 9th.

i Same temperature on the 30th.

j Imperfect.

k Same temperature on the 3d, 4th, 10th, and 11th.

l Observations taken at 9 a. m., noon, and 3 p. m.

m Same temperature on the 3d, 11th, and 19th.

n Same temperature on the 4th and 10th.

o Same temperature on the 11th.

p Same temperature on the 11th and 12th.

q Observations taken at 7 a. m., 2 p. m., and 5 p. m.

r Observations taken at sunrise, 2 p. m., and 9 p. m.

s Same temperature on the 27th.

t Same temperature on the 8th, 10th, 12th, and 13th.

u Same temperature on the 4th, 5th, 9th, 11th, 23d, 25th, and 30th.

v Same temperature on the 21st and 27th.

w Same temperature on the 10th.

x Observations taken at 7 a. m., 1 p. m., and 9 p. m.

y Observations at 2 p. m. often omitted.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°		°		°		°		°	
Welchfield .....	43.97	55.77	44.94	48.23	9	71	12	60.33	27	28	20	32.67	6.
Windham .....	44.97	55.29	47.71	49.32	7	a 70	13	60.67	22	26	20	33.00	---
MICHIGAN—													
Battle Creek .....	41.00	56.65	45.13	47.59	11	71	11	61.00	20	b 26	20	30.33	4.6
Cooper .....	44.81	51.74	43.19	46.58		c 68	13	60.00	20	26	20	30.00	1.9
Grand Rapids, [Currier] .....	39.03	54.77	42.81	45.54	11	75	11	63.33	28	d 26	20	30.33	4.4
Grand Rapids, [Streng] .....	39.19	56.80	41.87	45.95	11	75	5	59.67	27	23	20	29.00	5.8
Marquette .....	41.55	51.25	42.52	45.11	7	72	8	62.00	21	25	19	29.67	4.1
Monroe .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.7
New Buffalo .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.9
Port Huron .....	41.15	53.70	43.52	46.12	13	68	12	58.33	28	25	20	33.67	5.7
INDIANA—													
Evansville .....	50.10	61.16	53.39	54.88	13	78	11	67.67	21	31	20	38.33	5.7
Logansport (e) .....	45.00	59.00	51.00	52.00	?	75	-----	?	26	-----	-----	-----	-----
Michigan City .....	44.74	56.10	45.72	48.85	11	75	11	66.00	20	28	20	33.33	5.7
New Albany .....	47.10	60.90	49.16	52.39	11	77	1	65.50	21	24	21	36.33	6.0
New Harmony .....	40.45	62.33	52.26	51.68	11	76	11	67.67	21	29	20	37.33	5.3
Richmond (f) .....	42.65	56.21	46.94	48.60	11	g 70	12	64.00	21	26	20	36.20	5.8
ILLINOIS—													
Athens .....	45.10	61.90	46.42	51.14	11	84	11	68.67	20	24	20	31.67	5.4
Augusta .....	43.52	58.06	49.23	50.27	10	75	1	64.00	20	24	20	33.67	5.0
Aurora .....	46.65	59.06	50.00	51.90	11	73	11	66.00	20	24	20	35.00	5.2
Batavia .....	40.42	58.88	41.53	46.94	9	h 84	11	66.67	20	19	20	30.33	5.4
Brighton .....	43.77	59.29	54.84	52.63	1	81	1	76.00	30	27	19	i 33.03	1.4
Chicago .....	43.06	56.23	48.68	49.32	5	78	5	66.00	20	22	20	31.33	-----
Edgington .....	44.13	57.97	49.39	50.50	11	75	11	67.67	20	24	20	34.33	5.0
Fremont Centre .....	44.32	58.13	45.90	49.45	4	h 73	11	63.00	20	28	19	34.33	5.3
Manchester .....	44.94	60.87	48.84	51.55	1	h 78	10	h 65.00	20	24	20	33.00	4.9
Marengo .....	43.10	58.06	45.55	48.91	11	j 74	11	64.00	20	24	20	32.67	4.9
Ottawa .....	43.45	56.07	47.70	49.07	11	75	11	64.67	20	22	20	32.00	6.2
Pekin .....	43.71	60.58	47.65	50.65	11	78	11	65.00	20	23	20	34.00	4.5
Peoria .....	45.91	60.38	50.25	52.18	11	78	11	66.12	20	25	20	34.38	5.3
Riley .....	44.89	57.52	44.50	48.97	4	74	11	63.00	20	25	21	29.00	4.5
Warsaw .....	44.06	57.61	48.55	50.07	10	78	9	63.00?	20	27	20	37.00	5.2
West Salem .....	47.97	64.06	51.39	54.47	11	78	11	67.00	21	26	20	35.33	5.3
West Urbana .....	45.39	58.87	48.39	50.88	11	78	1	h 65.00	20	26	20	32.00	5.5
Winnebago .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.3
MISSOURI—													
Cape Girardeau (l) .....	48.81	62.26	53.08	54.60	10	75	2	65.25	29	30	20	38.75	5.3
St. Joseph (m) .....	45.02	58.52	48.45	50.38	1	74	7	n 63.75	20	24	20	34.25	4.5
St. Louis .....	48.74	62.21	52.85	54.60	1	81	1	71.00	20	30	20	37.33	5.2
Springfield (o) .....	46.81	60.44	53.45	53.57	1	76	-----	?	20	28	-----	?	5.6
WISCONSIN—													
Appleton .....	41.11	53.95	43.94	46.33	11	71	11	59.00	31	24	19	p 33.00	4.6
Bay City .....	37.00	45.19	40.94	41.04	10	68	11	60.33	19	q 24	21	32.00	3.4
Beloit .....	41.61	55.74	44.67	47.34	11	75	11	61.67	20	23	20	31.00	4.2
Janesville .....	43.81	56.35	46.52	48.89		n 74	10	64.00	20	27	20	33.33	5.3
Kenosha .....	45.06	53.31	46.37	48.25	11	65	11	60.33	20	25	20	32.67	4.4
Lind .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.6
Madison, [Sterling] .....	42.74	51.48	46.03	46.75	11	72	11	60.67	19	r 27	19	32.00	5.7
Manitowoc .....	40.61	53.19	44.52	46.11	5	66	11	57.67	20	24	20	33.33	6.2
Menasha .....	40.58	55.42	45.26	47.09	8	79	11	63.67	20	24	20	31.00	4.0
Milwaukee, [Lapham] .....	40.32	53.07	-----	46.69	11	64	5	58.50	20	23	20	31.00	-----
Milwaukee, [Pomeroy] .....	42.52	50.74	44.06	45.77	12	68	1	57.00	20	25	31	32.33	6.0

a Same temperature on the 9th.

b Same temperature on the 21st.

c Same temperature on the 8th.

d Same temperature on the 29th.

e Observations taken at sunrise, noon, and sunset.

f For the first 24 days of the month only.

g Same temperature on the 13th.

h Same temperature on the 11th.

i Same temperature on the 30th.

j Same temperature on the 13th.

k Same temperature on the 5th and 11th.

l Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 54.24.

m Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 49.53.

n Same temperature on the 10th.

o Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

p Same temperature on the 29th, 30th, and 31st.

q Same temperature on the 20th and 21st.

r Same temperature on the 20th.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Milwaukee, [Winkler] -----	43. 13	54. 23	43. 06	46. 81	6	69	5	59. 67	20	24	20	29. 67	5. 2
New London -----	37. 29	52. 94	40. 94	43. 72	10	73	10	61. 00	31	23	31	28. 67	3. 3
Platteville -----	44. 80	57. 48	49. 61	50. 63	?	75		?	?	23			5. 5
Waukesha, [Bean] -----	43. 06	54. 77	44. 97	47. 60	11	71	11	63. 00	20	24	20	31. 33	5. 6
IOWA—													
Pelleve -----	41. 19	59. 93	45. 45	48. 86	6	a 75	5	63. 00	20	20	20	32. 00	5. 6
Border Plains -----	45. 23	56. 90	46. 58	49. 57	7	79	1	71. 33	18	b 26	18	33. 67	6. 1
Dubuque -----	46. 13	55. 97	45. 92	49. 34	10	71	10	60. 67	20	23	20	32. 33	5. 3
Fairfield -----	44. 55	55. 96	48. 03	49. 51	10	75	9	c 63. 00	20	24	30	30. 00	5. 5
Fort Madison (d) -----	44. 03	57. 35	50. 52	50. 30	10	75	1	64. 00	20	22	20	32. 33	5. 1
Franklin -----	44. 26	56. 74	46. 33	49. 11	10	75	10	66. 33	19	24	19	32. 67	5. 7
Muscatine -----	41. 35	55. 58	46. 42	47. 78	8	74	5	61. 67	20	22	20	32. 00	4. 0
Pleasant Plain -----	43. 35	57. 42	46. 77	49. 18	9	75	10	62. 00	20	22	20	32. 33	5. 2
MINNESOTA—													
Hazlewood -----	42. 19	55. 50	44. 32	47. 34	10	73	9	66. 00	19	24	19	27. 67	4. 9
Princeton -----	41. 49	53. 26	44. 45	46. 40		e 72	7	f 64. 00	20	20	19	30. 00	5. 1
NEBRASKA—													
Bellevue, [Burt] -----	43. 26	56. 77	45. 81	48. 61	9	a 72		64. 00	20	20	29	33. 33	---
Bellevue, [Hamilton] (g) -----	45. 92	54. 87	47. 06	49. 28	9	74		64. 67	27	h 30	27	33. 00	4. 9
Omaha -----													5. 1
KANSAS—													
Lawrence -----	48. 76	62. 02	52. 15	54. 31	1	i 76	10	67. 00	20	28	21	40. 33	4. 1
DACOTA—													
Fort Union -----	34. 20	58. 00	43. 80	45. 30	5	j 76	7	64. 00	19	90	19	27. 3	1. 1
UTAH—													
Great Salt Lake City (h) -----	44. 48	63. 48	50. 48	53. 01		86	1	72. 25	27	28	27	41. 75	7. 1
MEXICO—													
Mirador (i) -----	74. 59	82. 55	75. 01	77. 38				81. 72				71. 50	---
CENTRAL AMERICA—													
Guatemala -----				65. 75		82				54			---
CALIFORNIA—													
Sacramento -----	55. 20	67. 77	61. 52	61. 50	16	79	16	68. 00	19	49	25	56. 00	2. 1
San Francisco -----	57. 45	68. 19	59. 13	61. 59	14	m 85	15	73. 67	23	n 52	24	55. 67	3. 4
SOUTH AMERICA—													
Catharina Sophia, Surinam (o) -----	75. 94	89. 06	84. 29	84. 43	5	92	18	85. 33		71	22	80. 33	3. 4
AZORES—													
Horta, Fayal -----	61. 00	64. 48	60. 71	62. 06		71	10	68. 67	26	p 54	27	56. 33	6. 4

a Same temperature on the 10th.

b Same temperature on the 20th and 30th.

c Same temperature on the 11th.

d Observations taken at 6 a. m., noon, and 7 p. m.

e Same temperature on the 9th.

f Same temperature on the 8th and 10th.

g Observations taken at 6 a. m., 2 p. m., and 9 p. m.

h Same temperature on the 28th and 29th.

i Same temperature on the 2d.

j Same temperature on the 7th.

k Observations taken at sunrise, 9 a. m., 3 and 9 p. m. Mean at 9 a. m., 53.58

l Observations taken at 7 a. m., 2 p. m., and 8 p. m.

m Same temperature on the 15th.

n Same temperature on the 24th.

o Observations taken at 6 a. m., 2 p. m., and 6 p. m.

p Same temperature on the 27th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) -----	35.46	-----	36.60	36.03	?	67	8	56.00	?	3	25	10.00	-----
Montreal -----	33.71	39.68	36.60	36.67	9	61	9	57.16	25	6	25	11.00	7.9
Moose Factory -----	-----	-----	-----	16.80	-----	-----	-----	-----	-----	-----	-----	-----	-----
Red River Settlement -----	19.10	22.11	17.88	19.70	4	38	2	33.33	22	—15	22	— 5.67	?
Rigolet (o) -----	19.13	-----	23.13	21.13	24	39	24	36.00	30	— 2	30	3.00	-----
St. John's -----	37.00	40.43	37.23	38.22	11	c 54	7	d 48.33	30	18	30	20.67	-----
St. Martin -----	29.71	38.93	32.83	33.82	9	64	9	55.00	25	1	25	7.90	6.2
Stanbridge -----	32.73	39.53	35.37	35.88	9	69	9	61.33	25	3	25	7.33	7.5
Toronto (e) -----	31.20	36.99	32.82	33.67	6	58	6	49.92	25	— 2	25	11.00	6.7
Windsor -----	37.05	43.05	38.80	39.63	10	69	10	63.20	26	14	26	16.20	7.6
Wolfville -----	38.52	44.08	40.02	40.87	10	69	10	66.67	26	15	26	17.67	6.0
MAINE—													
Cornish, [Guptill] -----	33.33	40.40	35.67	36.47	10	61	8	52.00	25	f 10	25	13.67	6.0
Cornish, [West] -----	29.83	39.73	33.96	34.51	6	61	6	53.00	25	8	25	11.00	5.6
Gardiner -----	33.30	42.50	37.10	37.63	8	g 57	6	54.33	25	13	25	17.00	6.2
Monson -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.5
Perry -----	34.83	40.50	35.33	36.89	7	54	10	48.67	27	9	27	12.33	5.7
Portland -----	35.60	44.40	39.14	39.71	8	60	10	56.33	26	13	25	19.33	6.4
Steuben -----	33.30	42.00	36.47	37.26	10	56	10	52.00	26	9	26	14.67	6.5
NEW HAMPSHIRE—													
Claremont -----	31.97	41.97	35.63	36.52	7	68	6	58.67	25	12	25	13.67	6.0
Concord -----	34.69	47.11	39.77	40.52	8	67	6	57.67	21	17	21	26.67	6.2
Francetown, [Bixby] -----	33.80	43.39	37.37	38.19	6	64	6	59.67	25	13	25	15.33	5.4
Manchester -----	31.28	45.19	39.07	38.51	6	66	6	61.33	26	12	25	21.33	4.8
North Barnstead -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.0
Shelburne -----	32.03	41.20	35.33	36.19	10	63	9	g 50.00	25	8	25	11.00	7.1
West Enfield -----	31.40	39.87	33.80	35.02	6	62	6	55.33	25	8	25	8.00	6.3
VERMONT—													
Brandon -----	32.87	41.78	35.92	36.86	9	68	10	63.00	25	10	25	11.83	6.6
Craftsbury -----	29.37	36.67	32.87	32.97	9	61	9	55.00	25	— 2	25	2.67	7.2
Norwich (h) -----	25.89	37.42	31.95	31.75	19	52	19	45.67	25	11	25	12.67	7.1
Rupert -----	35.63	45.93	42.00	41.19	9	72	9	68.67	24	7	25	12.67	8.0
St. Johnsbury -----	30.66	40.52	34.69	35.29	9	64	9	56.00	25	7	25	8.67	6.9
Shelburn -----	32.39	40.30	36.68	36.46	9	68	9	62.00	25	5	25	11.00	7.2
West Fairlee -----	30.77	39.90	35.36	35.34	7	61	7	52.67	26	9	9	10.67	-----
MASSACHUSETTS—													
Amherst -----	32.47	45.69	38.54	38.90	9	67	6	60.80	26	13	25	16.90	5.0
Bridgewater (i) -----	38.46	48.95	43.80	43.74	9	70	9	61.33	15	20	25	25.33	4.8
Cambridge -----	37.03	47.27	40.57	41.62	9	72	6	63.33	25	f 14	25	18.33	5.3
Canton -----	33.17	46.00	37.90	39.02	9	67	6	58.67	25	f 13	25	17.00	5.3
Florida -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.9
Lawrence -----	34.73	46.53	38.96	40.07	7	70	6	61.67	26	13	25	18.33	4.8
Mendon -----	36.10	45.73	37.63	39.82	10	68	7	62.67	27	12	26	17.33	5.3
Nantucket -----	44.32	56.90	45.52	48.91	10	64	9	61.00	25	22	25	26.67	4.4
New Bedford -----	39.40	48.60	41.50	43.17	9	66	10	61.70	25	15	25	19.80	5.4
Newbury port -----	40.24	46.67	40.93	42.61	6	70	6	64.33	25	15	-----	?	?
Princeton -----	32.49	41.43	35.75	36.56	6	64	6	59.00	25	10	25	12.33	5.3
Richmond -----	29.97	42.93	35.53	36.14	7	68	7	56.67	25	11	25	9.33	6.6
Westfield -----	32.27	45.40	37.60	38.42	6	67	6	61.67	26	12	25	15.67	5.1
Weymouth -----	39.27	-----	42.90	41.08	10	65	6	59.50	25	f 16	25	f 20.00	3.3
Williamstown -----	33.97	41.39	36.63	37.33	9	66	9	62.67	25	10	25	12.67	5.7
Worcester -----	36.33	46.70	40.89	41.31	9	68	6	62.33	25	f 15	25	19.00	5.5
RHODE ISLAND—													
Providence (j) -----	37.6	48.7	40.6	42.3	9	70	6	61.67	25	16	25	19.33	4.3
CONNECTICUT—													
Columbia -----	36.20	48.01	37.40	40.54	7	71	9	62.00	26	10	25	16.33	5.0
New London -----	38.67	47.93	41.27	42.62	7	66	7	59.67	25	15	25	20.33	4.6

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at sunrise and sunset.

c Same temperature on the 21st.

d Same temperature on the 11th and 23d.

e Observations taken at 6 a. m., 2 p. m., and 10 p. m.

f Same temperature on the 26th.

g Same temperature on the 10th.

h For the last 19 days of the month only.

i Observations taken at 7 a. m., 2 p. m., and 7 p. m.

j Observations taken at sunrise, 1 p. m., and 10 p. m.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	■		°		°		°		■	
Norwich	35.29	48.80	41.50	41.86	9	71	■	65.00	26	8	25	18.67	3.6
Pomfret	34.67	45.45	37.87	39.33	■	■	9	59.60	26	12	25	14.20	5.1
Saybrook	38.80	46.47	41.80	42.36	9	62	9	59.33	21	15	25	19.67	4.8
Wallingford	33.80	48.20	33.30	38.43	■	68	6	59.83	27	■	26	16.67	4.1
NEW YORK—													
Baldwinsville	33.23	39.97	35.53	36.24	9	60	6	55.00	25	9	25	15.00	7.1
Beverly	36.62	45.68	39.57	40.62	■	68	9	64.33	25	13	25	16.67	5.2
Blackwell's Island	40.10	49.97	43.93	44.67	■	69	9	65.67	25	19	25	22.33	6.0
Canton	33.81	41.11	34.67	36.53	9	62	9	62.67	25	— 1	25	7.00	7.8
Cazenovia	32.33	35.36	33.30	33.66	9	70	8	60.33	25	5	25	10.67	7.3
Clinton	33.67	43.23	35.03	37.31	9	76	9	68.33	25	1	25	8.00	7.3
Eden	34.03	39.33	35.53	36.30	8	69	8	63.33	26	— 4	26	10.67	6.8
Fishkill Landing	36.03	46.27	40.90	41.07	9	70	9	64.67	25	a 16	25	18.67	4.9
Flatbush	37.80	47.90	40.60	42.10	9	67	9	62.00	26	19	25	20.90	4.3
Fort Edward	33.59	44.53	37.60	38.57	■	68	9	62.00	25	■	25	14.67	6.9
Logansport	30.00	41.00	35.00	35.00	?	65	—	—	—	— 1	—	—	—
Lowville	—	—	—	35.00	■	70	9	59.25	25	4	24	35.00	—
Madrid	32.37	40.77	35.08	36.07	■	65	9	60.90	25	—	24	20.67	7.0
Morrisania	37.63	52.10	40.00	43.24	■	79	■	66.33	25	15	25	17.33	4.3
New York city	39.49	50.06	44.38	44.64	9	69	■	64.33	25	19	25	21.50	4.4
Nichols	29.80	43.07	33.90	35.59	8	b 72	9	68.33	25	■	25	13.67	6.2
Oswego	33.77	41.93	36.47	37.39	■	62	■	57.00	25	11	25	17.00	8.0
Ovid	35.03	41.53	36.63	37.73	8	69	8	64.00	25	11	25	15.33	6.7
Penn Yan	33.80	43.53	37.17	38.17	9	69	8	60.33	25	9	25	15.00	7.0
Pompey	32.27	37.17	32.90	34.11	■	70	■	61.67	25	3	25	8.67	6.8
Rochester, [Harkness]	34.90	41.30	36.60	37.60	—	65	—	—	—	11	—	—	—
Rochester, [Palmer]	34.20	40.70	36.90	37.27	8	66	8	61.00	25	11	25	14.67	7.6
Sag Harbor	40.43	51.87	43.93	45.41	7	b 70	7	63.67	25	a 21	25	23.33	4.4
Saratoga	33.25	43.92	36.71	37.96	9	69	9	61.33	25	10	25	15.00	3.7
Spencertown	32.17	39.53	34.60	35.43	9	66	6	60.00	25	6	25	8.00	5.2
Townsendville	32.66	41.10	34.55	36.10	8	64	8	59.33	25	■	25	13.67	7.1
Wampsville	33.43	42.63	34.70	36.92	9	76	9	63.33	25	6	25	13.00	7.2
Waterford	34.03	46.38	37.28	39.29	■	70	9	65.00	25	11	25	17.33	6.0
Wellsville	32.47	42.73	36.23	37.14	8	69	8	64.00	27	10	20	18.33	7.2
NEW JERSEY—													
Bloomfield	36.32	48.95	38.82	41.36	■	73	9	66.83	26	15	25	19.83	3.7
Burlington	36.57	50.59	41.00	42.72	■	c 75	10	68.33	26	14	25	22.00	3.9
Freehold	37.10	51.96	41.19	43.42	■	77	■	67.33	26	11	25	21.33	—
Lambertville	33.84	50.92	38.92	41.23	9	75.5	■	69.07	26	10.2	25	19.77	5.3
Newark (d)	—	—	—	41.71	9	73	9	64.88	26	16	25	22.00	—
Sergeantsville	34.73	54.97	40.67	43.46	■	89	■	76.67	26	12	25	a 23.00	4.1
PENNSYLVANIA—													
Bedford (e)	31.45	45.73	35.27	37.48	7	73	9	65.00	26	5	26	16.00	5.6
Cannonsburg	35.00	43.30	38.30	38.87	7	76	7	64.67	24	11	20	14.67	6.2
Chromedale	34.92	49.10	38.46	40.83	9	74	9	69.00	26	11	25	19.70	4.9
Easton	32.80	45.20	37.03	38.34	■	72	■	68.20	26	9	25	15.67	6.3
Fleming	30.33	42.96	34.53	35.94	■	72	9	64.00	26	5	25	14.33	4.9
Gettysburg	31.17	46.50	36.80	38.16	7	79	9	71.00	26	4	25	16.67	4.6
Harrisburg, [Heisely]	38.50	48.52	43.40	43.47	9	74	9	72.00	26	19	25	24.67	4.4
Harrisburg, [Hickok]	36.40	47.58	41.17	41.72	9	72	9	70.33	26	16	25	21.17	5.4
Lewisburg	31.11	44.46	35.94	37.17	9	71	■	67.13	26	8	25	16.13	5.9
Meadville	29.33	41.23	32.70	34.42	■	66	8	62.33	25	— 10	25	4.67	6.6
Morrisville	35.63	50.90	40.43	42.32	9	73	9	67.00	26	14	25	21.00	3.1
Mount Joy	35.92	49.40	41.28	42.20	8	75	9	71.50	26	11	25	19.50	3.5
Murrysville	32.17	43.07	35.00	36.75	7	75	7	64.33	26	■	25	13.00	6.1
Nazareth	33.27	44.11	35.30	37.56	9	63	9	61.00	26	12	25	17.00	5.7
Norristown	36.03	48.13	39.70	41.29	9	74	9	65.70	26	14	25	19.70	4.2
North Whitehall (f)	34.23	46.63	43.00	41.29	■	75	9	71.00	21	g 15	25	18.33	3.6
Paradise	—	—	—	34.00	—	—	—	—	—	—	—	—	—

a Same temperature on the 26th.

b Same temperature on the 9th.

c Same temperature on the 10th.

d Observations taken at 7 a. m. and 6 p. m.

e Imperfect.

f Observations taken at sunrise, noon, and sunset.

g Same temperature on the 25th and 27th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°		°		°		°			
Philadelphia	40.38	52.53	44.67	45.86	9	77	9	72.33	26	20	25	24.33	4.8
Pittsburg, [Martin]	33.14	44.57	40.24	40.98	7	72	8	63.00	24	a 15	25	18.00	6.6
Pocopsen	35.63	50.53	39.37	41.84	9	76	9	66.67	26	12	25	19.33	4.5
Shamokin	30.60	44.27	40.13	38.33	9	70	9	68.67	26	4	25	16.00	5.0
Tarentum	33.10	45.03	36.31	38.15	7	77	7	64.33	25	b 6	25	14.00	6.1
West Haverford	39.13	51.00		45.06	9	76	9	72.00	26	18	25	22.00	3.8
Westtown	35.12	48.46	39.51	41.03	9	73	9	68.00	26	10	25	19.07	3.9
DELAWARE—													
Georgetown (c)	42.60	56.10	47.23	48.64	7	80	9	73.00	25	22	25	b 25.33	---
Newark	38.61	54.15	43.04	45.27	9	78	9	71.67	26	16	25	22.00	4.3
MARYLAND—													
Annapolis	37.50	50.70	45.90	44.70	9	71	9	67.16	26	15	26	25.67	3.8
Baltimore (e)	42.09	52.72	44.71	46.51	9	77	9	70.41	26	17	25	25.00	---
Frederick	35.33	47.27	38.86	40.49	9	73	9	70.50	26	14	25	22.00	4.4
Sykesville	32.13	49.27	38.27	39.89	8	d 75	9	69.33	26	5	26	17.67	3.7
DISTRICT OF COLUMBIA—													
Washington, [Smith. In.] (e)	33.22	52.16	41.57	42.32	8	76	---	?	26	15	---	?	3.4
VIRGINIA—													
Alexandria	38.57	54.00	43.93	45.50	9	79	9	73.67	26	15	25	24.00	3.8
Ashland	33.13	48.33	37.17	39.54	7	80	7	65.00	26	10	20	18.33	4.8
Berryville	35.30	49.00	40.20	41.50	9	76	9	68.70	26	11	26	20.60	4.6
Crichton's Store (f)	44.92	55.32	51.54	50.59	8	82	8	74.76	26	23	20	27.67	2.9
Lewisburg	31.53	45.77	35.47	37.59	7	74	8	64.00	20	g 10	20	15.00	5.5
Meadow Dale	34.43	45.23	40.30	39.99	7	72	8	64.33	20	b 6	20	10.00	---
Montross	39.60	55.57	44.63	46.60	10	79	9	h 72.33	27	14	27	22.00	3.2
Mosby Creek	32.56	52.60	34.06	39.74	7	80	8	68.67	26	4	20	16.33	4.5
Portsmouth	42.53	58.33	46.30	49.05	7	82	8	73.67	27	20	26	27.33	2.3
Rose Hill (e)	43.67	54.72	51.91	50.10	7	80	7	73.33	23	26	25	28.83	3.9
Rougmont	36.86	51.10	41.93	43.30	8	81	9	74.67	26	14	20	19.33	4.1
Ruthven (i)	31.21?	45.00?	32.75?	36.32?	---	?	---	?	---	?	---	?	?
Salem													4.6
Sistersville	33.02	45.39	37.93	38.78	7	79	7	65.50	26	12	20	17.62	5.3
Smithfield	39.60	59.50	47.20	48.77	7	81	7	72.30	27	16	26	28.50	3.7
Winchester	35.50	51.37	39.23	42.03	8	79	8	69.67	26	12	25	21.00	3.5
Wirt Court-House	32.47	45.30	37.63	38.47	7	76	7	j 63.67	26	9	20	17.00	5.7
NORTH CAROLINA—													
Chapel Hill	40.27	56.43	45.83	47.51	7	82	9	72.67	20	k 21	21	25.33	4.2
Davidson College	37.77	48.03	42.10	42.63	29	63	---	?	21	18	21	29.17	3.1
Gaston	41.87	58.90	42.77	47.85	8	81	8	76.67	26	21	20	26.67	---
Murfreesborough	41.33	57.57	47.00	48.63	7	81	9	73.00	26	l 22	26	28.67	2.1
Warrenton	43.26	56.20	49.26	49.57	7	m 79	8	d 75.00	26	l 22	20	28.00	3.6
SOUTH CAROLINA—													
Aiken	45.43	63.24	49.30	52.66	7	83	8	72.67	20	19	20	24.00	4.0
All Saints	50.47	60.36	53.27	54.70	8	80	8	74.67	21	30	20	33.00	3.9
Camden	41.90	62.36	48.03	50.76	6	90	8	77.33	21	17	20	25.33	4.1
Charleston, [Dawson]	53.46	62.40	57.70	57.85	?	77	---	?	?	29	---	---	---
Charleston, [Johnson]	53.47	62.40	57.73	57.87	8	d 77	8	d 74.00	20	29	20	34.33	---
GEORGIA—													
Hillsborough	44.37	58.07	48.99	50.48	7	80	7	71.77	20	19	20	24.20	4.7
Savannah	51.20	64.40	56.90	57.50	8	79	8	75.17	21	27	20	33.53	4.1
Sparta	45.47	61.00	51.00	52.49	7	84	7	n 74.00	20	20	20	25.67	4.5
The Rock	44.83	57.60	52.00	51.48	7	80	8	71.00	20	o 20	20	24.67	5.1
Whitemarsh Island	51.27	63.27	56.10	56.88	8	78	8	73.33	21	26	20	32.67	3.8
Zebulon	50.41	57.13	52.95	53.50	7	82	7	76.00	20	24	20	27.33	5.4
FLORIDA—													
Alligator	52.30	70.60	58.70	60.53	6	p 86	8	78.33	21	27	20	35.33	3.8

a Same temperature on the 25th.  
 b Same temperature on the 26th.  
 c Observations taken at 8 a. m., 1 p. m., and 6 p. m.  
 d Same temperature on the 9th.  
 e Imperfect.  
 f Observations taken at 9 a. m., noon, and 5 p. m.  
 g Same temperature on the 6th.  
 h Same temperature on the 10th.

i For the last 17 days of the month only.  
 j Same temperature on the 7th.  
 k Same temperature on the 22d and 26th.  
 l Same temperature on the 27th.  
 m Same temperature on the 8th and 9th.  
 n Same temperature on the 8th.  
 o Same temperature on the 21st.  
 p Same temperature on the 7th and 8th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
FLORIDA—Continued.	°	°	°	°		°		°		°		°	
Atsena .....	58.97	67.27	63.63	63.29	8	79	8	75.67	21	34	20	40.00	2.4
Belair .....	53.80	70.87	61.23	61.97	■	a 89	8	81.33	21	26	21	35.67	3.4
Gainesville .....	52.40	71.55	59.00	60.98	■	86	■	78.00	21	25	21	36.00	3.3
St. Augustine .....	63.10	69.70	64.43	65.74	■	83	■	78.90	21	39	21	44.67	3.8
Salt Ponds .....	72.17	77.17	---	74.67	15	b 85	15	c 81.33	21	59	21	61.33	3.2
Warrington .....	56.43	67.13	58.53	60.70	7	82	7	79.00	21	32	21	36.67	3.1
ALABAMA—													
Ashville (d) .....	---	---	---	46.27	---	---	7	71.00	---	---	21	27.00	---
Auburn .....	48.03	58.20	51.62	52.62	7	82	7	74.67	20	23	20	28.00	4.6
Carlownville .....	48.07	58.63	50.50	52.40	■	e 78	6	75.67	20	26	20	27.67	5.3
Greene Springs .....	44.83	59.93	49.20	51.32	7	81	7	75.00	21	22	20	29.00	5.0
Greensborough .....	45.57	61.15	50.22	52.31	7	82	7	75.67	20	23	20	30.00	4.2
MISSISSIPPI—													
Columbus .....	44.10	57.00	49.01	50.04	6	80	7	75.33	21	23	20	29.37	4.6
LOUISIANA—													
Black River .....	47.37	64.77	53.77	55.30	■	85	■	79.33	20	f 24	20	33.67	4.5
TEXAS—													
Austin .....	50.18	64.96	55.16	56.77	5	84	6	77.68	9	33	15	42.83	4.9
New Braunfels .....	50.04	67.54	58.15	58.58	5	86	5	79.67	19	31	19	42.67	4.0
Washington .....	52.39	68.35	55.32	58.69	5	90	6	81.00	20	f 32	■	44.33	4.6
TENNESSEE—													
Glenwood .....	39.37	49.56	42.94	43.99	■	75	6	71.67	19	g 20	19	22.33	5.9
Memphis .....	42.13	52.97	46.70	47.27	■	80	6	74.33	20	24	20	29.00	4.5
KENTUCKY—													
Danville .....	39.10	52.60	43.37	45.02	7	77	7	74.33	19	16	19	20.67	4.4
Paris .....	34.90	45.59	38.83	39.77	7	74	7	68.33	26	14	20	19.00	6.0
Springdale (h) .....	34.15	48.03	43.10	41.76	7	73	7	67.33	26	10	20	19.00	5.7
OHIO—													
Belle Centre .....	30.90	42.06	35.30	36.09	■	68	■	61.67	25	—15	25	1.67	6.0
Bellefontaine .....	31.74	44.37	35.42	37.18	■	70	8	61.67	26	—4	25	7.60	7.5
Bowling Green .....	29.83	42.13	35.47	35.81	8	70	■	62.00	25	—8	25	5.33	---
Cincinnati, [Harper] .....	36.27	49.53	40.70	42.17	6	71	6	64.67	23	12	20	18.33	6.0
Cincinnati, [Hurt] .....	33.20	46.43	37.00	38.88	5	76	5	62.00	24	i 10	25	16.00	5.2
Cleveland .....	31.90	41.20	35.10	36.07	8	69	8	61.33	26	—4	24	j 12.33	7.0
Collingwood .....	30.60	40.03	33.43	34.69	8	68	8	60.00	25	—6	26	4.00	---
Edinburg .....	29.00	41.70	33.07	34.59	8	67	8	62.67	26	—10	25	i 10.00	6.4
Gallipolis .....	34.60	47.13	40.67	40.60	7	80	7	70.00	26	11	20	27.00	---
Hillsborough, [Mathews] .....	33.53	41.57	37.33	37.48	7	69	7	63.80	24	9	20	j 13.30	5.5
Hiram .....	30.80	39.47	33.30	34.52	8	65	8	61.33	25	5	25	10.33	6.3
Jackson .....	32.53	44.62	38.30	33.48	7	76	7	68.00	26	10	25	20.33	5.2
Jefferson .....	18.60	28.73	20.73	22.69	7	40	7	34.00	28	6	28	8.00	10.0
Lancaster (k) .....	33.95	47.55	39.80	40.43	7	75	7	?	25	■	25	?	5.8
Madison, [Atkins] .....	32.63	39.80	35.40	35.94	■	66	8	62.33	24	6	24	14.33	6.0
Madison, [Cunningham] .....	32.50	39.85	33.54	35.30	8	65	8	61.67	26	3	26	14.33	7.0
Medina .....	32.07	41.67	34.38	36.04	■	66	8	63.33	26	—7	24	10.33	6.5
New Lisbon .....	33.00	46.63	36.43	38.69	---	75	8	67.00	---	■	25	12.67	4.9
Oberlin .....	31.07	42.25	34.17	35.83	8	69	■	61.33	26	—6	25	9.67	5.8
Perrysburg (l) .....	31.00	43.20	35.30	36.50	8	70	■	62.00	25	—7	25	3.67	---
Ripley (m) .....	34.23	---	38.83	---	8	64	7	62.00?	26	13	25	16.00?	5.8
Savannah .....	28.30	41.93	33.53	34.59	■	69	9	64.67	27	—10	25	5.00	6.7
Urbana .....	29.00	43.60	33.50	35.37	■	70	8	61.67	26	—11	25	1.00	6.6
Welchfield .....	29.50	40.43	32.00	33.98	8	65	8	61.33	26	1	26	10.33	5.3
Windham .....	30.00	41.40	33.13	34.84	9	64	9	60.67	26	—6	26	11.00	---
MICHIGAN—													
Battle Creek .....	25.30	39.70	31.73	32.24	5	62	5	55.33	25	—16	25	3.00	6.0
Cooper .....	32.37	37.13	31.73	33.74	6	62	5	e 53.33	25	7	23	18.00	5.2

a Same temperature on the 8th.  
b Same temperature on the 16th.  
c Same temperature on the 16th and 17th.  
d Hours of observation not reported.  
e Same temperature on the 6th.  
f Same temperature on the 21st.  
g Same temperature on the 24th.

h Observations taken at 7 a. m., 2 p. m., and 5 p. m.  
i Same temperature on the 26th.  
j Same temperature on the 25th.  
k Imperfect.  
l Observations taken at 7 a. m., 1 p. m., and 9 p. m.  
m Observations rarely taken at 2 p. m.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°		°		°		°		°	
Grand Rapids, [Currier] . . .	28.73	35.28	31.63	31.88	5	60	5	53.33	25	—11	25	6.67	5.9
Grand Rapids, [Streng] . . .	27.20	37.00	31.13	31.78	4	a 60	5	53.67	25	—13	25	5.33	7.2
Marquette . . . . .	25.84	31.52	28.31	28.56	8	54	5	46.63	22	0	22	1.5	6.6
Monroe . . . . .													4.8
New Buffalo . . . . .													7.9
Port Huron . . . . .	28.18	37.73	29.98	31.96	8	67	8	59.33	25	—3	25	7.67	6.6
INDIANA—													
Evansville . . . . .	41.50	49.30	44.00	44.93	5	b 69	7	65.67	23	c 17	23	23.00	4.8
Logansport (d) . . . . .	30.00	41.00	35.00	35.00	?	65			?	—1			—
Michigan City . . . . .	29.98	39.62	32.34	33.98	5	64	5	56.67	25	0	25	10.67	6.8
New Albany (e) . . . . .	36.81	48.86	38.93	41.53	7	70	7	65.67	19	15	20	18.67	6.7
New Harmony . . . . .	36.47	46.53	40.30	41.10	5	71	7	66.67	25	11	23	20.33	5.5
Richmond . . . . .	31.53	42.68	36.58	36.93	5	65	5	61.67	26	—0	25	10.80	6.3
ILLINOIS—													
Athens . . . . .	28.33	42.30	33.40	34.68	5	67	5	58.67	25	—7	23	5.00	6.3
Augusta . . . . .	28.56	39.10	33.70	33.79	5	63	5	58.67	23	—2	23	5.67	5.5
Aurora . . . . .	28.47	39.13	32.07	33.22	4	62	5	54.33	23	0	23	8.00	6.0
Batavia . . . . .	24.06	37.26	27.88	29.73	4	66	4	a 52.00	25	—12	19	8.67	5.9
Brighton . . . . .	26.67	37.60	30.43	31.57	6	59	6	45.33	23	1	23	5.33	3.2
Chicago (f) . . . . .	26.10	34.63	32.31	31.01	5	61	5	56.67	23	—3	23	1.33	—
Edgington . . . . .	26.23	37.18	30.80	31.40	4	66	5	a 59.00	26	—7	23	6.00	5.9
Fremont Centre . . . . .	26.26	36.07	28.50	30.28	1	g 54	4	47.33	23	0	23	5.67	6.0
Manchester (h) . . . . .	29.03	43.27	32.27	34.86	4	65	4	57.33	23	1	23	6.00	5.5
Marengo . . . . .	26.73	37.27	28.60	30.87	4	60	5	50.67	23	i —4	23	4.00	5.8
Ottawa . . . . .	26.67	37.10	31.82	31.86	4	60	5	54.67	25	—4	23	3.67	6.3
Pekin . . . . .	28.33	39.13	31.86	33.11	4	a 62	5	58.00	25	—7	23	4.33	6.1
Peoria . . . . .	29.28	40.96	35.33	35.19	4	63	5	58.00	25	—2	23	5.41	5.9
Riley . . . . .	22.35	35.33	26.32	28.00	4	60	4	a 51.33	25	—17	25	0.33	5.1
Warsaw . . . . .	30.60	40.83	36.13	35.85	5	61	5	57.33	23	2	23	10.00	5.5
West Salem . . . . .	34.67	47.47	38.67	40.27	5	74	5	65.33	23	8	23	14.00	5.5
West Urbana . . . . .	31.77	39.43	36.33	35.84	6	69	6	61.67	25	—2	23	6.00	5.7
Winnebago . . . . .													5.7
MISSOURI—													
Cape Girardeau (j) . . . . .	37.38	48.43	42.72	42.13	5	73	7	68.25	19	18	19	20.37	5.0
St. Joseph (k) . . . . .	30.17	40.72	33.38	34.35	4	62	4	56.25	23	4	23	14.37	4.4
St. Louis . . . . .	33.80	44.80	38.60	39.07	5	67	5	60.17	23	11	23	13.50	6.0
Springfield (l) . . . . .	32.45	46.48	43.74	40.89	6	77	6	66.00	19	m 14	—	?	3.7
WISCONSIN—													
Appleton . . . . .	25.37	33.47	29.30	29.38	4	n 52	4	48.67	25	—8	25	2.33	6.1
Bay City . . . . .	21.07	28.67	23.00	24.25	1	46	4	a 41.33	25	—11	22	5.67	5.9
Beloit . . . . .	25.90	35.20	28.76	29.95	4	61	4	53.00	25	—20	25	—2.00	3.8
Janesville . . . . .	26.83	36.17	30.13	31.04	4	62	4	53.00	25	—10	25	1.33	6.8
Kenosha . . . . .	27.44	36.62	31.30	31.79	5	61	5	54.33	23	—1	23	5.00	5.1
Lind . . . . .													5.9
Madison, [Sterling] . . . . .	26.37	33.14	28.70	29.40	4	57	4	50.33	23	—3	23	5.00	6.2
Manitowoc . . . . .	28.17	38.00	32.63	32.93	5	58	5	52.00	23	—2	23	8.00	5.9
Menasha . . . . .	25.40	36.00	28.33	29.91	1	57	5	50.00	23	—10	23	2.33	6.4
Milwaukee, [Lapham] . . . . .	23.07	34.37	—	28.72	5	54	5	?	23	—1	23	?	—
Milwaukee, [Pomeroy] . . . . .	26.67	33.50	27.93	29.37	8	54	5	48.33	25	—4	24	8.00	7.4
Milwaukee, [Winkler] . . . . .	26.18	34.20	28.33	29.57	8	57	5	50.33	23	—3	23	4.00	5.1
New London . . . . .	23.13	32.60	26.80	27.51	5	52	5	48.00	25	—11	25	1.00	5.0
Platteville . . . . .	25.20	34.10	27.40	28.90	4	60	4	53.67	23	i —10	23	0.67	5.7
Waukesha, [Bean] . . . . .	27.07	33.83	29.67	30.19	4	62	4	53.00	25	—6	23	4.67	5.4
IOWA—													
Bellevue . . . . .	24.83	35.40	29.63	29.95	4	60	4	a 52.33	25	—6	23	6.00	5.9
Border Plains . . . . .	26.17	36.63	28.27	30.36	4	61	4	54.00	23	—10	23	9.33	5.6

- a Same temperature on the 5th.  
b Same temperature on the 6th.  
c Same temperature on the 26th.  
d Observations taken at sunrise, noon, and sunset.  
e For the first 21 days of the month only.  
f Observations taken at 6 a. m., noon, and sunset.  
g Same temperature on the 4th.  
h Observations taken at 7 a. m., 1 p. m., and 9 p. m.

- i Same temperature on the 25th.  
j Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 40.00.  
k Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 33.14.  
l Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.  
m Same temperature on the 23d.  
n Same temperature on the 28th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
IOWA—Continued.	○	■	○	○		○		□		□		○	
Camanche (a)-----	33. 13	39. 94	33. 00	35. 36	4	60	5	57. 33	19	3	19	7. 67	-----
Dubuque-----	25. 97	34. 30	27. 73	29. 33	4	62	5	51. 33	25	— 5	23	6. 33	6. 0
Fairfield-----	27. 60	37. 76	30. 27	31. 88	4	59	5	54. 67	23	— 5	23	7. 33	5. 8
Fort Madison (b)-----	27. 07	37. 30	33. 56	32. 64	4	60	5	55. 67	19	— 7	23	6. 33	6. 2
Franklin-----	25. 87	33. 23	27. 40	28. 83	4	59	4	52. 67	23	— 9	26	2. 67	5. 6
Iowa City-----	26. 53	34. 70	29. 70	30. 31	4	61	4	53. 67	23	— 4	25	5. 67	5. 9
Muscatine-----	27. 30	35. 57	32. 13	31. 67	4	60	5	56. 33	26	0	25	9. 00	5. 5
Pleasant Plain-----	26. 40	36. 80	29. 16	30. 79	4	60	5	54. 67	23	— 7	23	5. 67	5. 7
Rossville-----	22. 07	32. 13	25. 53	29. 91	4	62	4	51. 33	23	— 9	23	2. 33	5. 7
Sioux City-----	20. 63	32. 92	27. 36	26. 98	4	60	4	52. 33	22	5	19	14. 00	8. 6
MINNESOTA—													
Hazlewood-----	23. 77	32. 63	26. 80	27. 73	4	55	4	44. 67	23	— 1	22	4. 00	5. 3
Lapham (c)-----	18. 70	27. 13	21. 39	22. 41	8	50	27	39. 33	23	— 4	21	3. 33	-----
Princeton-----	20. 47	31. 53	24. 50	25. 50	1	d 52	4	45. 33	25	— 10	22	2. 33	5. 5
NEBRASKA—													
Bellevue, [Hamilton]-----	27. 72	37. 50	30. 90	32. 04	3	61	4	52. 67	23	6	23	e 17. 33	4. 8
Omaha-----													5. 0
KANSAS—													
Lawrence-----	31. 12	43. 80	36. 30	37. 07	4	60	4	56. 50	23	11	19	21. 00	4. 7
Leavenworth City-----	29. 27	39. 70	32. 74	33. 90	3	62	3	?	23	6	23	16. 00	5. 2
DACOTA—													
Fort Union-----	19. 3	33. 7	25. 7	26. 2	3	49	4	39. 7	19	— 6	19	9. 00	4. 1
CALIFORNIA—													
Sacramento-----	48. 50	58. 03	53. 20	53. 24	5	65	5	62. 67	15	38	14	46. 33	4. 4
San Francisco-----	52. 70	61. 33	55. 07	56. 37	8	70	8	f 62. 00	13	46	11	g 51. 33	4. 0
MEXICO—													
Mirador (h)-----	69. 50	80. 48	71. 73	73. 90				86. 58				63. 34	-----
CENTRAL AMERICA—													
Guatemala-----				64. 62		80				49½			-----
WEST INDIES—													
St. George's, Bermuda-----				69. 30	8	79			28	57			-----
SOUTH AMERICA—													
Catharina Sophia, Surinam-----	74. 90	87. 23	82. 77	81. 63	6	i 89	6	84. 00	18	71	2	78. 67	4. 1

a Imperfect.

b Observations taken at 6 a. m., noon, and 7 p. m.

c For the last 23 days of the month only.

d Same temperature on the 4th.

e Same temperature on the 25th.

f Same temperature on the 9th.

g Same temperature on the 21st.

h Observations taken at 7 a. m., 2 p. m., and 8 p. m.

i Same temperature on the 7th, 8th, 11th, 15th, 19th, 28th, and 29th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Hamilton (a).....	32.81		33.55	33.18	?	50	9	42.50	?	18	25	23.00	
Montreal.....	23.09	27.13	24.93	25.02	1	b 43	1	40.45	27	— 2	27	2.63	7.6
Moose Factory.....				3.40									
Red River Settlement.....	8.62	15.77	9.17	11.18	21	35	?	?	25	—13	?	?	?
Rigolet (c).....	4.94		8.55	6.74	2	30	2	29.50	30	—16	30	—14.50	
St. John's.....	31.52	32.87	30.68	31.69	23	d 46	24	44.67	19	19 e	18	21.33	
St. Martin.....	18.44	29.68	21.16	23.09	1	46	1	40.40	27	—13	27	— 2.90	6.0
Stanbridge.....	22.16	27.61	23.77	24.51	1	f 41	1	39.33	27	—12	27	— 4.00	7.1
Toronto (g).....	30.60	34.97	30.52	32.03	8	46	9	40.37	27	5.7	26	20.47	7.3
Windsor.....	25.66	31.10	28.95	28.57	18	51	18	42.80	27	5	27	7.33	7.5
Wolfville.....	25.72	30.88	28.47	28.35	18	53	18	43.77	27	2	27	6.33	5.8
MAINE—													
Cornish, [Guptill].....	23.16	29.74	25.51	26.14	8	h 43	1	39.00	27	3	27	9.00	5.0
Cornish, [West].....	21.55	28.41	23.58	24.51	14	44	22	38.33	25	0 i	27	4.67	5.1
Gardiner.....	19.03	30.37	25.10	24.83	3	45	18	38.33	27	4	27	7.33	5.9
Monson.....													6.1
Perry.....	24.74	30.94	26.52	27.40	1	46	18	42.33	27	0	27	5.67	6.5
Portland.....	27.58	33.12	29.52	30.07	18	47	18	43.50	27	11	27	13.33	5.9
Steuben.....	21.68	30.45	26.39	26.17	3	49	18	43.00	27	0	27	3.67	5.8
NEW HAMPSHIRE—													
Claremont.....	25.61	32.58	26.65	28.28	1	j 46	1	42.33	25	6 i	27	9.33	6.1
Concord.....	26.23	35.50	28.74	30.16	14	51	1	43.67	27	5	27	10.33	5.5
Francestown, [Bixby] (h).....	26.98	33.42	29.73	29.46	1	l 47	1	41.67	27	4.5	27	7.83	5.4
Manchester.....	24.83	32.20	29.64	28.89	18	46	18	42.00	27	E	27	8.67	5.2
North Barnstead.....													7.7
Shelburne.....	21.07	31.61	25.03	29.50	7	47	14	42.33	27	— 1	27	3.67	6.4
West Enfield.....	23.32	29.94	24.90	26.05	7	46	21	39.67	27	— 2	27	1.67	5.9
VERMONT—													
Brandon.....	24.63	31.91	26.56	27.70	1	m 45	18	42.33	25	1 i	27	7.33	6.9
Burlington.....	25.05	30.27	27.63	27.65	1	45	18	41.50	27	— 1	27	3.80	6.4
Craftsbury.....	19.39	26.48	22.32	22.73	1	n 40	18	37.00	27	— 8 n	27	— 1.00	7.0
Norwich.....	23.32	32.54	26.04	27.30	14	47	1	46.33	25	0	25	8.00	5.4
Rupert.....	26.71	34.84	32.45	31.33	1	48	1	44.00	25	8	26	14.16	6.8
St. Johnsbury.....	19.78	28.26	24.06	24.03	7	44	14	40.00	25	— 8	27	— 2.00	6.3
Shelburn.....	24.35	31.82	26.21	27.46	1	48	18	42.33	27	0	27	4.00	6.6
West Fairlee.....	26.84	31.84	28.04	28.91	14	45	18	38.67	27	1	27	6.67	---
MASSACHUSETTS—													
Amherst.....	28.52	36.13	30.22	31.62	8	52	18	43.70	27	2	27	7.30	5.6
Bridgewater (o).....	30.87	39.19	34.42	33.83	1	54	1	48.73	27	9	27	13.67	5.5
Cambridge.....	29.65	38.23	32.39	33.42	18	56	18	49.00	27	6	27	10.67	5.2
Canton.....	27.45	37.65	30.36	31.82	18	52	18	46.67	27	— 5	27	— 2.67	5.6
Florida.....													7.6
Lawrence.....	27.29	36.67	30.74	31.57	8	p 52	18	47.33	27	7	27	11.00	5.5
Mendon.....	29.03	36.16	31.84	32.34	18	53	18	48.67	27	3	27	7.67	5.2
Nantucket.....	39.31	42.61	38.71	40.21	10	56	8	48.00	27	21	27	25.17	5.3
New Bedford.....	33.19	40.19	34.58	35.99	7	b 53	18	47.33	27	11	27	14.70	5.7
Newburyport.....	31.56	38.76	33.67	34.66	E	56	18	50.13	27	9	27	14.30	3.5
Princeton.....	27.62	32.26	28.65	29.51	18	48	8	43.33	27	4	27	8.33	5.7
Richmond.....	27.13	35.39	29.64	30.72	1	50	1	40.67	26	2	26	14.33	6.8
Westfield.....	27.52	36.78	30.61	31.64	8	55	18	44.00	27	— 2	27	6.67	5.7
Weymouth.....	32.16		33.20	32.68	18	q 48	18	47.00	27	10	27	10.00	4.9
Williamstown.....	29.85	34.88	30.38	31.70	8	47	18	44.00	25	— 8.5	25	11.70	2.4
Worcester.....	30.58	38.07	31.89	33.51	8	54	8	45.67	27	5	27	11.67	6.1
RHODE ISLAND—													
Providence (r).....	31.90	39.40	32.50	34.60	1	b 54	18	48.33	27	9	27	14.00	4.9

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 8th.

c Observations taken at sunrise and sunset.

d Same temperature on the 24th.

e Same temperature on the 21st.

f Same temperature on the 7th, 8th, and 9th.

g Observations taken at 6 a. m., 2 p. m., and 10 p. m.

h Same temperature on the 14th.

i Same temperature on the 27th.

j Same temperature on the 2d.

k Observations interrupted from the 18th to the 21st of the month, inclusive.

l Same temperature on the 15th.

m Same temperature on the 7th and 14th.

n Same temperature on the 2d and 7th.

o Observations taken at 7 a. m., 2 p. m., and 7 p. m.

p Same temperature on the 18th.

q Same temperature on the 19th.

r Observations taken at sunrise, 1 p. m., and 10 p. m.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—	□	□	○	□		○		○		□		○	
Columbia	30.00	37.45	30.19	32.55	18	53	18	48.33	27	— 1	27	9.00	5.4
New London	32.87	40.74	34.77	36.09	8	59	18	49.67	27	11	27	17.67	5.0
Norwich	30.35	40.20	34.23	34.93	8	54	18	50.33	27	8	27	8.67	4.5
Pomfret	29.14	37.28	26.90	31.11	8	51	18	46.50	27	8	25	15.80	6.0
Saybrook	34.00	39.45	34.52	35.99	1	a 50	1	46.00	27	13	27	16.67	5.1
Wallingford	30.40	40.50	31.74	34.21	18	58	18	52.00	28	— 0.5	28	8.00	4.8
NEW YORK—													
Baldwinsville	29.61	35.23	31.65	32.16	8	47	8	43.33	27	12	27	16.00	7.1
Bellport	35.15	41.23	36.18	37.52	7	b 52	18	50.00	27	12	27	19.50	4.9
Beverly	32.06	40.58	33.83	35.49	1	a 54	18	50.33	27	10	27	15.67	5.3
Canton	24.45	30.90	26.71	27.35	9	50	1	c 40.67	25	d—10	25	1.33	7.1
Cazenovia	28.03	32.13	28.90	29.69	18	47	9	41.67	25	d 7	25	10.33	7.6
Clinton	29.81	36.61	29.71	32.04	7	54	18	45.33	25	4	25	d 13.00	7.8
Covert	30.52	35.97	31.06	32.52	8	a 48	9	44.00	25	e 16	26	18.33	7.7
Eden	32.61	37.10	33.94	34.55	16	b 52	9	52.00	26	d 18	26	17.33	5.8
Fishkill Landing	32.03	40.32	33.29	35.21	18	54	18	49.67	27	10	27	16.00	5.1
Flatbush	34.70	41.50	35.50	37.23	18	57	18	52.70	26	a 17	26	19.00	6.5
Fort Edward	26.00	32.84	28.06	28.97	14	46	18	42.67	27	3	27	7.33	7.2
Logansport	32.00	42.00	34.00	36.00	?	60			?	22			
Lowville				29.10	18	53	18	39.75	27	— 2	25	9.50	
Madrid	22.76	27.46	25.25	25.16	8	44	14	39.33	25	—12	25	2.90	
Morrisania	33.54	44.16	34.77	37.49	8	f 60	18	52.33	27	15	26	18.33	4.9
New York city	38.09	43.29	38.40	39.93	18	61	18	56.53	27	19	26	22.13	4.9
Nichols	28.68	38.32	29.61	32.20	8	56	8	45.67	21	g 12	26	17.00	7.3
Oswego	29.71	35.03	30.87	31.87	16	46	9	42.00	25	9	26	13.67	7.4
Quil	31.84	36.35	33.33	33.84	9	52	9	45.33	25	13	25	16.00	7.0
Penn Yan (h)	30.81	38.68	33.84	34.44	9	54	9	49.00	27	16	25	19.33	6.5
Pompey	27.70	30.51	28.03	28.75	9	i 46	9	41.00	27	3	25	11.00	6.9
Rochester, [Harkness]	32.40	37.10	33.90	34.47		52				18			
Rochester, [Palmer]	32.26	37.29	34.08	34.54	9	52	9	46.33	26	d 18	26	21.67	8.8
Sag Harbor (j)	36.92	44.36	37.12	39.47	18	65	18	55.00	27	18	27	20.00	5.9
Saratoga	27.35	35.58	28.42	30.45	7	56	1	a 43.33	27	8	27	12.67	5.6
Spencertown (k)	26.86	35.68	32.27	31.60	18	48	18	46.33	15	0	15	19.33	?
Wampsville	26.90	35.23	29.53	30.55	18	51	18	43.67	24	l 3	25	9.67	7.4
Waterford	28.61	36.76	30.29	31.89	14	54	18	44.16	25	d 11	26	13.67	6.4
Wellsville	30.03	39.84	32.74	34.20	9	m 54	9	49.33	12	d 12	12	20.00	7.9
NEW JERSEY—													
Bloomfield (n)	36.26	46.47	38.20	40.31	10	66	18	57.50	21	21	12	28.00	4.0
Burlington	34.84	42.90	36.65	38.13	8	61	18	52.67	27	17	26	21.33	5.1
Freehold	35.15	44.50	36.48	38.71	9	61	1	47.50	27	11	26	20.50	
Lambertville	31.89	43.40	34.65	36.65	8	59.1	18	52.53	27	11	26	21.13	4.9
Newark (o)				24.84	18	57	18	50.50	27	11	27	20.13	
Sergeantsville (p)	29.62	47.06	33.18	36.62	1	66	1	49.00	25	i 15	25	22.00	5.1
PENNSYLVANIA—													
Bedford	33.27	44.06	37.31	38.21	8	59	8	51.67	12	16	21	31.67	6.1
Berwick	32.94	41.77	35.39	36.70	8	59	8	a 50.67	13	17	27	25.00	4.8
Cannonsburg	34.45	41.48	28.06	34.66	9	58	9	54.00	13	g 26	26	30.00	6.8
Chromedale	34.44	43.40	35.65	37.83	9	62	8	54.50	27	13	12	24.50	5.2
Easton	31.32	40.00	32.58	34.63	8	a 54	18	51.00	27	7	26	17.17	5.8
Fleming	32.29	40.61	32.96	35.29	14	52	9	48.00	13	15	12	22.67	6.7
Gettysburg	32.26	41.48	34.16	35.97	9	55	9	50.33	13	16	12	24.33	5.2
Harrisburg, [Heisely]	37.06	42.97	39.42	39.82	18	54	18	51.00	13	d 26	26	d 30.00	5.7
Harrisburg, [Hickok]	35.34	42.42	37.65	38.47	18	55	18	51.17	13	22	27	27.83	6.1
Lewisburg	31.26	39.65	32.69	34.53	8	53	8	47.17	27	13	27	19.90	7.0
Meadville	30.74	39.10	32.65	34.16	14	55	9	48.67	12	14	25	25.67	6.8
Morrisville	33.81	43.52	35.26	37.53	18	57	18	49.33	27	14	27	22.00	4.5

a Same temperature on the 18th.

b Same temperature on the 9th.

c Same temperature on the 14th.

d Same temperature on the 27th.

e Same temperature on the 26th and 27th.

f Same temperature on the 14th and 18th.

g Same temperature on the 26th.

h Observations taken at sunrise, 2 p. m., and sunset.

i Same temperature on the 16th.

j Imperfect.

k For the first 22 days of the month only.

l Same temperature on the 24th and 26th.

m Same temperature on the 13th.

n For the first 23 days of the month only.

o Observations taken at 7 a. m. and 6 p. m.

p (i) Observations interrupted from the 5th to the 19th of the month, inclusive.

q Same temperature on the 23d.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°		°		°		°		°	
Mount Joy.....	33.92	43.68	36.95	38.18	8	60	9	52.00	27	14	27	23.00	4.6
Murrysville.....	31.03	40.68	34.29	35.33	9	61	9	55.67	12	a 17	12	23.67	7.0
Nazareth.....	31.60	39.67	31.71	34.33	18	53	18	47.00	27	11	27	19.33	5.9
Norristown.....	36.40	43.10	37.80	39.10	9	63	18	53.30	26	20	26	23.70	5.6
North Whitehall (b).....	31.68	41.03	36.39	36.37	18	55	18	52.00	27	10	27	21.33	7.2
Paradise.....				30.00									
Philadelphia.....	37.42	45.37	40.29	41.03	9	63	9	56.00	27	21	26	25.70	5.3
Pittsburg, [Martin].....	34.87	40.26	37.68	37.60	9	61	9	56.67	12	24	27	30.67	6.8
Pocapson.....	33.10	44.40	35.68	37.73	9	c 60	18	53.00	27	9	27	21.00	5.6
Shamokin.....	31.61	39.39	35.32	35.44	8	59	18	53.00	13	d 12	27	19.67	6.2
Somerset.....	30.06	39.10	33.26	34.14	8	e 59	9	55.67	12	12	12	21.00	---
Tarentum.....	32.77	44.65	35.61	37.68	9	62	9	56.33	13	17	12	25.00	6.5
West Haverford.....	35.58	44.45		40.01	8	c 58	1	53.50	27	18	25	24.50	5.7
Westtown.....	33.21	42.75	35.60	37.19	9	62	9	53.83	27	10	27	21.33	5.3
DELAWARE—													
Georgetown (f).....	39.77	49.97	44.58	44.77	9	68	9	58.33	13	23	27	31.67	---
Milford.....	40.80	49.63	43.00	44.48	1	75	1	64.67	26	23	25	30.00	3.9
Newark (g).....	37.76	47.40	40.58	41.91	9	66	9	57.00	13	22	12	30.67	5.4
MARYLAND—													
Annapolis.....	36.70	47.40	42.50	42.20	18	60	9	56.00	27	20	27	30.33	5.3
Baltimore.....	38.36	45.74	40.39	41.50	9	62	9	57.33	27	24	25	d 30.00	6.5
Frederick.....	36.11	43.32	37.42	38.95	9	57	9	52.83	13	23	12	29.00	5.5
Oakland (h).....	31.71	34.67	31.08	32.49	9	59	9	54.67	16	19	16	21.67	---
Sykesville.....	33.16	45.52	37.13	38.60	9	66	9	60.33	13	13	12	25.33	5.1
VIRGINIA—													
Alexandria.....	38.29	49.35	41.16	42.93	9	74	9	68.67	13	22	13	32.00	4.9
Ashland.....	34.25	48.58	38.25	40.36	9	64	9	57.33	27	16	27	30.67	4.8
Berryville.....	35.36	43.58	37.20	38.71	9	60	9	56.87	12	a 22	25	29.97	5.7
Crichton's Store (i).....	43.00	51.76	52.08	48.95	9	74	7	63.00	27	30	21	39.00	5.2
Lewisburg.....	32.16	42.68	34.97	36.60	9	59	9	50.67	27	13	27	23.00	6.1
Meadow Dale.....	31.84	42.78	38.52	37.71	8	62	9	56.33	27	12	12	d 23.67	---
Montross.....	38.19	47.87	40.68	42.25	9	68	9	64.67	13	22	24	26.33	5.0
Mossy Creek.....	30.14	47.29	33.31	36.98	9	67	9	59.50	13	10	27	24.83	5.6
Poplar Grove.....	36.84	49.78	42.32	42.98	9	61	9	58.67	27	24	12	33.00	6.1
Portsmouth.....	42.52	55.74	44.52	47.59	9	76	9	69.33	14	j 30	27	36.67	3.5
Rose Hill.....	42.52	48.31	45.33	45.42	9	68	9	65.83	27	29	27	32.50	5.1
Rougemont.....	38.39	50.23	41.16	43.26	9	75	9	67.00	27	22	27	30.00	5.4
Ruthven (g).....	38.22	48.94	41.52	42.89	9	69	9?	?	26	22	27?	?	3.1
Salem.....													5.3
Sistersville.....	33.84	44.16	37.10	38.37	9	61	9	56.00	27	21	11	k 32.17	6.2
Smithfield (g).....	40.70	54.80	46.70	47.40	9	75	9	68.80	26	24	27	35.67	5.6
Winchester.....	36.19	46.45	38.42	40.35	8	64	9	56.67	12	24	12	30.67	4.8
Wirt Court-House.....	32.68	43.10	36.71	37.60	9	61	8	e 56.33	27	18	27	28.00	5.6
NORTH CAROLINA—													
Ashville (l).....	35.70	43.93	39.89	41.84	9	65	9	59.93	14	m 26	26	32.00	---
Chapel Hill.....	43.12	53.63	45.68	47.48	9	76	9	69.33	4	k 32	26	36.67	6.2
Davidson College.....	40.61	51.72	44.71	45.69	9	66	8	61.33	27	27	26	36.33	5.0
Gaston.....	39.00	51.97	41.52	44.16	9	70	9	64.67	27	25	27	31.33	---
Murfreesborough.....	42.58	53.63	46.42	47.54	9	76	9	69.33	14	j 30	27	35.00	4.1
SOUTH CAROLINA—													
Aiken (n).....	44.50	61.41	47.77	51.23	9	74	9	68.33	23	31	25	40.33	3.8
All Saints.....	50.10	60.35	53.00	54.48	9	77	9	72.33	27	34	27	39.67	4.7
Camden.....	42.26	58.22	46.19	48.89	9	77	9	70.00	27	22	27	33.67	5.2
Charleston, [Dawson].....	55.83	60.61	57.32	57.92	?	74			?	39			---
Charleston, [Johnson].....	54.55	60.81	57.03	57.46	9	74	9	70.00	27	39	27	45.00	---

a Same temperature on the 13th.

b Observations taken at sunrise, noon, and sunset.

c Same temperature on the 18th.

d Same temperature on the 27th.

e Same temperature on the 9th.

f Observations taken at 8 a. m., 1 p. m., and 6 p. m.

g Imperfect.

A For the last 24 days of the month only.

i Imperfect. Observations taken at 9 a. m., noon, and 4½ p. m.

j Same temperature on the 26th and 27th.

k Same temperature on the 15th and 27th.

l Observations taken at 7 a. m., 1 p. m., and 9 p. m.

m Same temperature on the 26th.

n For the first 26 days of the month only.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
GEORGIA—	°	°	°	■		°		°		■		°	
Athens .....	40.60	54.84	47.18	47.54	7	68	9	63.33	27	27	27	36.83	4.6
Hillsborough (a) .....	43.90	59.70	51.70	51.77	8	74	8	68.53	27	31	11	42.50	5.4
Savannah .....	52.30	63.10	56.30	57.23	8	78	■	70.27	27	33	26	44.20	5.3
Sparta .....	44.84	59.16	49.52	51.17	8	77	8	70.67	27	30	27	39.67	4.7
The Rock .....	45.42	56.26	50.65	50.78	8	72	8	68.33	28	30	24	40.00	5.1
Whiteman's Island .....	52.10	61.68	55.00	56.26	8	b 72	■	c 68.33	11	d 40	26	47.00	5.0
Zebulon .....	49.34	56.43	53.21	52.99	■	73	■	68.00	11	37	24	41.66	4.8
FLORIDA—													
Alligator .....	53.10	67.13	59.16	59.80	8	82	■	74.00	26	e 36	26	40.67	5.4
Atsena .....	58.19	65.39	62.61	62.06	1	76	■	72.33	11	43	26	49.67	4.0
Belair (f) .....	55.85	67.62	59.26	60.91	■	84	9	78.33	26	35	26	43.67	4.8
Gainesville .....	54.73	68.70	59.97	61.13	8	82	■	74.33	26	35	27	48.00	4.0
Hibernia (g) .....	54.74	66.13	57.54	59.47	■	80	30	70.33	27	36	23	47.67	---
Jacksonville .....	57.33	67.57	59.65	61.52	8	80	8	73.33	26	39	---	?	5.6
St. Augustine .....	63.58	68.96	63.45	65.33	■	h 81	■	75.67	11	d 50	23	53.67	5.0
Salt Ponds .....	72.52	77.39	---	74.95	7	i 85	10	81.00	27	61	27	64.00	3.6
Warrington .....	52.74	66.48	53.23	57.48	21	78	8	70.33	23	40	13	49.33	2.6
ALABAMA—													
Ashville (j) .....	---	---	---	45.70	---	---	11	56.00	---	---	■	38.50	---
Auburn .....	46.77	58.68	51.93	52.46	8	c 74	8	70.67	11	32	24	41.00	5.0
Carlowville .....	49.58	62.72	53.27	55.19	8	80	■	75.67	25	k 38	24	41.00	4.9
Greensborough .....	41.45	58.74	48.32	50.50	9	■	9	68.17	26	28	25	37.17	5.4
Greene Springs .....	44.10	58.37	48.06	50.18	■	68	8	66.33	11	l 31	10	40.33	4.1
MISSISSIPPI—													
Columbus .....	44.03	55.60	48.61	49.41	8	68	8	66.72	2	31	25	37.43	5.5
LOUISIANA—													
Back River .....	46.29	61.13	51.77	53.06	■	m 76	8	72.67	26	31	24	n 41.33	5.5
New Orleans (o) .....	54.94	62.03	62.55	59.84	7	84	7	p 80.67	31	42	25	46.00	---
TEXAS—													
Austin, [Jennings] .....	44.81	58.57	50.82	51.40	7	73	7	65.00	10	q 30	23	38.16	5.6
Austin, [Palm] .....	44.84	59.00	49.42	51.09	7	74	7	63.33	10	q 30	23	37.00	4.0
Goliad .....	52.10	63.45	56.68	57.41	7	77	7	73.16	25	32	25	43.16	5.6
Union Hill .....	---	---	---	---	---	---	---	---	---	---	---	---	5.6
Washington .....	47.70	60.33	49.45	52.49	7	80	7	71.33	25	31	25	41.00	5.6
TENNESSEE—													
Glenwood .....	39.53	51.10	43.60	44.74	8	59	■	64.80	1	28	26	35.93	6.3
Memphis .....	43.23	54.16	47.84	48.41	8	72	■	67.33	13	r 32	24	38.33	5.2
KENTUCKY—													
Danville .....	38.74	51.74	43.32	44.60	8	67	■	62.33	27	24	10	33.33	4.9
Millersburg .....	39.93	45.13	44.33	42.93	8	65	8	62.67	25	28	25	31.33	5.2
Paris .....	35.65	45.77	39.52	40.31	8	53	8	66.00	27	22	26	32.33	5.8
Springdale (s) .....	34.73	47.15	42.90	41.59	■	64	8	60.67	23	e 22	23	33.17	6.1
OHIO—													
Belle Centre .....	34.08	42.89	35.78	37.58	9	59	■	48.33	12	19	---	?	6.4
Bellefontaine .....	31.47	41.06	33.95	35.49	8	59	8	52.00	27	17	24	24.00	7.1
Bowling Green .....	31.81	40.81	35.06	35.89	15	55	6	44.33	12	e 23	12	28.67	---
Cincinnati, [Harper] .....	37.48	47.45	40.55	41.83	9	63	8	58.33	27	25	10	f 35.33	5.8
Cincinnati, [Hurt] .....	33.60	43.03	37.18	37.94	■	u 59	8	52.67	27	20	3	27.33	5.2
Cleveland .....	33.30	40.50	35.10	36.30	9	57	15	46.30	12	21	25	28.80	7.8
Collingwood .....	31.58	40.35	33.13	35.02	14	58	14	45.33	20	22	20	27.00	---
Edinburg .....	30.16	39.06	33.71	34.31	■	59	■	50.33	12	15	12	22.33	7.0
Gallipolis .....	34.42	45.74	33.03	37.73	9	62	6	56.67	27	19	12	28.67	---
Hillsborough .....	34.68	41.26	37.82	37.92	■	58	8	55.30	27	20	12	28.00	5.5

a Incomplete.

b Same temperature on the 9th and 29th.

c Same temperature on the 9th.

d Same temperature on the 26th.

e Same temperature on the 27th.

f Observations interrupted from the 3d to the 6th of the month, inclusive.

g For the last 24 days of the month only.

h Same temperature on the 30th.

i Same temperature on the 8th and 10th.

j Hours of observation not reported.

k Same temperature on the 26th, 27th, and 28th.

l Same temperature on the 12th and 27th.

m Same temperature on the 8th.

n Same temperature on the 25th.

o Observations taken at 9 a. m., noon, and 3 p. m.

p Same temperature on the 8th.

q Same temperature on the 11th.

r Same temperature on the 23d and 25th.

s Observations taken at 7 a. m., 2 p. m., and 5 p. m.

t Same temperature on the 12th, 22d, 23d, and 26th.

u Same temperature on the 8th and 30th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Hiram	32.74	39.23	35.42	35.80	9	60	8	45.00	13	24	25	27.33	7.6
Jackson	33.90	45.55	38.65	39.37	9	62	6	56.33	27	19	12	27.33	5.6
Jefferson	33.35	37.29	32.77	34.47	7	a 44	6	b 40.67	23	c 26	26	d 28.67	8.5
Lancaster (e)	32.79	45.16		38.97	9	60	?	?	12	19	!	?	7.0
Madison, [Atkins]	32.94	38.55	34.06	35.18	15	53	11	f 43.33	12	20	12	25.67	7.3
Madison, [Cunningham]	32.26	39.90	33.42	35.19	9	56	9	47.00	4	18	12	24.33	7.9
Medina	33.81	40.16	36.47	36.81	6	g 59	6	52.00	20	22	26	27.00	6.7
Mount Union	33.29		38.36	35.82	9	60	10	52.50	12	h 24	20	25.50	---
New Lisbon	35.93	46.83	39.48	40.75	9	67	9	59.67	12	i 20	11	34.00	4.9
Perrysburg (j)	34.10	43.00	35.45	37.52	15	64	14	48.33	11	21	27	31.67	---
Ripley (k)	35.31	?	39.10		11	60	6	53.00	12	25	13	34.67	6.2
Savannah	30.87	39.06	34.00	34.64	9	i 58	9	48.00	12	i 18	12	23.67	7.6
Urbana	31.19	41.39	34.10	35.56	10	60	8	51.67	13	18	12	26.33	6.8
Welchfield	34.39	39.32	33.10	35.60	9	60	9	51.67	12	17	12	24.00	6.4
Windham	31.90	40.19	65.23	45.77	15	56	9	50.00	13	20	26	28.00	---
MICHIGAN—													
Battle Creek	28.68	38.32	32.23	33.08	14	54	14	43.33	25	6	25	23.67	5.5
Cooper	32.65	38.16	34.90	35.24	17	50	17	44.33	25	20	25	27.33	2.3
Grand Rapids, [Currier]	29.67	35.55	29.70	31.64	15	48	14	?	12	7	12	21.33	6.5
Grand Rapids, [Streng]	25.96	37.19	29.58	30.91	16	51	14	42.00	12	l 6	12	21.00	6.6
Marquette	25.51	31.70	25.98	27.75	16	41	16	38.73	24	5	24	13.03	6.3
Monroe													5.5
New Buffalo (j)													6.9
Port Huron	25.96	36.12	29.16	30.41	14	50	15	40.67	12	12	26	22.00	7.2
INDIANA—													
Evansville	39.50	48.80	41.27	43.19	8	66	8	61.67	23	m 28	23	32.00	3.6
Logansport (n)	32.00	42.00	34.00	36.00	?	60			?	22			---
Michigan City	29.02	39.55	32.76	30.44	15	57	15	47.16	22	15	11	24.33	5.9
New Harmony	36.30	46.61	39.65	40.85	8	63	8	58.33	3	26	26	32.67	5.4
Richmond	32.03	41.71	36.16	36.63	8	55	8	52.67	27	18	12	28.67	6.4
ILLINOIS—													
Augusta	30.42	39.80	34.87	35.03	13	56	14	46.33	22	17	22	19.00	5.3
Aurora	29.35	41.48	32.71	34.51	1	54	8	43.33	22	16	22	24.67	6.4
Batavia	25.13	37.19	27.87	30.06	13	53	13	40.67	22	12	22	18.00	6.4
Brighton	25.81	40.45	35.10	33.79	31	61	31	48.00	6	16	3	22.00	2.3
Edgington	28.29	38.45	32.61	33.12	14	57	14	46.33	10	18	22	21.33	6.0
Fremont Centre	28.67	37.29	30.77	32.24	14	53	13	44.00	22	14	22	19.00	6.7
Manchester (j)	30.13	42.90	33.06	35.36	13	o 58	8	p 43.67	13	22	22	22.00	5.0
Marengo	28.39	38.55	30.77	32.57	1	f 54	1	q 44.00	25	10	22	20.00	5.4
Ottawa	28.10	38.06	32.87	33.01	13	54	13	46.00	22	17	22	21.33	6.5
Pekin	27.71	40.39	32.48	33.53	9	r 55	14	43.00	10	s 16	22	c 21.33	5.6
Peoria	30.75	40.23	34.73	35.24	13	54	14	45.50	22	18	22	23.00	5.6
Riley	25.32	36.07	28.47	29.95	13	52	8	38.67	25	7	24	19.33	4.7
South Pass	36.97	51.10	41.52	46.20	1	t 65	8	60.33	12	u 26	10	v 34.33	5.3
Warsaw	32.48	43.65	37.03	37.72	13	60	14	49.00	22	20	22	24.00	4.1
West Salem	34.81	47.35	39.23	40.46	8	68	8	61.33	22	23	22	28.67	5.6
West Urbana	30.77	39.45	33.65	34.62	14	53	8	48.67	25	16	22	24.33	5.7
Wheaton	27.80	36.80	30.30	31.63	14	51	11	42.43	22	14	22	20.03	6.9
Winnebago													6.0
MISSOURI—													
Cape Girardeau (w)	38.76	50.00	43.63	43.29	8	66	8	60.25	23	x 28	23	34.75	5.0
St. Joseph (y)	32.10	42.43	34.95	35.91	1	r 54	13	49.75	22		22?	?	5.0

a Same temperature on the 8th and 30th.

b Same temperature on the 7th and 30th.

c Same temperature on the 26th.

d Same temperature on the 27th.

e Incomplete.

f Same temperature on the 15th.

g Same temperature on the 9th.

h Same temperature on the 13th, 23d, 26th, and 27th.

i Same temperature on the 13th.

j Observations taken at 7 a. m., 1 p. m., and 9 p. m.

k Observations rarely taken at 2 p. m.

l Same temperature on the 29th.

m Same temperature on the 24th.

n Observations taken at sunrise, noon, and sunset.

o Same temperature on the 14th.

p Same temperature on the 16th.

q Same temperature on the 15th and 16th.

r Same temperature on the 13th and 14th.

s Same temperature on the 22d and 25th.

t Same temperature on the 8th.

u Same temperature on the 20th and 23d.

v Same temperature on the 23d.

w Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 40.76.

x Same temperature on the 25th.

y Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 34.18.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSOURI—Continued.	°	°	°	°		°		°		°		°	
St. Louis.....	35.40	45.90	40.30	40.53	13	59	16	50.83	22	24	22	26.17	5.2
Springfield (a).....	34.39	45.88	40.05	40.11	7	b 58	17	53.00	22	c 24	24	29.33	3.4
WISCONSIN—													
Appleton.....	24.42	33.39	28.35	28.72	16	48	16	41.33	29	10	11	19.33	6.0
Bay City.....	20.26	28.35	21.81	23.47	13	d 38	16	34.67	18	5	24	10.67	6.4
Beloit.....	27.19	36.64	30.29	31.37	13	52	16	41.33	29	15	22	22.00	5.3
Janesville.....	28.16	37.77	31.65	32.53	14	56	14	43.00	29	10	19	21.67	6.7
Kenosha.....	29.32	37.67	32.90	33.30	13	52	16	43.00	22	e 17	22	22.50	5.0
Madison, [Sterling].....	27.63	34.75	30.48	30.95	16	48	16	43.00	10	17	11	22.00	6.8
Manitowoc.....	28.68	38.45	32.48	33.20	13	51	16	45.33	26	f 16	26	20.67	7.0
Menasha.....	23.71	33.13	27.33	28.06	1	45	15	38.67	12	8	3	19.33	7.0
Milwaukee, [Lapham].....									23	e 13			
Milwaukee, [Pomeroy].....	28.32	36.16	29.72	31.40	13	50	13	42.00	29	14	26	20.67	7.1
Milwaukee, [Winkler].....	27.10	35.26	29.76	30.71	13	50	13	40.67	29	15	19	21.67	5.0
New London.....	22.93	29.83	25.48	26.08	13	g 42	16	h 37.33	12	— 4	12	17.00	6.4
Platteville.....	26.42	36.26	30.16	30.95	14	50	16	44.33	10	14	26	20.00	6.0
Racine.....	29.81	36.33	32.31	32.82	14	49	14	40.33	22	18	22	20.83	6.4
St. Croix.....	20.60	31.60	23.70	25.30	13	52	16	37.67	22	— 1	24	i 17.00	7.3
Waukesha.....	27.19	35.56	30.37	31.04	7	g 49	16	42.67	29	15	10	22.33	8.1
IOWA—													
Bellevue.....	25.74	36.45	29.58	30.59	13	52	15	h 41.00	21	12	26	20.00	6.0
Border Plains.....	25.58	36.61	28.77	30.32	14	g 52	16	45.00	10	7	10	15.67	5.5
Camanche.....	29.35	37.42	31.03	32.60	14	54	16	45.33	26	i 16	22	j 21.33	7.3
Dubuque.....	27.01	35.65	31.29	31.32	13	50	13	42.67	31	15	11	j 21.67	5.8
Fairfield.....	28.00	39.87	33.33	33.73	14	58	14	k 16.67	22	j 13	22	16.33	5.9
Fort Madison (l).....	28.90	38.06	33.67	33.54	13	53	14	45.00	10	m 17	22	18.33	4.8
Franklin.....	25.81	35.94	30.26	30.67	14	52	15	44.00	11	i 11	11	19.33	5.5
Iowa City.....	27.05	38.16	32.35	32.52	14	54	16	42.67	3	14	22	22.67	5.9
Muscatine.....	27.35	36.61	31.06	31.67	14	52	14	50.33	28	15	26	20.33	4.3
Pleasant Plain.....	27.45	39.81	32.06	33.11	15	59	15	48.00	22	8	22	20.33	4.7
Rossville.....	24.48	32.65	27.52	28.22	13	47	16	40.33	22	i 10	11	17.33	5.8
Sioux City.....	23.33	34.43	26.25	28.00	19	43	17	34.40	11	63	11	16.90	---
MINNESOTA—													
Buchanan (n).....	20.26	31.26	22.06	25.44	16	49	16	42.75	8	o 7	24	15.00	---
Hazlewood.....	20.14	27.96	22.86	23.65	16	40	16	37.33	11	2	10	14.67	5.4
Lapham.....	16.19	25.42	16.06	19.22	13	40	13	34.67	5	2	25	10.00	---
Princeton (p).....	18.86	29.42	19.87	22.72	1	52	16	34.33	30	— 1	30	2.67	4.5
Wabashaw.....	21.93	29.65	25.90	25.83	13	43	16	36.00	31	11	31	14.00	5.2
NEBRASKA—													
Bellevue.....	27.27	38.81	30.29	32.12	31	52	15	46.00	10	10	11	i 22.67	4.7
Omaha.....													4.3
KANSAS—													
Lawrence.....	31.87	46.35	37.74	38.65	31	58	16	49.00	23	q 18	22	28.33	4.3
Leavenworth City.....	32.23	43.68	36.35	37.42	13	56	16	48.67	22	18	22	25.67	5.5
Mapleton.....	33.57	46.90	37.10	37.19	13	62	15	52.00	22	19	22	27.00	4.6
CALIFORNIA—													
Sacramento.....	43.03	51.16	47.94	47.38	18	57	4	52.67	7	r 37	23	43.33	4.6
San Francisco.....	48.42	55.77	51.13	51.77	18	61	10	55.67	7	43	24	48.33	3.9
MEXICO—													
Mirador (s).....	66.49	76.50	67.64	70.21				81.40				60.19	---
Vera Cruz (t).....	72.36		73.14	71.75									---

a Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m.

b Same temperature on the 17th and 31st.

c Same temperature on the 23d.

d Same temperature on the 15th and 16th.

e Same temperature on the 25th.

f Same temperature on the 29th.

g Same temperature on the 16th.

h Same temperature on the 17th.

i Same temperature on the 31st.

j Same temperature on the 26th.

k Same temperature on the 15th.

l Observations taken at 6 a. m., noon, and 7 p. m.

m Same temperature on the 22d.

n Observations taken at 7 a. m., noon, 3 p. m., and 9 p. m. Mean at

3 p. m., 28.19.

o Same temperature on the 18th.

p Imperfect.

q Same temperature on the 24th.

r Same temperature on the 20th.

s Observations taken at 7 a. m., 3 p. m., and 8 p. m.

t Observations taken at 6 to 8 a. m., and 9 to 11 p. m.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WEST INDIES—	□	□	○	○		○		○		○		□	
St. George's, Bermuda.....				66.40	9	73			27	55			
Sheloy Bay, Bermuda.....	64. 61	68. 07	65. 13	65. 94	10	74	19	70. 00	28	57	28	59. 00	4. 9
CENTRAL AMERICA—													
Guatemala.....				62. 73		77				47			
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (a)	74. 35	83. 39	79. 29	79. 01	1	90	1	81. 00	3	c 72	3	75. 33	5. 7

a Observations taken at 6 a. m., 2 p. m., and 6 p. m.

b Same temperature on the 15th.

c Same temperature on the 4th, 12th, 17th, and 23d.

## No. 26.—PSYCHROMETER, JANUARY, 1857.

NAME OF STATION.	FORCE OF VAPOR.								RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.			MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.		7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>							
Montreal (a).....	.057	.078	.068	27	.192	23	.008	80	84	84	53	66	63	
Montreal (b).....	.048	.069	.059	27	.174	18	.006	75	84	83	30	53	53	
St. Martin (a).....	.047	.075	.056	21	.155	23	.008	83	80	83	63	38	64	
St. Martin (b).....	.041	.069	.051	27	d. 136	23	.007	82	83	84	42	59	62	
Toronto (c).....	.079	.088	.083	27	.191	18	.018	91	84	80	?	65	76	
Wolfville.....	.100	.117	.114	22	.295	18	.022	87	83	88	66	61	55	
<b>VERMONT—</b>														
Norwich (f).....								29	29	27	25	25	25	
<b>MASSACHUSETTS—</b>														
Amherst.....	.075	.091	.080	27	.223	24	.019	97	86	93	81	50	69	
Bridgewater (e).....	.096	.098	.095	31	.266	12	.023	85	82	88	16	59	63	
Cambridge (g).....								82	79	80	59	63	51	
Canton.....	.058	.092	.082	27	.212	24	.014	80	73	81	42	50	52	
Lawrence.....	.294	.359	.371	27	.442	12	.204	82	81	81	68	53	75	
Nantucket.....	.095	.096	.103	31	.235	24	.000	73	56	74	43	0	51	
New Bedford.....	.087	.102	.100	31	.233	23	.021	86	71	87	58	41	62	
Newburyport.....	.087	.098	.099	31	.234	5	.010	84	75	80	52	22	70	
North Attleborough.....	.069	.083	.083	31	.266	24	.013	78	64	79	43	37	49	
Westfield.....	.065	.081	.078	27	.205	23	.011	81	68	80	47	22	49	
Worcester.....	.062	.079	.068	27	.229	15	.000	70	53	53	0	23	0	
<b>CONNECTICUT—</b>														
Pomfret.....	.082	.104	.088	31	.267	23	.023	97	90	94	83	69	53	
Wallingford.....	.071	.086	.082	27	.221	23	.015	85	69	87	55	45	37	
<b>NEW YORK—</b>														
Blackwell's Island.....	.095	.121	.107	27	.208	18	.035	80	90	89	76	71	77	
Fordham.....	.111	.144	.118	27	.267	6	.006	100	97	97	100	50	0	
McGrawville.....	.064	.074	.066	27	.162	18	.015	87	51	86	58	60	73	
New York city.....	.083	.095	.088	1	.201	18	.000	89	61	65	0	5	3	
Ovid.....	.061	.075	.067	27	.162	18	.008	74	74	75	40	53	55	
Plainville.....	.057	.089	.064	27	.170	2	.000	67	79	70	3	16	0	
Troy (k).....	.107	.119	.108	27	.197	11	.036	81	79	79	61	61	62	
<b>NEW JERSEY—</b>														
Bloomfield.....	.074	.093	.088	31	.197	17	.011	74	64	76	29	41	54	
<b>PENNSYLVANIA—</b>														
Berwick.....	.080	.101	.086	31	.191	22	.008	81	81	81	16	62	67	
Chromedale.....	.084	.098	.090	21	.181	24	.004	84	73	80	15	45	46	
Easton.....	.076	.091	.082	31	.193	24	.020?	82	53	81	77	50	45	
Lewisburg.....	.068	.086	.069	29	.232	8	.019	84	62	72	44	42	39	
Nazareth.....	.067	.114	.080	29	.225	23	.000	74	85	81	6	49	0	
Norristown.....	.082	.092	.092	31	.204	22	.000	83	62	77	52	0	53	
Philadelphia.....	.081	.097	.091	31	.205	22	.023	76	67	73	48	48	45	
<b>MARYLAND—</b>														
Annapolis.....	.091	.129	.101	27	.235	23	.017	77	69	75	54	42	39	
Frederick.....	.075	.089	.081	31	.191	24	.018	72	61	65	39	20	26	
<b>DISTRICT OF COLUMBIA—</b>														
Washington.....	.099	.122	.119	27	.229	18	.029	78	69	76	45	41	43	
<b>VIRGINIA—</b>														
Montross.....	.097	.126	.110	10	.212	23	.028	89	75	84	65	46	61	
Rose Hill.....	.092	.116	.125	27	.206	23	.028	74	74	75	40	45	42	
<b>NORTH CAROLINA—</b>														
Goldsborough (e).....	.143	.137	.156	31	.413	8	.045	81	52	83	48	27	41	
Murfreesborough.....	.136	.152	.148	27	l. 335	23	.036	90	70	80	54	38	44	
<b>SOUTH CAROLINA—</b>														
All Saints.....	.174	.189	.185	31	.452	23	.040	84	64	83	15	55	51	
Camden.....	.132	.178	.147	27	.439	20	.044	91	68	82	53	25	51	
Charleston, [Dawson] (m).....														

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to the tables used by the observer.

b According to the Smithsonian tables.

c Same amount on the 23d.

d Same amount on the 28th.

e For changes in hours of observation, &amp;c., see table of the thermometer for this month.

f For changes in hours of observation, &amp;c., see table of the thermometer for this month. Dalton's hygrometer.

g Simmons's organic hygrometer.

h Same amount on the 25th.

i Same amount on the 19th.

j Same amount on the 22d.

k Incomplete.

l Same amount on the 31st.

m Mean force of vapor for the month, .190, obtained approximately from the mean dew point.



## No. 26.—PSYCHROMETER, JANUARY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>SOUTH CAROLINA—Continued.</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Edisto Island (a) .....	.157	.156	.165	3	.432	19	.048	70	52	70	49	23	44
<b>GEORGIA—</b>													
Augusta .....	.197	.213	.225	17	.362	12	.101	87	75	86	54	49	64
Factory Mills .....	.162	.191	.188	28	.362	19	.043	82	72	78	53	32	53
Savannah .....	.186	.191	.193	18	.442	19	.046	78	52	70	46	16	38
<b>FLORIDA—</b>													
Jacksonville .....	.272	.372	.290	28	.559	19	.082	90	77	90	51	58	77
Warrington .....	.424	.484	.430	28	.695	18	.182	92	86	89	85	70	73
<b>ALABAMA—</b>													
Auburn .....	.134	.167	.164	17	.394	22	.008	63	50	59	22	12	7
Carlowville .....	.170	.234	.213	27	.483	12	.012	81	70	80	11	27	28
Greensborough (b) .....	.137	.161	.156	2	.383	17	.040	67	52	61	40	37	26
<b>MISSISSIPPI—</b>													
Columbus .....	.161	.178	.170	27	.474	18	.053	82	68	78	58	45	52
Port Gibson .....	.224	.255	.253	2	.518	19	.078	91	79	86	71	43	71
<b>TEXAS—</b>													
Austin .....	.202	.180	.201	2	.407	12	.000	88	48	67	57	0	37
New Braunfels .....	.226	.361	.284	27	.758	19	.082	52	71	84	71	54	72
<b>TENNESSEE—</b>													
Glenwood .....	.107	.116	.114	27	.316	19	.025	87	70	79	63	42	52
<b>KENTUCKY—</b>													
Springdale .....	.063	.097	.086	26	c. 222	13	d. 000	53	63	61	0	0	0
<b>OHIO—</b>													
Cincinnati, [Harper] .....	.088	.121	.094	26	.265	25	.031	77	73	67	52	50	45
Hillsborough .....	.094	.117	.106	26	.257	23	.026	100	92	99	100	63	89
Perrysburg (a) .....	.074	.106	.084	27	.310	19	e. 000	89	85	87	49	0	0
West Bedford (a) .....	.079	.105	.083	26	.204	22	f. 022	91	91	84	70	70	52
Zanesville (g) .....	.063	.077	.059	27	.278	18	f. 000	53	55	48	0	19	0
<b>MICHIGAN—</b>													
Romeo .....	.065	.088	.077	31	.159	11	.023	94	91	93	80	52	64
<b>INDIANA—</b>													
New Harmony .....	.089	.109	.110	26	.335	19	.025	93	73	91	67	48	71
Richmond .....	.072	.077	.079	26	.261	23	.016	82	63	75	56	33	47
<b>ILLINOIS—</b>													
Chicago .....	.063	.079	.076	26	.196	19	h. 025	92	80	89	77	57	69
Manchester (a) .....	.069	.126	.083	26	.231	18	.017	100	94	100	100	60	100
Peoria .....	.060	.080	.071	26	.236	21	f. 021	81	65	78	33	31	33
<b>MISSOURI—</b>													
St. Louis .....	.084	.101	.096	26	.269	7	.007	93	75	84	80	40	2
<b>WISCONSIN—</b>													
Appleton .....	.034	.068	.046	30	.162	18	i. 000	54	65	60	0	12	0
Madison, [Sterling] .....	.024	.042	.036	30	.221	22	j. 000	37	45	45	0	0	0
Prescott .....	.052	.075	.070	30	.162	5	k. 000	46	55	56	0	11	12
Waukesha .....	.048	.066	.052	26	.155	18	.018	89	80	89	63	50	57
<b>IOWA—</b>													
Muscatine .....	.044	.089	.055	29	.168	19	.010	81	94	93	45	62	60
<b>CALIFORNIA—</b>													
Sacramento .....	.269	.318	.294	19	.423	9	.136	87	81	84	71	61	67
San Francisco .....	.320	.340	.326	29	.536	18	.146	90	77	86	62	36	60
<b>WEST INDIES—</b>													
Port of Spain, Trinidad .....	.846	1.068	.926	4	1.087	23	.801	87	75	82	82	54	68
St. George's, Bermuda (m) .....													
<b>SOUTH AMERICA—</b>													
Catharina Sophia, Surinam (a) .....	.781	.826	.811	15	.931	31	.631	88	74	79	81	55	58
<b>AZORES—</b>													
Horta, Fayal .....	.409	.419	.407	5	.573	19	n. 281	84	79	83	63	60	63

a For changes in hours of observation, &c., see table of the thermometer for this month.

b For the first 18 days of the month only.

c Same amount on the 27th.

d Same amount on the 17th, 20th, 22d, and 23d.

e Same amount on the 31st.

f Same amount on the 22d.

g For the last 19 days of the month only.

h Same amount on the 25th.

i Same amount on the 17th, 19th, 21st, 23d, 24th, and 25th.

j Same amount on the 23d.

k Same amount on the 17th and 18th.

l Same amount on the 30th.

m Mean force of vapor for the month, .391; mean relative humidity for the month, 80.8.

n Same amount on the 26th.

## No. 27.—PSYCHROMETER, FEBRUARY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a) .....	.126	.147	.138	24	.325	12	.020	85	80	84	70	45	64
Montreal (b) .....	.115	.132	.124	24	.311	11	.008	83	84	85	30	72	43
St. Martin (a) .....	.111	.163	.125	7	.337	12	.016	86	82	86	75	64	73
St. Martin (b) .....	.100	.145	.112	7	.340	12	.012	88	81	87	67	38	71
Toronto (c) .....	.142	.149	.151	17	.346	2	.032	91	77	85	69	58	66
Wolfville .....	.150	.163	.148	9	.397	28	.016	91	78	88	51	4	70
VERMONT—													
Norwich (d) .....								39	38	36	14	14	13
MASSACHUSETTS—													
Amherst .....	.163	.190	.162	18	.420	27	.035	93	76	87	60	25	47
Bridgewater (e) .....	.176	.219	.185	8	.385	11	.032	92	79	87	66	40	58
Cambridge (e) .....								85	78	80	54	61	61
Canton .....	.162	.204	.172	16	.436	11	.036	89	75	86	65	39	40
Lawrence (e) .....	.150	.201	.173	18	.374	11	.012	76	64	76	19	25	58
Nantucket .....	.164	.166	.157	17	.308	11	f. 000	73	63	74	29	0	0
New Bedford .....	.170	.196	.176	8	.361	11	.036	91	78	90	57	51	51
Newburyport .....	.176	.189	.180	17	.385	27	.017	88	76	83	26	30	45
North Attleborough .....	.165	.177	.155	17	.397	71	.027	85	63	78	45	29	31
Westfield .....	.141	.167	.156	18	.396	2	.001	80	64	86	42	15	65
Worcester .....	.155	.186	.158	17	.405	27	.010	81	72	74	12	12	33
CONNECTICUT—													
Pomfret .....	.168	.210	.172	18	.469	12	.038	95	84	89	76	54	67
Wallingford .....	.157	.179	.162	18	.383	3	.044	91	88	86	55	33	60
NEW YORK—													
Blackwell's Island .....	.175	.208	.179	18	.391	12	.051	86	79	84	51	28	30
Fordham .....	.206	.241	.186	18	.505	1	.012	88	91	87	91	43	25
McGrawville .....	.165	.195	.169	17	.436	11	.036	88	81	86	71	57	59
New York city .....	.161	.190	.154	25	.380	11	.001	72	62	64	10	22	25
Oswego (g) .....	.270	.246	.252	17	.394	23	.131	88	81	90	74	55	72
Ovid .....	.145	.165	.153	18	.354	4	.019	71	68	75	41	39	51
Plainville .....	.173	.229	.178	17	.523	11	.014	84	92	86	34	71	42
Troy (g) .....	.195	.199	.153	8	.415	3	.072	85	75	86	70	47	51
NEW JERSEY—													
Bloomfield .....	.173	.221	.167	16	.456	10	.045	84	68	72	56	28	61
PENNSYLVANIA—													
Berwick .....	.178	.216	.183	8	.439	10	.036	82	72	80	60	24	40
Chromedale .....	.178	.234	.190	8	.470	3	.046	88	70	82	47	21	29
Easton .....	.160	.203	.165	18	.433	11	.030	84	70	80	43	38	44
Lewisburg .....	.167	.178	.152	18	.388	4	.000	78	61	69	0	20	20
Norristown .....	.163	.196	.189	16	.433	2	.026	83	58	78	40	15	47
Philadelphia .....	.184	.250	.208	16	.549	10	.036	82	68	78	54	40	37
MARYLAND—													
Annapolis .....	.179	.256	.209	25	.549	11	.036	86	72	84	55	37	50
Frederick .....	.178	.221	.191	17	.471	3	.044	84	66	79	55	17	40
DISTRICT OF COLUMBIA—													
Washington .....	.206	.261	.247	25	.523	10	.036	91	80	84	57	24	36
VIRGINIA—													
Montross .....	.224	.320	.258	19	.568	11	.062	86	73	83	56	45	45
Rose Hill .....	.235	.277	.258	19	.725	10	.056	77	65	69	57	33	30
NORTH CAROLINA—													
Goldsbrough .....	.737	.766	.756	17	.514	■	.069	85	50	71	56	17	0
Murfreesborough .....	.295	.392	.344	25	.612	10	h. 123	89	73	86	76	60	70
SOUTH CAROLINA—													
All Saints .....	.340	.425	.395	25	.604	11	.100	88	69	88	30	31	55
Camden .....	.303	.383	.346	20	.591	■	.082	90	56	79	57	26	51
Charleston, [Dawson] (i) .....													
Mount Pleasant (c) .....	.354	.478	.395	16	j. 543	11	.071	81	76	86	35	■	61

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to the Smithsonian tables.

c For change in hours of observation, &amp;c., see table of the thermometer for this month.

d Dalton's hygrometer.

e Simmon's organic hygrometer.

f Same amount on the 2d.

g Incomplete.

h Same amount on the 11th, 8th, and 12th.

i Mean force of vapor for the month, .361; obtained approximately from the mean d-w point.

j Same amount on the 24th.



## No. 27.—PSYCHROMETER, FEBRUARY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
GEORGIA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
Factory Mills.....	.294	.399	.349	21	.604	11	.064	87	62	82	63	22	53
Savannah.....	.339	.370	.379	15	.545	10	.064	88	53	84	40	17	62
FLORIDA—													
Jacksonville.....	.406	.532	.459	28	.704	10	.215	88	68	87	65	58	65
Warrington.....	.559	.649	.591	26	.900	9	.285	93	88	91	83	69	82
ALABAMA—													
Auburn.....	.282	.283	.286	25	.537	9	.000	67	42	54	37	10	0
Carlowville.....	.332	.458	.388	27	.843	9	.042	75	64	74	29	27	46
Greensborough.....	.321	.382	.379	25	.624	9	.066	73	60	69	51	23	42
MISSISSIPPI—													
Columbus.....	.325	.365	.349	25	.601	9	.074	87	59	79	53	25	48
Port Gibson.....	.409	.438	.437	25	.671	9	.167	89	60	75	68	43	54
TEXAS—													
Austin.....	.343	.334	.378	23	.644	10	.083	78	47	71	30	19	39
New Braunfels.....	.424	.576	.480	3	.856	8	.123	87	75	87	77	63	82
TENNESSEE—													
Glenwood.....	.261	.286	.285	25	.543	10	.065	79	56	72	46	24	39
KENTUCKY—													
Springdale (a).....	.197	.278	.257	18	.483	9	.032	71	65	69	45	32	45
OHIO—													
Cincinnati, [Harper].....	.216	.289	.241	18	.554	10	.037	69	65	69	60	28	42
Hillsborough.....	.248	.274	.262	18	.518	11	.055	96	76	89	74	51	61
Medina.....	.159	.203	.189	17	.456	1	.010	87	71	81	27	33	12
Perrysburg (a).....	.193	.252	.217	24	.556	10	.000	86	81	83	0	51	0
West Bedford.....	.189	.226	.218	18	.433	11	.052	89	78	82	65	45	57
Zanesville.....	.176	.224	.207	18	.457	2	.034	78	66	73	54	41	44
MICHIGAN—													
Romeo (a).....	.139	.170	.172	17	.442	10	.031	88	76	84	68	52	60
INDIANA—													
New Albany (b).....	.296	.328	.334	17	.516	12	.142	82	72	82	64	51	50
New Harmony.....	.257	.319	.280	17	.690	11	.075	89	77	87	62	44	60
Richmond (b).....	.234	.220	.197	1	.666	1	.051	69	60	70	35	25	46
ILLINOIS—													
Chicago.....	.151	.183	.163	17	.388	10	.028	93	80	90	68	57	65
Manchester (a).....	.191	.279	.221	16	.518	10	.036	100	90	100	100	61	100
Peoria.....	.172	.222	.188	6	.439	10	.034	88	78	87	66	46	60
MISSOURI—													
St. Louis.....	.210	.244	.224	17	.473	10	.047	87	71	81	63	31	54
WISCONSIN—													
Appleton.....	.091	.134	.105	16	.283	2	c. 000	66	69	69	0	45	40
Madison, [Sterling].....	.108	.141	.111	14	.267	10	.000	70	72	74	0	0	9
Prescott.....	.092	.154	.101	12	.308	10	.000	48	54	47	0	2	11
Waukesha.....	.125	.137	.131	17	.311	10	.027	92	77	85	70	45	61
IOWA—													
Muscatine.....	.135	.186	.146	23	.365	10	.025	88	83	84	70	45	59
CALIFORNIA—													
Sacramento.....	.276	.308	.303	1	.423	6	.090	84	73	83	70	47	66
San Francisco.....	.310	.337	.321	1	.476	6	.147	86	76	86	57	50	70
WEST INDIES—													
Port of Spain, Trinidad.....	.866	1.061	.919	26	1.190	7	.801	88	77	85	81	60	77
St. George's, Bermuda (d).....													
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (a).....	.783	.800	.788	11	.900	2	.612	94	74	78	90	57	57
AZORES—													
Horta, Fayal.....	.336	.352	.356	24	.533	14	.192	80	74	83	62	59	56

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Incomplete.

c Same amount on the 10th.

d Mean force of vapor for the month, .490. Mean relative humidity for the month, 87.0.

## No. 28.—PSYCHROMETER, MARCH, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.123	.172	.138	30	b. 292	2	c. 040	83	81	80	71	45	45
Montreal (d).....	.111	.161	.134	30	b. 285	3	.030	84	87	85	63	70	74
St. Martin (e).....	.107	.174	.125	31	.274	11	.021	84	81	83	70	64	70
St. Martin (d).....	.091	.158	.113	29	.256	11	.021	83	82	82	59	62	55
Toronto (e).....	.117	.128	.125	23	.220	2	c. 039	86	67	78	63	44	52
Wolfville.....	.123	.138	.132	19	.251	2	.033	86	85	82	49	33	60
VERMONT—													
Norwich (f).....								25	24	23	16	14	11
Woodstock.....	.103	.117	.113	25	.243	11	.027	82	62	74	54	20	42
MASSACHUSETTS—													
Amherst.....	.126	.146	.140	19	.389	12	.046	84	62	78	55	23	50
Bridgewater (e).....	.146	.167	.142	19	.385	17	.029	85	70	76	50	31	16
Cambridge (g).....								81	70	76	68	56	59
Canton (e).....	.117	.138	.122	19	.403	4	.036	80	64	76	36	41	46
Lawrence.....	.122	.153	.140	24	.269	11	.039	75	62	74	23	28	20
Nantucket.....	.145	.141	.146	19	.285	11	.041	71	54	73	36	19	42
New Bedford.....	.149	.177	.160	19	.300	8	.048	85	76	83	60	43	59
Newburyport (e).....	.159	.158	.158	14	.367	3	.029	86	67	82	33	22	46
North Attleborough.....	.126	.127	.128	19	.361	3	i. 040	76	51	72	47	20	33
Westfield.....	.118	.130	.159	19	.361	11	.033	74	55	85	51	18	63
Williamstown.....	.113	.135	.119	19	.298	3	.025	78	69	77	36	41	36
Worcester.....	.100	.137	.124	30	.361	5	.001	58	54	61	1	3	1
CONNECTICUT—													
Pomfret.....	.139	.165	.141	19	.361	7	.051	88	75	83	68	52	59
Wallingford.....	.127	.139	.140	19	.348	3	.043	83	57	78	52	22	54
NEW YORK—													
Blackwell's Island.....	.139	.152	.160	24	.349	13	.051	74	61	74	42	17	48
Fordham.....	.203	.252	.207	31	.438	3	.068	98	96	99	79	63	75
McGrawville.....	.124	.137	.126	18	.311	10	.030	87	80	86	70	45	54
New York city.....	.129	.144	.146	19	.307	3	.001	63	53	63	23	25	35
Ovid.....	.105	.117	.111	24	.241	12	.030	69	60	67	40	26	33
Plainville.....	.112	.179	.117	31	.334	2	.029	75	81	77	57	61	51
NEW JERSEY—													
Bloomfield.....	.124	.153	.154	19	.347	11	.027	69	52	75	45	18	42
PENNSYLVANIA—													
Berwick.....	.136	.152	.144	24	.309	13	.045	73	58	72	54	35	42
Chromedale.....	.135	.144	.153	24	.347	2	.050	80	52	75	50	24	35
Easton.....	.138	.130	.151	19	.328	10	.037	71	43	75	45	20	54
Harrisburg, [Hickok].....	.157	.143	.144	24	.336	12	.000	68	42	51	0	19	20
Lewisburg.....	.118	.129	.115	24	.356	2	.035	74	52	58	33	17	23
Norristown.....	.137	.137	.138	17	.283	2	.039	72	51	63	53	17	53
Philadelphia.....	.144	.167	.156	24	.348	8	.044	72	55	72	41	26	47
MARYLAND—													
Annapolis.....	.143	.164	.156	24	.365	3	.031	72	54	66	40	29	35
Frederick.....	.135	.142	.157	19	.286	3	.040	71	52	71	52	18	49
DISTRICT OF COLUMBIA—													
Washington.....	.156	.160	.195	24	.685	2	.040	81	52	76	50	15	45
VIRGINIA—													
Montross.....	.158	.192	.172	24	.541	19	.022	70	56	67	42	41	6
Rose Hill.....	.159	.155	.171	25	.433	8	.044	62	46	53	37	21	39
NORTH CAROLINA—													
Goldsborough.....	.190	.163	.189	24	.533	2	.035	71	39	63	23	9	18
Murfreesborough.....	.216	.280	.262	24	.561	8	.042	85	68	84	18	48	67
SOUTH CAROLINA—													
All Saints.....	.233	.269	.279	24	.666	2	.083	80	56	77	42	28	29
Camden.....	.198	.227	.212	23	.514	2	.076	80	49	65	44	15	23
Charleston, [Dawson] (j).....													

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b Same amount on the 31st.

c Same amount on the 3d.

d According to the Smithsonian tables.

e For changes in hours of observation, &amp;c., see table of the thermometer for this month.

f Dalton's hygrometer.

g Simmons's organic hygrometer.

h Same amount on the 30th.

i Same amount on the 7th.

j Mean force of vapor for the month, .273; obtained approximately from the mean dew point.



## No. 28.—PSYCHROMETER, MARCH, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
SOUTH CAROLINA—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Mount Pleasant.....	.242	-----	.291	23	.478	3	.093	74	-----	73	41	47	43
GEORGIA—													
Athens (a).....	.187	.183	.215	23	.459	26	.076	69	46	58	29	11	25
Augusta.....	.260	.351	.318	23	.591	2	.155	83	72	84	57	38	65
Factory Mills.....	.197	.237	.235	23	.496	7	.025	75	48	72	40	9	38
Savannah.....	.248	.253	.294	25	.597	2	.048	76	51	70	33	14	31
FLORIDA—													
Jacksonville.....	.356	.460	.400	25	.733	13	.144	85	66	88	33	50	73
Warrington.....	.494	.576	.532	27	.771	7	.309	91	85	86	75	71	47
ALABAMA—													
Auburn.....	.166	.181	.182	5	.391	29	.007	55	38	46	20	1	12
Carlowville.....	.250	.343	.255	24	.671	12	.082	72	63	63	32	36	23
Greensborough.....	.211	.227	.242	23	.422	2	b. 070	61	49	57	25	16	36
MISSISSIPPI—													
Columbus.....	.207	.198	.215	22	.420	12	.054	69	38	60	31	20	31
Port Gibson.....	.319	.342	.362	21	.652	12	.143	82	53	68	60	24	31
LOUISIANA—													
New Orleans.....	.380	.381	.452	25	.635	12	.090	78	55	79	26	25	36½
TEXAS—													
Austin.....	.331	.293	.349	17	.662	13	.076	78	39	67	51	14	39
New Braunfels.....	.414	.682	.506	27	1.135	13	.100	86	74	87	71	48	70
TENNESSEE—													
Olenwood.....	.161	.165	.172	23	.370	7	.047	70	43	61	50	16	35
KENTUCKY—													
Springdale (a).....	.125	.184	.181	23	.514	14	.000	66	53	62	40	0	29
OHIO—													
Cincinnati, [Harper].....	.160	.183	.182	17	.500	11	.047	75	52	68	52	22	27
Millsborough.....	.156	.177	.173	23	.433	2	.049	90	64	83	29	29	41
Medina.....	.117	.131	.119	24	.308	2	.035	68	55	68	31	25	34
Perrysburg (a).....	.161	.219	.174	23	.618	2	.050	85	75	83	61	49	64
West Bedford.....	.147	.170	.150	23	.403	2	.043	87	69	79	58	32	47
MICHIGAN—													
Romeo (a).....	.112	.108	.112	24	.214	2	.036	79	55	72	43	23	46
INDIANA—													
New Albany (a).....	.213	.248	.234	22	.438	25	.130	81	70	78	63	40	45
New Harmony.....	.165	.195	.202	23	.510	3	.064	79	58	83	48	25	49
ILLINOIS—													
Chicago.....	.130	.142	.139	22	.330	12	.033	86	72	85	64	35	58
Manchester (a).....	.158	.236	.180	22	.497	9	.048	95	81	94	68	35	58
Peoria.....	.134	.187	.161	21	.410	12	.035	85	67	81	57	40	48
MISSOURI—													
St. Louis.....	.151	.174	.179	22	.367	21	.019	80	59	75	10	10	4
WISCONSIN—													
Appleton.....	.093	.131	.111	21	.273	12	.012	69	58	68	27	25	45
Madison, [Sterling].....	.093	.130	.109	30	.439	7	.006	63	60	66	12	24	18
Prescott.....	.110	.205	.139	21	.451	6	c. 036	52	58	54	21	38	20
Waukesha.....	.107	.120	.113	22	d. 225	11	.036	84	65	71	61	34	28
IOWA—													
Muscatine.....	.135	.188	.162	23	d. 286	2	.017	82	82	87	29	56	63
UTAH—													
Great Salt Lake City (a).....	.164	.176	-----	11	.297	24	.000	69	47	-----	7	5	-----
CALIFORNIA—													
Sacramento.....	.333	.357	.361	11	e. 442	23	.204	85	69	81	77	45	60
San Francisco.....	.356	.403	.342	13	.591	19	.260	87	70	85	72	45	74
WEST INDIES—													
St. George's, Bermuda (f).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
AZORES—													
Horta, Fayal.....	.396	.415	.404	30	.537	17	.246	84	79	84	64	64	68

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 7th.

c Same amount on the 11th.

d Same amount on the 31st.

e Same amount on the 15th.

f Mean force of vapor for the month, .489; mean relative humidity for the month, 83.8.

## No. 29.—PSYCHROMETER, APRIL, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date	Amt.	Date	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
BRITISH AMERICA—													
Montreal (a).....	.176	.212	.184	20	.358	2	.051	77	73	77	62	33	54
Montreal (b).....	.177	.211	.175	20	.348	2	.035	81	74	79	53	39	42
St. Martin (a).....	.179	.238	.299	19	.342	2	.044	84	78	84	65	61	68
St. Martin (b).....	.163	.221	.179	19	.320	2	.034	84	76	82	67	58	64
Toronto (c).....	.147	.164	.152	5	.259	2	.061	82	63	79	69	49	57
Wolfville.....	.202	.219	.201	10	.420	3	.092	88	63	81	60	30	54
NEW HAMPSHIRE—													
Francestown, [Bixby].....	.163	.176	.183	■	.443	2	d.028	74	56	76	25	22	31
VERMONT—													
Norwich (e).....								20	16	16	10	6	4
MASSACHUSETTS—													
Amherst.....	.190	.195	.190	6	.457	2	.062	83	59	76	56	32	54
Bridgewater (c).....	.193	.217	.214	6	.458	3	.064	83	65	74	51	33	25
Cambridge (f).....								83	73	79	67	57	63
Lawrence.....	.187	.214	.209	8	.483	3	.062	83	63	81	58	18	51
Nantucket.....	.193	.198	.203	6	.328	2	.076	72	61	79	42	32	60
Newburyport (c).....	.183	.218	.219	6	.407	3	.062	80	71	84	43	28	49
New Bedford.....	.196	.227	.214	6	.361	2	.066	84	71	87	52	39	47
Westfield.....	.158	.172	.218	6	.454	7	.055	70	53	88	38	20	74
Williamstown.....	.185	.228	.196	6	.467	8	.100	80	74	85	56	41	58
Worcester.....	.169	.225	.193	6	.449	2	.051	75	71	75	21	22	21
CONNECTICUT—													
Pomfret.....	.189	.222	.197	6	.403	2	.067	86	73	84	52	46	59
Wallingford.....	.173	.188	.188	6	.411	2	.065	77	55	76	45	30	47
NEW YORK—													
Blackwell's Island.....	.182	.198	.188	6	.374	2	.039	68	56	68	33	26	39
McGrawville.....	.168	.180	.166	6	.410	2	.045	83	70	82	61	36	59
New York city.....	.172	.200	.169	6	.352	2	.037	63	55	58	35	25	21
Oswego (g).....	.215	.236	.166	14	h.300	15	.155	85	81	85	60	59	61
Ovid.....	.151	.157	.155	6	.363	2	.054	72	64	72	42	26	37
Plainville.....	.183	.225	.181	4	.439	2	.039	86	81	87	57	25	47
NEW JERSEY—													
Bloomfield.....	.205	.237	.219	6	.418	2	.043	78	65	81	61	33	57
Burlington.....	.232	.252	.250	27	.348	16	.156	90	74	88	68	39	62
PENNSYLVANIA—													
Berwick (c).....	.195	.211	.184	5	.433	2	.055	72	58	70	53	33	44
Chromedale.....	.191	.189	.186	■	.424	2	.001	79	57	72	33	23	43
Easton.....	.169	.158	.174	■	.428	2	.046	68	46	73	40	23	43
Harrisburg, [Hickok].....	.175	.177	.166	5	.446	2	.047	71	52	59	51	26	20
Lewisburg.....	.170	.157	.160	6	.531	2	.042	72	49	66	48	18	39
Norristown.....	.184	.197	.168	6	.421	2	.064	76	60	67	51	27	41
Philadelphia.....	.204	.210	.197	6	.469	2	.077	74	55	70	42	31	47
DELAWARE—													
Newark, (c).....	.203	.212	.185	27	.334	15	.136	74	53	67	54	32	50
MARYLAND—													
Annapolis.....	.198	.211	.200	6	.449	2	d.076	75	56	71	45	29	40
Frederick.....	.177	.219	.192	5	.449	6	.000	69	59	69	0	14	17
DISTRICT OF COLUMBIA—													
Washington.....	.210	.198	.214	8	.491	15	.069	79	52	72	44	21	44
VIRGINIA—													
Crack Whip.....	.163	.196	.168	5	.433	5	.051	71	57	71	40	25	38
Montross.....	.208	.245	.218	8	.491	15	.014	72	61	76	25	20	4
Rose Hill.....	.199	.186	.211	6	.483	2	.067	62	48	58	38	22	30
NORTH CAROLINA—													
Goldsborough.....	.251	.222	.221	6	.544	17	.035	71	45	62	40	10	20
Murfreesborough.....	.275	.358	.311	27	.631	2	.150	90	75	87	74	59	58
SOUTH CAROLINA—													
All Saints.....	.316	.313	.337	8	.591	7	.129	83	54	77	47	29	55
Camden.....	.252	.253	.260	19	.536	3	.078	73	42	69	34	14	39

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to the tables used by the observer.

b According to the Smithsonian tables.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 3d.

e Dalton's hygrometer.

f Simmons's organic hygrometer.

g Imperfect.

h Same amount on the 27th.



## No. 29.—PSYCHROMETER, APRIL, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
SOUTH CAROLINA—Continued.													
Charleston, [Dawson] (a) . . . . .													
GEORGIA—													
Athens . . . . .	.260	.293	.278	5	.531	21	.126	80	54	69	63	30	38
Augusta . . . . .	.274	.358	.378	28	.695	6	.087	71	59	76	21	35	22
Factory Mills . . . . .	.261	.272	.278	5	.544	6	.099	72	43	65	36	17	35
Savannah . . . . .	.295	.267	.308	19	.542	15	.070	68	40	64	31	7	22
FLORIDA—													
Jacksonville . . . . .	.417	.512	.466	18	.829	22	.210	84	65	83	58	37	68
ALABAMA—													
Auburn . . . . .	.217	.230	.223	18	.524	13	.039	59	39	48	18	7	15
Carlowville . . . . .	.289	.461	.340	29	b.990	22	.064	75	68	73	21	21	37
Greensborough . . . . .	.256	.276	.291	18	.557	6	.097	64	51	63	43	25	40
MISSISSIPPI—													
Columbus . . . . .	.265	.275	.279	5	b.585	6	.097	72	44	68	37	24	41
Port Gibson . . . . .	.334	.388	.371	30	.708	8	.125	84	59	73	68	40	37
LOUISIANA—													
New Orleans . . . . .	.369	.382	.389	17	.724	6	.113	83	53	74	37	29	45½
TEXAS—													
Austin, [Jennings] . . . . .	.271	.247	.303	17	.608	23	.000	69	33	61	34	0	29
New Braunfels . . . . .	.390	.636	.484	17	.970	6	.155	87	71	87	81	58	51
TENNESSEE—													
Glenwood . . . . .	.192	.189	.197	30	.523	16	.040	69	47	61	22	13	36
KENTUCKY—													
Springdale (c) . . . . .	.156	.224	.218	4	.469	28	.034	79	63	74	29	7	30
OHIO—													
Cincinnati, [Harper] . . . . .	.187	.235	.185	30	.457	6	.080	75	57	67	58	30	43
Hillsborough . . . . .	.189	.202	.188	5	.388	8	.093	86	63	78	54	34	45
Medina . . . . .	.149	.174	.138	26	.405	20	.058	74	64	76	23	21	24
Perrysburg (c) . . . . .	.185	.217	.189	5	.362	1	d.089	79	70	79	53	36	59
INDIANA—													
New Albany . . . . .	.227	.255	.260	30	.570	12	.088	83	67	82	62	41	61
New Harmony . . . . .	.186	.214	.219	30	.487	15	.058	75	58	79	45	21	39
Richmond . . . . .	.147	.136	.149	5	.361	16	.061	67	47	59	45	22	34
ILLINOIS—													
Chicago . . . . .	.146	.177	.171	29	.361	8	.065	80	70	83	62	44	66
Manchester (c) . . . . .	.188	.260	.205	1	.423	6	.086	92	69	92	60	45	63
Peoria . . . . .	.167	.195	.188	30	.410	11	.071	80	55	76	49	28	55
Upper Alton (c) . . . . .	.222	.243	.259	25	.559	20	.118	84	81	87	48	63	74
MISSOURI—													
St. Louis . . . . .	.165	.172	.177	30	.459	28	.057	70	49	62	39	5	27
WISCONSIN—													
Appleton . . . . .	.115	.155	.139	30	.346	6	.051	67	53	67	45	28	42
Madison, [Sterling] . . . . .	.120	.135	.149	4	.298	6	.031	66	51	73	28	20	43
Waukesha, [Bean] . . . . .	.194	.204	.190	26	.452	21	.029	68	50	65	38	7	31
IOWA—													
Muscatine . . . . .	.212	.236	.255	12	.452	6	.075	83	76	82	59	51	58
UTAH—													
Great Salt Lake City (c) . . . . .	.219	.188		20	.551	8	.002	83	37		45	0	
CALIFORNIA—													
Sacramento . . . . .	.384	.428	.449	12	.635	1	.223	82	61	80	64	32	50
San Francisco . . . . .	.376	.397	.362	8	.572	5	.216	82	61	82	37	43	66
WEST INDIES—													
St. George's, Bermuda (f) . . . . .													
SOUTH AMERICA—													
Cath'na Sophia, Surinam (c) . . . . .	.747	.834	.807	30	.958	25	.489	89	68	76	75	55	68
AZORES—													
Horta, Fayal . . . . .	.396	.418	.386	20	g.533	8	h.256	79	75	84	61	62	61

a Mean force of vapor for the month, .348; obtained approximately from the mean dew point.

b Same amount on the 30th.

c For changes in hours of observation, &c., see table of the thermometer for this month.

d Same amount on the 6th.

e Imperfect.

f Mean force of vapor for the month, .494; mean relative humidity for the month, 84.3.

g Same amount on the 21st and 22d.

h Same amount on the 17th.

## No. 30.—PSYCHROMETER, MAY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.283	.376	.232	18	.748	9	b. 106	72	67	70	31	33	31
Montreal (c).....	.281	.345	.280	23	.666	12	.100	72	65	73	38	41	32
St. Martin (a).....	.265	.376	.299	28	.888	11	.145	81	67	79	53	45	61
St. Martin (c).....	.248	.344	.274	25	.587	19	.083	77	60	73	33	32	52
Toronto (d).....	.230	.270	.259	■	.489	11	.119	78	66	78	51	39	38
Windsor.....	.307	.327	.233	30	.612	11	.120	84	60	77	43	35	53
Wolfville.....	.279	.296	.266	30	.524	14	.110	79	57	76	40	26	36
MAINE—													
Gardiner.....	.365	.469	-----	25	.745	15	.192	85	79	-----	57	54	-----
NEW HAMPSHIRE—													
Francestown, [Bixby].....	.283	.287	.286	28	.581	12	.097	76	57	74	39	18	45
VERMONT—													
Norwich (c).....	-----	-----	-----	-----	-----	-----	-----	25	19	18	10	3	2
MASSACHUSETTS—													
Amherst.....	.318	.315	.322	28	.625	11	.091	84	57	80	60	31	36
Bridgewater (d).....	.315	.378	.342	31	.549	11	.099	86	67	88	30	31	32
Cambridge (f).....	-----	-----	-----	-----	-----	-----	-----	87	72	78	68	55	57
Lawrence.....	.319	.366	.329	28	.583	11	g. 125	80	67	82	56	26	40
Nantucket.....	.282	.296	.295	31	.437	■	.062	73	60	82	53	33	49
New Bedford.....	.325	.354	.324	27	.537	11	.137	84	69	88	51	32	51
Newburyport (d).....	.323	.364	.333	29	.604	11	.148	86	71	87	64	30	52
Westfield.....	.267	.296	.310	28	.517	11	.108	76	50	76	42	24	40
Worcester.....	.297	.376	.279	■	.698	10	.083	79	68	72	15	28	17
RHODE ISLAND—													
Providence (h).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CONNECTICUT—													
Pomfret.....	.334	.386	.324	25	.626	11	.144	90	73	86	66	44	63
Wallingford.....	.305	.325	.299	28	.536	13	.099	83	57	75	52	16	42
NEW YORK—													
Blackwell's Island.....	.338	.343	.343	31	.577	1	.133	79	63	77	42	38	32
McGrawville.....	.268	.298	.298	31	.483	11	.078	74	61	79	47	40	54
New York city.....	.304	.337	.320	31	.552	17	.109	66	55	67	41	23	34
Oswego.....	.327	.321	.323	9	.621	6	.033	82	64	89	51	8	65
Ovid.....	.228	.240	.246	31	.583	13	.095	64	52	65	33	18	22
Plainville.....	.324	.428	.304	26	.908	19	i. 000	83	74	85	57	46	53
NEW JERSEY—													
Bloomfield.....	.354	.450	.379	31	.691	11	.160	85	67	84	58	48	62
Burlington.....	.397	.388	.382	31	.658	11	.182	86	62	81	51	32	62
PENNSYLVANIA—													
Berwick.....	.305	.331	.325	31	.604	11	.139	71	55	70	44	30	35
Chromedale.....	.332	.331	.350	31	.633	11	.114	78	55	76	36	28	42
Easton.....	.292	.287	.314	31	.612	11	.107	75	50	71	56	23	43
Harrisburg, [Hickok].....	.292	.279	.309	31	.609	11	.095	73	47	62	39	10	25
Lewisburg.....	.277	.281	.292	31	.526	11	.107	71	47	61	45	21	39
Morrisville (j).....	-----	.391	-----	31	.610	11	.144	-----	54	-----	-----	33	-----
Murrysville.....	.248	.263	.278	7	.537	11	.027	59	45	68	29	7	26
Norristown.....	.316	.347	.312	26	.638	11	.117	78	59	71	45	33	39
Philadelphia.....	.343	.343	.350	30	.585	11	.142	75	51	68	42	29	43
DELAWARE—													
Newark.....	.335	.407	.360	31	.601	11	.156	74	62	69	48	37	49
MARYLAND—													
Annapolis.....	.381	.391	.369	31	.711	12	.171	80	58	77	52	34	34
Frederick.....	.327	.367	.356	31	.658	12	k. 156	70	56	72	48	22	25
DISTRICT OF COLUMBIA—													
Washington.....	.375	.374	.403	31	.724	11	.162	81	54	76	47	18	27

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to the tables used by the observer.

b Same amount on the 16th, 18th, and 20th.

c According to the Smithsonian tables.

d For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e Dalton's hygrometer.

f Simmons's organic hygrometer.

g Same amount on the 12th.

h Mean relative humidity for the month, .77; minimum, .48.

i Same amount on the 13th.

j Imperfect.

k Same amount on the 5th.



## No. 30.—PSYCHROMETER, MAY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
VIRGINIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Crack Whip.....	.298	.319	.308	29	.642	11	.112	70	51	68	42	14	39
Montross.....	.373	.481	.408	24	.931	16	.176	76	60	79	29	34	30
NORTH CAROLINA—													
Murfreesborough.....	.478	.617	.530	31	.976	20	.287	90	75	86	68	61	72
SOUTH CAROLINA—													
All Saints.....	.519	.517	.553	31	.884	21	.263	81	63	82	70	36	53
Camden.....	.450	.440	.471	31	.705	4	.206	77	52	77	49	26	28
Charleston, [Dawson] (a).....													
GEORGIA—													
Athens.....	.436	.479	.348	16	.701	18	.177	81	61	77	61	25	50
Augusta.....	.523	.634	.624	28	1.310	21	.219	85	68	82	69	37	31
Factory Mills.....	.484	.495	.519	24	.904	21	.234	84	61	81	61	29	53
Savannah.....	.494	.479	.526	31	.712	21	.211	74	51	75	46	22	56
FLORIDA—													
Jacksonville.....	.638	.729	.661	30	.996	20	.352	88	71	88	70	48	77
Warrington.....	.719	.742	.742	15	.897	4	.483	95	87	91	86	78	79
ALABAMA—													
Auburn.....	.392	.394	.380	15	.604	23	.141	66	45	56	38	15	29
Carlowville.....	.500	.633	.518	12	1.097	22	.137	78	67	74	49	28	22
Greensborough.....	.440	.454	.475	1	.655	3	.266	83	53	77	56	26	51
MISSISSIPPI—													
Columbus.....	.440	.454	.475	1	.655	3	.266	83	53	77	56	26	51
TEXAS—													
Austin.....	.439	.410	.451	16	.599	19	.181	81	39	65	43	6	42
New Braunfels.....	.597	1.072	.722	14	1.432 <i>b</i>	4	.309	89	82	90	83	74	79
TENNESSEE—													
Glenwood.....	.341	.339	.369	1	.612	21	.139	76	51	69	44	27	46
KENTUCKY—													
Springdale (c).....	.287	.391	.406	9	1.114	8	.144	84	59	79	47	14	36
OHIO—													
Cincinnati, [Harper].....	.332	.430	.354	31	.733	11	.147	74	58	70	53	32	42
Cincinnati, [Hurt] (d).....	.368	.535	.506	30	1.114	17	.216	72	69	81	53	33	52
Hillsborough.....	.323	.328	.334	31	.577	11	.170	81	61	76	51	29	48
Medina.....	.274	.306	.280	1	.600	11	.097	70	61	70	34	28	19
Perrysburg (c).....	.316	.360	.323	31	.693	11	.125	76	64	75	46	30	39
Savannah.....	.301	.356	.302	24	.772	20	.110	67	55	71	26	29	39
INDIANA—													
New Albany.....	.376	.415	.367	31	.718	3	.156	79	61	78	48	33	48
New Harmony.....	.334	.347	.364	13	.599	20	.123	68	50	73	52	18	37
Richmond.....	.295	.246	.274	31	.532	20	.098	69	48	62	44	18	23
ILLINOIS—													
Chicago.....	.264	.250	.248	11	.462	20	.144	73	57	75	42	30	51
Manchester (c).....	.322	.407	.346	9	.610	11	.183	82	60	82	48	36	51
Peoria.....	.305	.325	.308	25	.539	11	.159	76	46	69	51	22	33
Upper Alton.....	.383	.559	.430	23	.904	19	.143	84	79	88	43	51	75
MISSOURI—													
St. Louis.....	.289	.294	.272	30	.601	17	.015	61	41	55	5	22	5
WISCONSIN—													
Appleton.....	.214	.254	.237	26	.570	10	.059	63	44	64	36	17	36
Madison, [Sterling].....	.208	.199	.227	24	.428	2	.078	59	40	62	30	13	26
Waukesha.....	.252	.270	.236	22	.800	4	.100	70	50	69	26	13	43
IOWA—													
Fairfield.....	.255	.229	.257	16	.572	19	.099	61	40	61	25	10	19
Muscataine.....	.352	.377	.392	24	.572	20	.232	79	73	76	61	34	58

a Mean force of vapor for the month, .554, obtained approximately from the mean dew point.

b Same amount on the 29th.

c For changes in hours of observation, &c., see table of the thermometer for this month.

d For the last 19 days of the month only.

e Same amount on the 24th.

f Same amount on the 16th.

## No. 30.—PSYCHROMETER, MAY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 a. m.	7 a. m.	2 p. m.	9 p. m.
CALIFORNIA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
Sacramento .....	.396	.463	.431	25	.762	1	.266	72	62	75	62	34	56
San Francisco .....	.362	.376	.357	11	.460	14	.295	80	59	84	63	32	74
MEXICO—													
Vera Cruz (a) .....	.710		.762					75		76			
WEST INDIES—													
St. George's, Bermuda (b) .....													
SOUTH AMERICA—													
Catharina Sophia, Surinam (a) .....	.796	.896	.864	1	1.010	30	.591	91	76	81	76	62	67
AZORES—													
Horta, Fayal .....	.416	.423	.415	23	.583	10	.209	78	73	85	58	38	69

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Mean force of vapor for the month, .667; mean relative humidity for the month, 90.2.



## No. 31.—PSYCHROMETER, JUNE, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
BRITISH AMERICA—													
Montreal (a).....	.379	.468	.408	29	.854	5	.153	74	70	75	43	32	49
Montreal (b).....	.357	.428	.380	29	.869	5	.114	67	64	69	21	28	48
St. Martin (b).....	.374	.499	.412	10	.684	5	.186	82	65	82	66	47	47
St. Martin (a).....	.392	.516	.411	10	.692	5	.226	83	70	83	72	52	55
Toronto (c).....	.341	.374	.335	28	.584	5	.172	83	69	79	61	33	51
Windsor.....	.395	.412	.380	21	.710	16	.234	75	65	81	58	38	65
Wolfville.....	.383	.420	.368	21	.691	8	.221	78	65	76	59	34	59
MAINE—													
Gardiner.....	.439	.520	.....	21	.904	8	.017	88	70	.....	71	2	.....
NEW HAMPSHIRE—													
Frauncestown, (Bixby).....	.354	.371	.379	20	.639	5	.150	72	55	76	38	27	50
VERMONT—													
Norwich (d).....	.....	.....	.....	.....	.....	.....	.....	25	19	17	17	6	6
MASSACHUSETTS—													
Amherst.....	.436	.457	.441	20	.742	26	.238	83	64	83	65	23	46
Cambridge (e).....	.....	.....	.....	.....	.....	.....	.....	83	70	77	71	53	64
Lawrence.....	.426	.465	.442	22	.758	8	.273	88	65	85	66	34	59
Nantucket.....	.395	.408	.409	13	.586	26	.126	75	63	84	34	14	32
New Bedford.....	.425	.464	.434	3	.696	6	.219	81	69	87	48	22	53
Newburyport.....	.446	.415	.439	21	.685	15	.184	85	62	83	44	32	55
Westfield.....	.366	.362	.403	20	.631	5	.205	73	61	74	43	23	50
Worcester.....	.385	.375	.387	20	.639	6	.146	72	54	72	52	22	26
CONNECTICUT—													
Pomfret.....	.439	.490	.423	20	.706	6	.245	87	74	84	65	45	61
Wallingford.....	.408	.425	.417	21	.758	5	.221	80	59	79	62	26	54
NEW YORK—													
Blackwell's Island.....	.434	.445	.459	21	.785	6	.190	72	62	75	42	25	34
McGrawville.....	.415	.453	.433	10	.708	5	.224	83	71	86	71	45	62
New York city.....	.434	.485	.447	20	.711	6	.214	69	62	72	42	32	34
Oswego.....	.446	.463	.422	18	.758	4	.225	85	73	89	64	42	70
Ovid.....	.386	.400	.351	18	.617	6	.150	73	61	72	40	25	40
Plainville.....	.446	.618	.416	18	.827	28	.136	85	82	87	21	55	67
Spencertown.....	.375	.400	.403	29	.612	6	.162	76	62	76	31	33	45
NEW JERSEY—													
Bloomfield.....	.500	.562	.502	27	.892	6	.184	86	70	88	64	25	59
Burlington.....	.501	.569	.525	1	.785	5	.270	86	71	82	55	45	65
PENNSYLVANIA—													
Berwick.....	.470	.542	.501	28	.789	6	.044	80	69	82	49	41	5
Chromedale.....	.495	.552	.527	21	.822	6	.252	80	67	84	48	36	60
Easton.....	.415	.443	.440	1	.655	5	.181	77	59	77	47	29	43
Harrisburg, [Hickok].....	.436	.460	.492	16	.738	4	.150	76	57	73	45	20	35
Lewisburg.....	.430	.472	.424	1	1.003	5	.192	74	57	79	52	27	48
Morrisville.....	.....	.572	.....	27	.762	23	.429	.....	65	.....	.....	45	.....
Murrysville.....	.409	.402	.444	16	.644	5	.136	69	45	77	52	21	52
Norristown.....	.450	.493	.496	1	.758	6	.231	81	62	77	52	31	45
Philadelphia.....	.483	.518	.502	1	.743	6	.268	71	57	70	46	33	49
DELAWARE—													
Newark.....	.512	.546	.524	16	.744	6	.268	78	65	77	45	40	54
MARYLAND—													
Annapolis.....	.563	.569	.569	16	.805	6	.322	82	62	80	61	36	56
Frederick.....	.540	.590	.556	27	.849	2	.203	74	64	82	48	47	34
DISTRICT OF COLUMBIA—													
Washington, [Smith. Inst.].....	.566	.564	.590	16	.938	23	.165	82	57	81	47	22	61
VIRGINIA—													
Berryville.....	.511	.531	.532	9	.784	24	.070	79	58	78	42	8	55
Crack Whip.....	.522	.595	.494	16	.897	8	.261	81	66	85	55	38	59
Montross.....	.552	.653	.569	28	.901	6	.295	75	60	78	49	37	69
Rose Hill.....	.542	.532	.574	29	.745	8	.273	77	55	67	61	29	48

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to the Smithsonian tables.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Dalton's hygrometer.

e Simmons's organic hygrometer.

## No. 31.—PSYCHROMETER, JUNE, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
NORTH CAROLINA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Murfreesborough .....	.739	.909	.762	5	1.187 <sup>a</sup>	7	.389	86	75	86	63	51	72
SOUTH CAROLINA—													
All Saints .....	.703	.747	.733	9	b.891	23	.333	81	72	80	50	44	57
Camden .....	.660	.568	.637	14	.800	23	.362	77	47	78	55	31	54
Charleston, [Dawson] (c) .....													
GEORGIA—													
Athens .....	.551	.500	.570	28	.723	23	.393	71	43	72	50	26	50
Augusta .....	.674	.763	.860	15	1.228	23	.371	79	60	85	49	27	57
Factory Mills .....	.631	.578	.645	27	.877	23	.382	80	49	74	43	34	56
Savannah .....	.647	.637	.673	17	.880	30	.397	74	52	73	53	25	51
FLORIDA—													
Jacksonville .....	.825	.866	.820	28	1.010	21	.706	86	73	82	70	57	71
Warrington .....	.916	.943	.932	29	1.255	2	.678	94	88	90	90	67	74
ALABAMA—													
Auburn .....	.534	.466	.481	24	.704	20	.220	66	40	53	48	19	33
Carlowville .....	.557	1.053	.558	27	1.698	7	.264	68	71	64	15	39	27
Greensborough (d) .....	.611	.520	.596	28	.819	19	.291	80	48	82	67	30	49
MISSISSIPPI—													
Columbus .....	.621	.642	.644	28	.871	22	.394	87	55	81	71	34	54
TEXAS—													
Austin .....	.544	.479	.510	15	.717	24	.216	68	37	52	42	16	22
New Braunfels .....	.913	1.501	.977	12	1.791 <sup>e</sup>	2	f.658	91	81	91	87	78	86
TENNESSEE—													
Glenwood .....	.561	.567	.598	7	.884	18	.343	88	60	84	74	42	65
KENTUCKY—													
Springdale (g) .....	.459	.583	.563	14	.915	22	.229	91	58	78	81	38	41
OHIO—													
Cincinnati, [Harper] .....	.517	.584	.538	13	.850	5	.296	78	58	73	67	38	45
Cincinnati, [Hurt] .....	.534	.582	.582	7	.832	24	.306	79	61	76	43	32	55
Hillsborough .....	.514	.539	.509	28	.779	5	.257	91	63	84	73	36	40
Medina .....	.442	.524	.435	16	1.016	15	.229	73	64	77	37	45	37
Perrysburg (g) .....	.514	.589	.497	15	.775	4	.283	78	63	79	61	47	59
Savannah .....	.569	.594	.517	28	1.138	6	.225	84	62	86	69	42	59
INDIANA—													
New Albany .....	.597	.650	.541	14	1.060	5	.319	83	67	85	65	38	68
New Harmony .....	.559	.603	.569	9	.963	1	.268	79	62	83	51	39	58
Richmond .....	.431	.389	.400	16	.724	22	.185	73	50	67	57	25	36
ILLINOIS—													
Chicago .....	.423	.496	.414	15	.788	2	.210	73	59	79	53	28	63
Manchester (g) .....	.522	.602	.547	14	.997	18	.334	90	65	89	72	43	25
Peoria .....	.492	.409	.531	15	.869	5	.216	79	49	75	59	26	51
Upper Alton .....	.579	.744	.581	28	1.101	5	.335	85	80	87	60	53	63
MISSOURI—													
St. Louis .....	.502	.524	.526	13	.843	2	.018	69	52	73	44	1½	48
WISCONSIN—													
Appleton .....	.395	.454	.418	27	.764	3	.204	74	62	79	52	35	60
Madison, [Sterling] .....	.393	.374	.388	7	.748	4	.124	73	49	66	34	21	34
IOWA—													
Fairfield .....	.383	.356	.388	7	.650	3	.178	56	38	61	37	21	38
Muscatine .....	.541	.567	.594	15	.846	1	.308	81	73	80	67	58	69
UTAH—													
Great Salt Lake City (g) .....	.293	.238	-----	19	.577	24	.000	53	26	-----	18	0	-----
CALIFORNIA—													
Sacramento .....	.437	.547	.519	16	.873	25	.237	65	61	73	47	21	54
San Francisco .....	.394	.421	.405	16	.581	24	.336	80	63	88	53	22	76

<sup>a</sup> Same amount on the 14th and 16th.<sup>b</sup> Same amount on the 13th.<sup>c</sup> Mean force of vapor for the month, .844; obtained approximately from the mean dew point.<sup>d</sup> Imperfect.<sup>e</sup> Same amount on the 26th, 27th, 28th, and 30th.<sup>f</sup> Same amount on the 20th.<sup>g</sup> For changes in hours of observation, &c., see table of the thermometer for the month.



## No. 31.—PSYCHROMETER, JUNE, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
MEXICO—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Vera Cruz (a)-----	.802	-----	.849	-----	-----	-----	-----	81	-----	80	-----	-----	-----
WEST INDIES—													
St. George's, Bermuda (b) ..	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (a)	.765	.889	.846	22	.024	5	.693	91	75	80	82	58	67
AZORES—													
Horta, Fayal-----	.494	.522	.493	30	626	3	.375	78	74	88	64	54	75

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Mean force of vapor for the month, .543; mean relative humidity for the month, 86.5.

## No. 32.—PSYCHROMETER, JULY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a) .....	.562	.667	.566	17	.814 <sup>b</sup>	5	.287	78	71	77	52	54	52
Montreal (c) .....	.518	.629	.557	17	.813 <sup>b</sup>	5	.259	72	65	74	40	43	47
St. Martin (a) .....	.537	.713	.567	15	1.136	5	.241	85	67	87	71	44	71
St. Martin (c) .....	.527	.739	.574	15	1.128	5	.210	83	67	87	23	43	70
Toronto (d) .....	.495	.552	.505	25	.764	2	.302	85	67	83	61	42	64
Wolfville .....	.577	.663	.560	7	.975	8	.319	85	76	82	69	47	69
MAINE—													
Cornish, [West] .....	.532	.607	.521	19	.948	8	.255	85	67	85	53	48	56
Gardiner .....	.606	.809	.....	27	1.109	8	.373	89	76	.....	55	40	.....
VERMONT—													
Norwich (e) .....	.....	.....	.....	.....	.....	.....	.....	27	19	19	18	8	6
MASSACHUSETTS—													
Amherst .....	.610	.675	.630	14	.899	8	.295	92	67	90	81	34	77
Cambridge (f) .....	.....	.....	.....	.....	.....	.....	.....	87	70	80	75	55	65
Lawrence .....	.594	.689	.614	19	1.019	6	.269	93	68	88	62	35	63
Nantucket .....	.560	.596	.541	20	.856	1	.335	85	69	87	70	51	66
New Bedford .....	.623	.671	.622	15	.914	2	.349	94	78	96	72	43	75
Newburyport (d) .....	.608	.630	.616	28	.928	4	.213	88	72	86	64	44	57
Princeton .....	.515	.594	.511	28	1.180	2	.143	85	70	81	48	41	36
Westfield .....	.540	.589	.601	25	.851	2	.293	86	63	88	67	36	71
Worcester .....	.569	.608	.598	18	1.092	9	.229	85	67	83	41	37	44
RHODE ISLAND—													
Providence (g) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CONNECTICUT—													
Pomfret .....	.604	.691	.614	13	.877	2	.335	94	78	95	73	57	73
Wallingford .....	.600	.632	.604	26	.832	2	.327	92	68	90	75	40	78
NEW YORK—													
Blackwell's Island .....	.177	.601	.593	13	.789	8	.306	77	66	73	39	37	43
McGrawville .....	.559	.606	.575	19	.820	2	.362	84	69	87	75	51	69
New York city .....	.599	.694	.611	13	1.050	2	.355	76	72	76	47	54	58
Oswego .....	.642	.681	.616	19	1.066	3	.362	84	71	87	76	56	78
Ovid .....	.477	.506	.494	20	.927	4	.270	65	54	67	49	32	44
Spencertown .....	.554	.568	.575	26	.800	2	.244	78	64	80	60	47	66
NEW JERSEY—													
Bloomfield .....	.649	.752	.656	26	.945	3	.389	91	72	94	80	51	72
Burlington .....	.664	.716	.691	18	.983	4	.418	93	69	90	83	52	81
PENNSYLVANIA—													
Berwick .....	.614	.689	.647	13	.914	1	.337	87	71	86	70	52	63
Chromedale .....	.669	.664	.632	19	.865	2	.370	88	66	89	78	51	77
Easton .....	.592	.593	.604	24	.813	3	.328	89	61	85	73	34	59
Harrisburg, [Hickok] .....	.585	.601	.619	19	.823	1	.290	83	63	79	64	43	42
Lewisburg .....	.563	.599	.584	19	.841	4	.157	83	59	81	69	17	57
Morrisville .....	.....	.690	.....	20	.850	2	.416	.....	65	.....	53	.....	.....
Murrysville .....	.500	.485	.511	12	.877	3	.250	75	47	75	59	26	43
Norristown .....	.618	.629	.604	18	.795	2	.334	88	67	83	79	48	64
Philadelphia .....	.608	.621	.645	26	.822	3	.377	74	57	72	58	41	55
Westtown .....	.663	.726	.666	19	.921 <sup>h</sup>	3	.403	91	70	87	82	57	67
DELAWARE—													
Newark .....	.639	.698	.655	26	.936	2	.391	83	73	82	67	57	63
MARYLAND—													
Annapolis .....	.689	.694	.713	19	.943	2	.410	90	67	78	81	51	65
Chestertown .....	.677	.718	.659	28	.870	3	.35	87	71	86	76	58	65
Frederick .....	.629	.667	.669	13	.827	3	.378	81	70	84	60	53	73
DISTRICT OF COLUMBIA—													
Washington, [Smith. Inst.] .....	.674	.671	.696	19	.983	3	.407	88	63	84	76	47	59

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b Same amount on the 30th.

c According to the Smithsonian tables.

d For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e Dalton's hygrometer.

f Simmons's organic hygrometer.

g Mean relative humidity for the month, 80; minimum, 52.

h Same amount on the 20th.



## No. 32.—PSYCHROMETER, JULY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
VIRGINIA—													
Berryville .....	.599	.639	.627	27	.8~9	3	.379	88	70	87	51	53	71
Crack Whip.....	.607	.633	.575	16	.911 <sup>a</sup>	1	.362	87	67	90	74	54	85
Rose Hill .....	.653	.672	.695	30	.877	3	.403	86	71	80	54	54	68
Salem .....	.596	.680	.641	27	.969	2	.359	76	69	75	58	52	50
NORTH CAROLINA—													
Murfreesborough.....	.733	.781	.757	20	.989	3	.446	88	77	86	83	60	72
SOUTH CAROLINA—													
All Saints.....	.776	.808	.818	26	.950	1	.497	88	77	86	59	50	73
Camden .....	.685	.683	.696	26	.884	3	.409	84	63	85	61	36	50
Charleston, [Dawson] (b) .....													
GEORGIA—													
Athens .....	.639	.647	.663	29	.963	2	.324	82	61	79	61	29	44
Augusta .....	.721	.766	.757	13	1.366	1	.268	83	64	85	47	32	22
Savannah .....	.742	.759	.747	31	.902	2	.368	87	69	85	55	33	47
FLORIDA—													
Jacksonville .....	.828	.847	.847	12	1.038	4	.606	89	77	87	81	47	67
Warrington .....	.910	1.079	.918	15	1.114 <sup>c</sup>	3	.758	91	96	92	86	75	82
ALABAMA—													
Auburn .....	.578	.546	.556	12	.785	2	.287	70	47	64	45	12	33
Carlowville .....	.688	.824	.711	28	1.083	3	.389	78	70	80	52	36	54
Greensborough (d) .....	.619	.583	.639	27	.875	2	.306	84	55	82	63	28	60
MISSISSIPPI—													
Columbus.....	.690	.719	.719	21	.953	4	.438	88	57	83	75	37	64
TEXAS—													
Austin .....	.642	.516	.564	29	.758 <sup>e</sup>	5	.342	75	36	55	48	20	37
New Braunfels.....	.935	1.581	1.076	18	1.954	11	.745	91	80	91	87	75	86
TENNESSEE—													
Glenwood.....	.631	.682	.698	19	.943	1	.382	91	68	89	73	45	78
KENTUCKY—													
Springdale (d) .....	.511	.760	.681	15	1.283	1	.298	93	61	85	68	39	63
OHIO—													
Cincinnati. [Harper].....	.652	.669	.705	26	.963	1	.322	78	61	75	50	38	61
Hillsborough .....	.625	.678	.651	20	.854 <sup>f</sup>	1	.380	97	74	94	88	55	76
Hiram .....	.556	.614	.577	18	.775	1	.376	84	68	85	56	49	48
Medina .....	.565	.633	.573	28	.920	3	.330	83	69	89	54	47	76
Perrysburg (d) .....	.632	.684	.641	17	.928 <sup>f</sup>	1	.365	82	66	82	73	42	72
Savannah .....	.687	.854	.648	26	1.300	1	.362	55	72	96	57	29	64
INDIANA—													
New Harmony.....	.692	.711	.709	13	.976	1	.376	83	60	85	67	38	69
Richmond .....	.568	.503	.538	3	.890	1	.293	82	53	77	68	32	54
ILLINOIS—													
Manchester (d) .....	.682	.810	.726	17	1.146	2	.376	92	72	91	77	47	75
Peoria.....	.613	.616	.621	26	.952	1	.325	80	44	72	67	27	35
MISSOURI—													
St. Louis.....	.631	.620	.663	16	.928	1	.303	71	48	72	52	31	56
WISCONSIN—													
Appleton .....	.545	.618	.566	5	1.124	10	.277	75	55	80	45	18	49
Madison, [Sterling] (d).....	.531	.494	.542	15	.915	1	.234	65	48	67	54	32	33
Waukesha .....	.516	.613	.511	7	.877	1	.323	75	58	77	50	37	45
IOWA—													
Fairfield .....	.514	.469	.455	17	1.128	5	.211	56	37	57	16	16	42
Muscataine .....	.636	.715	.736	16	1.111	4	.429	80	74	81	72	60	65
UTAH—													
Great Salt Lake City (d) .....	.326	.238	-----	22	.577	26	.073	53	22	-----	22	7	-----
CALIFORNIA—													
Sacramento .....	.433	.508	.483	18	.626	9	.356	67	57	67	52	28	51
San Francisco .....	.400	.426	.407	11	.522	2	.336	86	65	91	72	42	75

<sup>a</sup> Same amount on the 20th.<sup>b</sup> Mean force of vapor for the month, .847; obtained approximately from the mean dew point.<sup>c</sup> Same amount on the 28th, 29th, and 30th.<sup>d</sup> For changes in hours of observation, &c., see table of the thermometer for this month.<sup>e</sup> Same amount on the 23d and 26th.<sup>f</sup> Same amount on the 27th.

## No. 32.—PSYCHROMETER, JULY, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
MEXICO—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches.</i>						
Vera Cruz ( <i>b</i> )	.809		.857					81		82			
WEST INDIES—													
St George's, Bermuda ( <i>a</i> )													
SOUTH AMERICA—													
Catharina Sophia, Surinam ( <i>b</i> )	.784	.890	.861	19	1.024	29	.680	93	77	82	81	65	75
AZORES—													
Horta, Fayal	.604	.650	.596	25	.793	16	.393	86	80	90	77	56	59

*a* Mean force of vapor for the month, .797; mean relative humidity for the month, 82.5.

*b* For changes in hours of observation, &c., see table of the thermometer for this month.



## No. 33.—PSYCHROMETER, AUGUST, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches.</i>						
Montreal (a).....	.505	.636	.537	14	1.036	31	.358	85	82	84	63	64	72
Montreal (b).....	.492	.619	.534	14	1.051	4	.206	83	78	85	28	38	70
St. Martin (a).....	.462	.648	.491	27	.910	30	.302	79	73	87	29	53	63
St. Martin (b).....	.448	.657	.481	14	1.165	24	.065	89	72	86	44	52	29
Toronto (c).....	.481	.506	.455	14	.755	11	.260	86	66	81	66	40	67
Wolfville.....	.516	.645	.560	8	.814	17	.259	76	75	74	40	59	54
<b>MAINE—</b>													
Cornish, [West].....	.456	.514	.468	14	.832	16	.296	86	70	87	57	45	67
Gardiner.....	.547	.646		14	1.098	16	.371	93	78		62	49	
<b>NEW HAMPSHIRE—</b>													
Francestown, [Bixby].....	.492	.519	.485	14	.789	16	.283	86	69	79	54	46	62
<b>MASSACHUSETTS—</b>													
Amherst.....	.544	.599	.557	13	.864	16	.346	93	68	92	61	50	71
Cambridge (d).....								86	75	80	75	64	70
Lawrence.....	.525	.627	.565	14	.970	19	e.348	91	73	88	67	50	71
Nantucket.....	.538	.535	.533	13	.746	24	.343	79	65	87	46	44	74
New Bedford.....	.564	.573	.576	14	.882	18	.325	90	71	91	69	43	62
Newburyport.....	.545	.586	.560	13	.863	16	.355	88	66	85	54	42	61
Princeton.....	.462	.507	.472	14	.790	16	.266	85	67	84	58	41	52
Westfield.....	.459	.516	.527	14	.813	30	.316	83	59	84	61	37	59
Worcester.....	.515	.581	.524	29	.938	3	.189	86	70	82	67	37	56
<b>RHODE ISLAND—</b>													
Providence (f).....													
<b>CONNECTICUT—</b>													
Pomfret.....	.551	.610	.558	14	.895	24	.378	94	78	92	72	60	77
Wallingford.....	.523	.590	.554	11	.918	24	.334	91	66	88	77	44	73
<b>NEW YORK—</b>													
Bellport.....	.526	.573	.546	14	.850	20	.257	77	70	88	43	46	56
Blackwell's Island.....	.537	.541	.574	14	.836	24	.330	71	59	68	53	40	54
McGrawville.....	.449	.499	.472	14	.785	24	.272	84	66	87	62	42	75
New York city.....	.556	.535	.565	14	.859	25	.387	69	55	68	52	34	55
Oswego.....	.535	.643	.565	14	.990	24	.376	87	75	88	70	59	78
Waterford (c).....	.505	.560	.520	14	1.005	24	.365	81	66	81	61	44	65
<b>NEW JERSEY—</b>													
Bloomfield.....	.580	.719	.607	14	1.042	30	.295	86	69	89	65	54	61
Burlington.....	.616	.656	.645	14	.963	24	.413	92	67	90	77	50	75
<b>PENNSYLVANIA—</b>													
Berwick.....	.558	.651	.607	14	.962	26	.363	89	72	85	75	59	55
Chromedale.....	.585	.618	.605	14	.901	25	.388	89	63	92	64	53	74
Easton.....	.528	.533	.551	14	.875	24	.300	86	57	82	66	39	61
Harrisburg, [Hickok].....	.524	.512	.541	14	.839	24	.255	80	54	71	46	33	44
Lewisburg.....	.521	.534	.555	14	.843	21	.250	87	56	79	72	31	66
Morrisville.....		.643		13	.956	26	.452		61			44	
Mount Joy.....	.586	.697	.678	14	1.005	25	.363	85	71	81	71	56	75
Murrysville.....	.451	.473	.496	17	.732	31	.256	74	49	77	56	22	60
Norristown.....	.546	.586	.578	15	.850	25	.348	85	65	83	76	46	64
Philadelphia.....	.576	.576	.596	14	.908	25	.371	73	57	73	56	41	52
Westtown.....	.588	.679	.623	14	1.019	23	.367	85	72	86	48	57	71
<b>DELAWARE—</b>													
Newark (c).....	.613	.669	.630	15	.928	25	.400	84	70	82	73	54	65
<b>MARYLAND—</b>													
Annapolis.....	.654	.661	.686	18	.976	24	.365	88	66	76	68	47	61
Frederick.....	.630	.657	.662	4	.942	25	.342	87	71	89	67	42	66
<b>DISTRICT OF COLUMBIA—</b>													
Washington, [Smith Inst.].....	.638	.646	.667	17	.923	21	.402	87	64	84	72	44	68
<b>VIRGINIA—</b>													
Berryville.....	.565	.570	.564	17	.812	25	.341	85	62	79	48	40	51
Crack Whip (c).....	.581	.596	.541	15	.829	30	.341	89	69	90	78	55	72

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to the Smithsonian tables.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Simmons's organic hygrometer.

e Same amount on the 25th.

f Mean relative humidity for the month, 80. Observations taken at 6 a. m., 1 p. m., and 10 p. m.

## No. 33.—PSYCHROMETER, AUGUST, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
VIRGINIA—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Rose Hill .....	.660	.615	.647	14	.838	25	.369	82	62	77	61	41	61
Salem .....	.621	.670	.649	17	.856	12	.369	79	66	74	67	48	35
NORTH CAROLINA—													
Murfreesborough .....	.774	.808	.782	15	1.066	26	.537	86	72	83	71	58	59
Warrenton .....	.687	.709	.725	17	1.038	22	.429	83	66	80	68	51	69
SOUTH CAROLINA—													
All Saints .....	.791	.810	.840	16	1.016	30	.489	87	77	86	62	52	68
Camden .....	.724	.745	.738	15	.983	21	.430	86	64	84	69	43	55
Charleston, [Dawson] (a) .....													
GEORGIA—													
Augusta .....	.787	.868	.763	10	1.165	22	.376	87	73	74	66	40	40
Savannah .....	.755	.783	.767	15	.930	22	.472	86	65	84	73	44	73
FLORIDA—													
Jacksonville .....	.830	.874	.836	17	1.060	11	.618	89	72	85	82	50	60½
Warrington .....	.952	1.069	.959	15	1.189	21	.798	95	94	95	86	83	91
ALABAMA—													
Auburn .....	.651	.641	.636	1	.816	30	.385	76	55	72	46	40	53
Carlowville .....	.706	.993	.719	10	1.366½	26	.574	79	77	79	58	60	62
MISSISSIPPI—													
Columbus .....	.737	.776	.767	11	.967	30	.463	91	63	83	81	49	68
TEXAS—													
Austin .....	.707	.556	.616	13	.812	30	.335	78	37	58	56	28	32
New Braunfels .....	.989	1.575	1.180	10	1.880	30	.812	91	79	94	91	75	76
TENNESSEE—													
Glenwood .....	.679	.729	.728	12	1.065	30	.420	93	74	92	85	53	82
KENTUCKY—													
Springdale (c) .....	.554	.763	.694	16	1.056	30	1.310	93	68	85	90	44	59
OHIO—													
Cincinnati, [Harper] .....	.667	.732	.716	14	1.241	31	.423	78	69	76	47	48	59
Hillsborough .....	.629	.660	.635	17	.914	30	.388	98	72	92	92	56	73
Medina .....	.551	.573	.593	13	.843	28	.327	82	64	84	62	37	42
Perrysburg (c) .....	.565	.649	.587	12	.950	21	.334	85	70	81	49	57	64
Savannah .....	.617	.795	.615	13	1.078	22	.396	91	72	98	70	49	77
INDIANA—													
New Harmony .....	.696	.767	.729	10	1.016	31	.216	53	69	88	40	52	74
Richmond (c) .....	.588	.560	.580	14	.792	30	.335	89	50	79	72	36	58
ILLINOIS—													
Manchester (c) .....	.625	.772	.662	14	1.160	29	.388	94	78	94	88	62	75
Peoria .....	.584	.603	.592	1	.895	28	.293	83	53	76	72	28	62
MISSOURI—													
St. Louis .....	.625	.651	.652	8	1.090	28	.330	76	58	76	56	40	53
WISCONSIN—													
Appleton .....	.512	.626	.530	31	.983	25	.264	82	71	87	43	27	69
Madison, [Sterling] .....	.505	.485	.496	2	.816	18	.306	43	58	77	63	41	46
IOWA—													
Fairfield .....	.518	.479	.477	11	1.023	30	.176	69	47	67	27	24	51
Muscataine .....	.631	.716	.692	12	1.046	29	.399	84	82	84	76	73	75
UTAH—													
Great Salt Lake City (c) .....	.301	.166	.....	15	.497	10	.000	52	16	.....	11	11	.....
CALIFORNIA—													
Sacramento .....	.410	.470	.483	10	.572	9	.331	68	53	66	39	26	49
San Francisco .....	.400	.448	.418	8	.597	22	.336	88	68	94	73	25	77
MEXICO—													
Vera Cruz (c) .....	.870	.....	.920	.....	.....	.....	.....	86	.....	86	.....	.....	.....
WEST INDIES—													
St. George's, Bermuda (f) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SOUTH AMERICA—													
Catharina Sophia, Surinam (c) .....	.819	.901	.882	7	1.070g	1	.682	92	71	78	86	56	61

a Mean force of vapor for the month, .887; obtained approximately from the mean dew point.

b Same amount on the 29th.

c For changes in hours of observation, &c., see table of the thermometer for this month.

d Same amount on the 31st.

e For the first 17 days of the month only.

f Observations taken at 3½ and 5¼ a. m., and p. m. Mean force of vapor, .612; mean relative humidity, 81.2.

g Same amount on the 9th and 31st.



## No. 34.—PSYCHROMETER, SEPTEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.364	.428	.384	2	.800	29	.190	79	67	75	46	47	58
Montreal (b).....	.363	.437	.382	2	.806	19	.100	77	71	75	54	42	30
St. Martin (b).....	.359	.514	.412	13	.854	19	.170	86	74	89	74	53	83
St. Martin (a).....	.339	.515	.406	4	.911	21	.105	85	73	89	72	43	77
Toronto (c).....	.353	.435	.375	11	.744	29	.145	86	67	83	75	37	71
Windsor.....	.360	.412	.364	15	.692	30	.190	86	60	78	72	33	52
Wolfville.....	.386	.440	.371	4	.877	30	.169	82	63	77	65	40	52
<b>MAINE—</b>													
Cornish, [West].....	.356	.415	.382	3	d. 704	23	.136	86	63	86	39	35	70
Gardiner.....	.404	.490	-----	2	.942	30	.189	93	68	-----	55	42	-----
<b>NEW HAMPSHIRE—</b>													
Francestown, [Bixby].....	.373	.406	.384	11	.731	29	e. 117	79	60	75	52	32	50
Francestown, [Root] (f).....	.301	.318	.319	14	.688	30	g. 117	80	55	74	55	29	53
<b>MASSACHUSETTS—</b>													
Amherst.....	.406	.472	.452	14	.798	30	.175	94	64	89	63	41	61
Cambridge (h).....	-----	-----	-----	-----	-----	-----	-----	82	70	77	73	61	66
Lawrence.....	.385	.467	.438	14	.771	30	.149	92	64	87	76	39	62
Nantucket.....	.440	.438	.439	14	.672	30	.066	77	62	80	26	14	26
New Bedford.....	.463	.470	.447	14	.772	27	.172	90	67	89	72	22	58
Newburyport.....	.452	.491	.459	11	.804	30	.183	91	64	85	71	40	58
Princeton.....	.370	.402	.365	14	.694	29	.127	82	63	77	55	42	49
Westfield.....	.374	.402	.446	14	.762	30	g. 157	90	52	80	60	34	67
Worcester.....	.404	.403	.448	14	.897	19	.016	86	58	82	58	15	47
<b>RHODE ISLAND—</b>													
Providence (i).....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>CONNECTICUT—</b>													
Pomfret.....	.435	.499	.454	14	.868	30	.178	93	75	92	77	53	73
Wallingford.....	.400	.472	.444	14	.805	30	.168	89	62	88	71	41	71
<b>NEW YORK—</b>													
Bellport.....	.447	.478	.457	14	.731	30	.136	86	69	86	59	21	49
Blackwell's Island.....	.441	.477	.480	17	.785	30	.182	74	63	72	54	37	47
Clinton.....	.357	.430	.402	14	.706	7	.152	76	52	76	57	33	64
McGrawville.....	.363	.447	.406	10	.764	30	.099	86	69	86	71	48	29
New York city.....	.444	.458	.454	14	.804	30	.185	73	59	68	55	35	46
Oswego.....	.449	.546	.487	11	.955	30	.190	90	78	88	74	27	62
Ovid.....	.365	.399	.371	18	.653	30	.144	73	56	70	47	37	53
Waterford.....	.403	.481	.459	11	.850	30	.157	83	63	81	65	45	63
<b>NEW JERSEY—</b>													
Bloomfield.....	.459	.631	.494	2	.955	29	.249	90	73	90	67	50	68
Burlington.....	.501	.572	.522	14	.841	30	.273	96	68	88	79	48	68
<b>PENNSYLVANIA—</b>													
Chromedale.....	.450	.498	.462	17	.754	30	.210	90	69	85	65	40	62
Easton.....	.402	.449	.436	14	.684	30	.193	89	57	81	55	30	55
Harrisburg, [Hickok].....	.398	.402	.422	18	.854	29	.118	78	50	69	34	19	36
Lewisburg.....	.394	.451	.445	11	.658	29	.185	88	88	79	63	29	56
Morrisville.....	-----	.516	-----	1	.704	30	.256	-----	61	-----	-----	44	-----
Mount Joy.....	.463	.604	.574	11	.904	31	.238	81	71	81	39	42	67
Murrysville.....	.377	.405	.398	17	.658	30	.169	80	49	76	63	30	56
Norristown.....	.425	.474	.456	17	.731	29	.178	86	61	84	59	37	58
Philadelphia.....	.470	.463	.491	14	.764	29	.201	75	51	71	51	32	47
Westtown.....	.466	.557	.504	17	.792	30	.164	91	71	90	53	49	65
<b>DELAWARE—</b>													
Newark.....	.469	.540	.493	17	.779	30	.209	84	67	83	63	49	71
<b>MARYLAND—</b>													
Annapolis.....	.519	.519	.555	13	.798	30	.242	88	61	74	52	40	49
Frederick.....	.447	.514	.489	13	.812	16	.177	88	63	84	65	39	26

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to the Smithsonian tables.

b According to tables used by the observer.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 14th.

e Same amount on the 30th.

f For the last nineteen days of the month only.

g Same amount on the 29th.

h Simmons's organic hygrometer.

i Mean relative humidity for the month, 72.1.

## No. 34.—PSYCHROMETER, SEPTEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA*.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches</i>						
VIRGINIA—													
Berryville.....	.427	.451	.442	12	.701	29	.175	86	55	78	70	31	52
Crack Whip.....	.426	.490	.440	5	.731	30	.175	91	63	89	83	37	76
Kanawha (a).....	.455	.602	.528	14	.877	29	.218	85	60	86	67	39	73
Rose Hill.....	.350	.523	.540	12	.813	30	.216	77	58	71	46	41	49
Salem.....	.541	.625	.558	19	1.087	29	.218	79	72	79	66	49	50
NORTH CAROLINA—													
Murfreesborough (b).....	.617	.734	.674	18	.948	30	.335	87	74	86	71	50	70
Warrenton.....	.559	.629	.589	17	c. 895	7	.188	82	67	76	33	51	58
SOUTH CAROLINA—													
All Saints.....	.660	.730	.719	18	.969	30	.232	85	72	80	61	34	65
Camden.....	.595	.585	.623	19	.908	30	.123	80	54	77	65	18	47
Charleston, [Dawson] (d).....													
GEORGIA—													
Augusta.....	.633	.637	.523	2	1.060	19	.000?	81	54	54	47	35	0?
Hillsborough.....	.521	.480	.497	19	e. 772	30	.116	77	42	60	56	14	34
Philomath.....	.559	.595	.601	18	.909	30	.327	76	61	67	65	38	46
Savannah.....	.628	.650	.689	16	.890	30	.242	79	58	78	50	34	55
FLORIDA—													
Jacksonville.....	.780	.869	.815	2	1.114	10	.611	86	78	89	62	59	75
Warrington.....	.847	1.028	.871	29	1.296	23	.549	93	91	93	82	83	87
ALABAMA—													
Auburn.....	.480	.426	.454	16	.789	24	.048	58	36	52	10	13	24
Carlowville.....	.570	.780	.617	9	1.024	30	.283	76	68	78	45	34	49
Greensborough (b).....	.507	.513	.537	18	.866	29	.183	86	52	74	59	25	33
MISSISSIPPI—													
Columbus.....	.555	.610	.626	14	.956	30	.276	90	55	83	79	34	57
TEXAS—													
Austin.....	.616	.610	.614	28	.877	26	.355	80	54	70	60	31	37
TENNESSEE—													
Glenwood.....	.530	.603	.599	14	.843	30	.244	93	65	93	88	42	81
Memphis.....	.575	.553	.615	15	.891	29	.221	76	53	80	63	27	55
KENTUCKY—													
Springdale (b).....	.435	.649	.621	16	1.149	30	.181	95	63	82	87	42	48
OHIO—													
Cincinnati, [Harper].....	.514	.660	.558	18	.962	29	.245	84	63	70	72	50	56
Hillsborough.....	.505	.538	.527	18	.787	29	.206	99	66	87	92	33	45
Medina.....	.463	.509	.448	11	.955	30	.179	81	61	83	62	40	46
Perrysburg (b).....	.467	.611	.492	15	.983	29	.195	87	69	82	78	49	65
Savannah.....	.499	.658	.539	■	.983	30	.000	96	64	99	79	■	90
MICHIGAN—													
Marquette.....	.350	.397	.368	9	.924	5	.033	77	62	79	23	40	■
INDIANA—													
New Albany.....	.549	.670	.567	16	1.111	28	.213	86	64	83	71	24	59
New Harmony.....	.567	.640	.617	17	.915	29	.285	90	68	89	75	39	81
ILLINOIS—													
Batavia.....	.485	.516	.533	12	.812	30	.216	97	55	97	83	22	83
Manchester (b).....	.540	.691	.566	16	1.038	29	.273	93	75	91	85	52	49
Peoria.....	.506	.501	.545	16	.809	28	.218	86	54	81	75	31	61
MISSOURI—													
St. Louis.....	.541	.589	.566	30	.812	22	.198	83	59	77	73	39	28
WISCONSIN—													
Appleton.....	.421	.585	.445	26	.931	15	.207	82	73	82	51	42	66
Madison, [Sterling].....	.427	.422	.441	12	.731	29	.165	50	56	79	38	32	48
Waukesha.....	.387	.459	.411	1	.863	29	.139	76	61	77	38	35	37
IOWA—													
Fairfield.....	.420	.432	.393	10	.850	21	f. 189	73	50	65	50	28	31
Muscataine.....	.566	.591	.590	10	.877	30	.321	86	80	84	77	35	54

a Observations interrupted from the 19th to the 27th, inclusive.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 19th.

d Mean force of vapor for the month, .876; obtained approximately from the mean dew point.

e Same amount on the 18th.

f Same amount on the 30th.



## No. 34.—PSYCHROMETER, SEPTEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.								RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.			MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	
UTAH—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>							
Great Salt Lake City ( <i>a</i> )----	.292	.199	-----	□	.456	13	<i>b.</i> 030	68	28	-----	13	3	-----	
CALIFORNIA—														
Sacramento.....	.386	.423	.437	14	.551	26	.308	72	53	66	53	27	49	
San Francisco.....	.450	.462	.445	10	<i>c.</i> 536	28	.315	89	68	92	54	30	49	
MEXICO—														
Vera Cruz ( <i>a</i> ).....	.803	-----	.844	-----	-----	-----	-----	77	-----	79	-----	-----	-----	
SOUTH AMERICA—														
Catharina Sophia, Surinam ( <i>a</i> )	.811	1.012	.951	20	1.121	12	.706	92	75	81	86	66	72	
AZORES—														
Horta, Fayal.....	.538	.565	.526	13	.739	29	.376	85	76	86	69	65	67	

*a* For changes in hours of observation, &c., see table of the thermometer for this month.

*b* Same amount on the 21st.  
*c* Same amount on the 23d.

## No. 35.—PSYCHROMETER, OCTOBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a).....	.225	.263	.241	12	.576	21	.090	81	70	78	47	38	59
Montreal (b).....	.224	.265	.243	12	.576	21	.090	81	69	79	54	38	61
St. Martin (a).....	.225	.331	.257	13	.562	22	.091	87	78	89	63	63	79
St. Martin (b).....	.217	.211	.240	13	.580	22	.096	89	75	88	65	53	67
Toronto (c).....	.225	.267	.236	12	.447	20	.105	84	70	80	57	46	57
Windsor.....	.308	.327	.299	16	.655	23	.114	91	70	86	65	47	61
Wolfville.....	.307	.307	.305	16	.659	22	.108	91	66	84	62	40	58
MAINE—													
Cornish, [West] (d).....	.269	.300	.298	13	.503	21	.096	95	65	91	73	34	68
Gardiner (d).....	.272	.343	.285	16	.583	18	.126	94	77	95	49	46	74
NEW HAMPSHIRE—													
Francestown, [Bixby] (d).....	.258	.284	.270	13	.510	22	.076	83	72	81	45	17	56
Francestown, [Root].....	.246	.265	.272	15	.487	1	.094	81	61	77	52	20	43
MASSACHUSETTS—													
Amherst.....	.272	.317	.308	13	.637	20	.111	92	66	89	66	33	62
Cambridge (e).....								81	73	77	71	56	60
Lawrence.....	.266	.269	.312	14	.685	21	.092	90	62	88	71	27	67
Nantucket.....	.332	.341	.336	16	.685	21	.106	76	68	80	54	26	42
New Bedford.....	.317	.326	.329	13	.617	20	.099	70	65	87	70	29	53
Newburyport.....	.283	.343	.321	16	.613	23	.158	88	74	87	50	35	61
Princeton.....	.256	.274	.264	15	.611	17	.071	84	67	80	62	32	21
Westfield.....	.249	.291	.303	13	.592	20	.084	84	62	88	56	30	58
Worcester.....	.241	.288	.295	13	.583	17	.025	86	62	85	41	5	50
CONNECTICUT—													
Pomfret.....	.288	.346	.313	13	.644	20	.130	93	77	89	76	45	63
Wallingford.....	.276	.319	.312	13	.642	20	.095	89	63	84	65	29	57
NEW YORK—													
Bellport.....	.313	.366	.320	13	.591	22	.056	87	78	87	49	32	16
Blackwell's Island.....	.295	.355	.348	13	.612	22	.146	73	71	80	47	33	57
Clinton.....	.239	.281	.225	13	.576	20	.103	75	65	75	47	15	51
New York City.....	.304	.330	.334	13	.631	20	.094	76	67	75	41	33	38
Oswego.....	.280	.345	.291	13	.576	25	.086	94	85	85	70	63	24
Ovid.....	.240	.272	.253	13	.491	20	.113	82	71	78	61	43	55
Pompey.....	.045	.044	.043	13	.076	17	.007	77	68	72	12	29	35
Spencertown.....	.279	.350	.310	13	.549	17	.159	86	74	85	71	41	70
Waterford.....	.271	.308	.298	13	.563	21	.142	89	72	88	70	48	70
NEW JERSEY—													
Bloomfield.....	.305	.435	.353	7	.812	20	.117	86	73	89	53	34	51
PENNSYLVANIA—													
Chromedale.....	.298	.323	.235	14	.655	21	.106	86	64	85	49	35	40
Easton.....	.274	.295	.308	13	.610	20	.085	85	60	84	52	31	60
Mount Joy.....	.346	.440	.411	14	.717	20	.168	82	70	78	64	39	55
Murrysville.....	.281	.308	.290	13	.524	19	.077	89	77	88	75	44	71
Norristown.....	.285	.294	.301	13	.608	19	.074	81	60	77	47	25	38
Philadelphia.....	.298	.337	.342	13	.645	19	.116	76	58	75	50	32	58
Westtown (e).....	.368	.466	.380	13	.737	27	.133	94	82	88	85	57	37
DELAWARE—													
Newark.....	.322	.383	.341	13	.666	21	.142	86	69	83	56	43	63
MARYLAND—													
Annapolis.....	.332	.354	.371	14	.675	20	.113	86	64	78	48	33	53
Frederick.....	.288	.327	.325	14	.622	20	.140	82	63	82	20	37	62
DISTRICT OF COLUMBIA—													
Washington, [Smith. Inst.].....	.331	.354	.354	14	.733	20	.099	88	63	82	43	29	43
VIRGINIA—													
Berryville.....	.263	.298	.287	13	.591	20	.079	76	59	75	12	27	50
Crack Whip (e).....	.284	.360	.313	13	.559	20	.078	86	68	78	50	44	36

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to the Smithsonian tables.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d In perfect.

e Simmons's organic hygrometer.

f Same amount on the 21st.

g Same amount on the 14th.

h Same amount on the 22d.



## No. 35.—PSYCHROMETER, OCTOBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
VIRGINIA—Continued.	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Rose Hill .....	.356	.359	.362	14	.685	20	.137	76	62	70	33	36	57
Salem .....	.310	.329	.327	14	.626	4	.153	75	70	72	58	53	32
NORTH CAROLINA—													
Murfreesborough.....	.406	.503	.444	14	.785	21	.191	92	79	90	76	65	67
Warrenton .....	.366	.442	.395	14	.785	22	.150	85	75	77	62	53	42
SOUTH CAROLINA—													
All Saints .....	.431	.485	.466	14	.785	21	.142	83	68	79	51	41	56
Camden .....	.342	.399	.383	14	.813	21	.160	85	58	83	61	32	58
Charleston, [Dawson] (a).....													
GEORGIA—													
Augusta .....	.358	.424	.363	13	.772	1	.175	77	64	69	50	37	35
Hillsborough .....	.330	.313	.336	14	.612	21	.013	78	46	66	51	2	40
Savannah .....	.422	.455	.464	12	.770	21	.177	82	63	78	43	34	46
FLORIDA—													
Jacksonville.....	.547	.606	.567	14	.873	31	.244	87	75	91	68	47	68
Warrington .....	.595	.812	.643	15	1.101	30	.361	91	92	91	76	81	76
ALABAMA—													
Auburn .....	.299	.312	.307	14	.812	21	.099	66	45	58	32	16	28
Carlowville.....	.325	.625	.388	22	1.023	29	.096	73	75	77	37	36	37
Greensborough (b).....	.359	.338	.357	13	.644	31	.068	85	50	71	60	22	13
MISSISSIPPI—													
Columbus.....	.360	.405	.412	13	.667	20	.174	88	59	83	59	38	52
TEXAS—													
Austin .....	.504	.558	.525	4	.874	16	.218	86	66	62	64	33	54
TENNESSEE—													
Glenwood .....	.335	.401	.371	10	.655	20	.162	90	68	88	69	42	63
Memphis .....	.367	.360	.392	12	.648	21	.129	84	54	80	54	27	53
KENTUCKY—													
Springdale (b).....	.299	.391	.370	11	.914	21	.123	96	68	78	73	43	54
OHIO—													
Belle Centre.....	.284	.337	.286	13	.626	21	.129	96	69	89	82	54	71
Cincinnati, [Harper].....	.314	.388	.340	12	.644	20	.127	83	65	76	62	48	56
Cincinnati, [Hurt].....	.268	.358	.291	11	.691	27	.064	77	62	74	33	19	26
Cleveland (c).....								30	31	29			
Hillsborough .....	.307	.327	.337	12	.583	20	.142	93	73	88	67	44	63
Medina .....	.286	.290	.294	12	.543	19	.034	90	68	86	46	20	7
Perrysburg (b).....	.278	.352	.301	12	.617	21	.129	86	73	81	58	55	63
Savannah.....	.309	.454	.356	5	.666	25	.123	99	80	97	72	57	63
MICHIGAN—													
Marquette .....	.203	.249	.223	11	.417	2	.087	78	64	80	34	40	43
INDIANA—													
New Albany (b).....	.320	.415	.333	11	.738	21	.123	86	69	82	66	43	51
New Harmony.....	.327	.374	.646	12	.599	21	.142	89	64	87	71	47	59
ILLINOIS—													
Manchester (b).....	.295	.404	.337	10	.628	20	.129	93	73	93	81	57	79
Peoria .....	.296	.322	.330	11	.586	20	.114	92	61	87	80	40	67
MISSOURI—													
St. Louis.....	.310	.405	.347	1	1.027	26	.126	85	69	82	73	30	34
WISCONSIN—													
Appleton .....	.244	.344	.245	6	.658	28	.058	87	76	81	54	15	21
Madison, [Sterling].....	.252	.255	.265	11	.543	19	d. 076	86	63	78	52	32	45
Waukesha.....	.242	.288	.219	6	e. 670	21	f. 000	84	65	70	15	13	0
IOWA—													
Fairfield .....	.221	.237	.214	11	.536	16	.047	73	51	59	45	17	27
Muscatine .....	.339	.369	.374	5	.658	20	.173	84	79	84	71	38	69

a Mean force of vapor for the month, .448; obtained approximately from the mean dew point.

b For changes in hours of observation, &c., see table of the thermometer for this month.

c Wooden hygrometer.

d Same amount on the 20th.

e Same amount on the 10th.

f Same amount on the 31st.

## No. 35.—PSYCHROMETER, OCTOBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
UTAH—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Great Salt Lake City ( <i>a</i> ) . . . .	.203	.114	-----	3	.433	4	<i>b</i> .000	72	25	-----	0	0	-----
CALIFORNIA—													
Sacramento . . . . .	.313	.365	.378	3	<i>c</i> .483	19	.143	72	56	71	43	36	33
San Francisco . . . . .	.421	.418	.434	3	<i>d</i> .518	30	.323	89	63	88	53	29	52
SOUTH AMERICA—													
Cathar'a Sophia, Surinam ( <i>a</i> ) . . . .	.790	.948	.910	3	1.097	30	.558	88	69	77	73	50	50
AZORES—													
Horta, Fayal . . . . .	.466	.482	.461	10	.700	28	.308	83	75	83	65	64	65

*a* For changes in hours of observation, &c., see table of the thermometer for this month.

*b* Same amount on the 5th, 6th, 7th, 19th, 20th, 25th, 29th, and 31st.

*c* Same amount on the 6th.

*d* Same amount on the 4th.



## No. 36.—PSYCHROMETER, NOVEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a.m.	2 p.m.	9 p.m.	Date.	Amt.	Date.	Amt.	7 a.m.	2 p.m.	9 p.m.	7 a.m.	2 p.m.	9 p.m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a)-----	.163	.196	.171	9	.473	25	.030	78	74	74	49	46	41
Montreal (b)-----	.165	.188	.171	9	.473	25	.030	77	71.	74	49	34	41
St. Martin (a)-----	.174	.217	.194	9	.565	25	.043	89	82	89	68	67	74
St. Martin (b)-----	.161	.203	.178	9	.564	25	.038	92	81	91	75	63	74
Toronto (c)-----	.155	.161	.154	9	.344	25	.033	80	71	77	62	36	56
Windsor-----	.210	.230	.219	10	.564	26	.067	86	76	86	61	40	64
Wolfville-----	.211	.290	.219	10	.564	26	.065	85	74	81	51	46	53
NEW HAMPSHIRE—													
Francestown, [Bixby]-----	.164	.163	.176	■	.491	25	.033	75	52	69	42	14	30
VERMONT—													
Norwich (d)-----								21	20	20	15	15	15
MASSACHUSETTS—													
Amherst-----	.191	.211	.220	9	.646	25	.051	89	61	81	59	33	63
Bridgewater (c)-----	.223	.239	.245	9	.636	24	.094	86	64	82	68	40	56
Cambridge (e)-----								80	70	76	69	54	55
Lawrence-----	.190	.228	.211	9	.612	25	.020	84	62	79	46	20	36
Nantucket-----	.225	.241	.244	10	.490	25	.038	71	59	73	46	27	45
New Bedford-----	.231	.225	.233	9	.563	2	.044	85	59	81	48	27	14
Newburyport-----	.256	.276	.313	10	.594	15	.115	88	70	89	65	48	57
Princeton-----	.166	.187	.183	9	.544	25	.004	81	65	75	35	42	■
Westfield-----	.164	.178	.212	9	.581	25	.014	78	51	82	35	15	45
Worcester-----	.198	.194	.215	10	.576	29	.013	73	53	72	27	10	5
RHODE ISLAND—													
Providence (f)-----													
CONNECTICUT—													
Pomfret-----	.206	.230	.236	9	.604	25	.043	88	68	86	63	35	50
Wallingford-----	.187	.201	.200	9	.577	20	.000	86	54	73	62	25	0
NEW YORK—													
Blackwell's Island-----	.207	.261	.233	9	.564	24	.076	78	66	75	52	40	49
Clinton-----	.151	.186	.157	9	.577	27	.016	69	60	65	20	30	21
Fort Edward-----	.120	.127	.134	23	.235	24	.036	79	51	74	45	26	47
New York city-----	.214	.240	.222	9	.579	25	.069	77	63	69	53	36	39
Ovid-----	.146	.176	.159	8	.599	27	.017	63	60	65	12	25	31
Pompey-----	.032	.030	.034	8	.084	27	.000	67	59	70	0	1	2
Spencertown (g)-----	.217	.227	.217	9	.536	15	.086	87	72	80	73	51	30
Waterford (h)-----	.223	.241	.239	9	.586	21	.080	88	64	84	71	45	69
NEW JERSEY—													
Bloomfield-----	.215	.243	.236	10	.617	11	.025	83	57	81	53	9	50
PENNSYLVANIA—													
Chromedale-----	.197	.225	.220	8	.623	25	.063	87	56	82	54	33	51
Easton-----	.208	.198	.194	9	.584	25	.042	81	55	74	51	29	41
Harrisburg, [Hickok] (i)-----	.126	.141	.133	23	.309	21	.000	65	46	58	20	0	44
Lewisburg-----	.166	.195	.191	8	.594	25	.039	83	61	78	54	29	56
Mount Joy-----	.259	.350	.323	8	.668	14	.129	74	71	83	46	51	59
Murrysville-----	.158	.198	.173	8	.556	24	.030	74	63	72	40	32	51
Norristown-----	.186	.195	.193	■	.532	25	.036	79	52	72	51	27	36
Philadelphia-----	.216	.240	.249	■	.832	25	.055	76	53	74	48	26	48
Westtown-----	.202	.251	.239	8	.676	25	.052	85	66	86	51	32	54
DELAWARE—													
Newark-----	.233	.296	.253	9	.708	25	.090	93	64	82	66	50	53
MARYLAND—													
Annapolis-----	.214	.257	.268	8	.628	25	.053	81	61	77	49	28	48
Baltimore (c)-----	.235	.267	.263	8	.641	25	.059	78	59	73	57	34	50
Frederick-----	.202	.235	.214	8	.638	25	.054	83	64	79	65	34	50
DISTRICT OF COLUMBIA—													
Washington, [Smith. Inst] (c)-----	.286	-----	.280	8	.725	24	.106	94	-----	81	71	-----	58

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to the tables used by the observer.

b According to the Smithsonian tables.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Dalton's hygrometer.

e Simmons's organic hygrometer.

f Mean relative humidity for the month, 64.6.

g For the first 20 days of the month only.

h For the first 21 days of the month only.

i For the last 21 days of the month only.

## No. 36.—PSYCHROMETER, NOVEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
VIRGINIA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Berryville.....	.192	.207	.192	8	.620	25	.049	77	52	68	49	21	30
Montross.....	.214	.282	.238	8	.704	25	.038	78	62	69	44	22	35
Rose Hill (a).....	.240	.216	.301	8	.672	25	.067	70	53	65	40	24	47
Salem.....	.231	.285	.300	8	.785	20	.064	76	72	78	56	48	60
NORTH CAROLINA—													
Murfreesborough.....	.321	.447	.374	8	.963	26	b.129	94	82	91	85	54	79
Warrenton.....	.261	.322	.284	8	.731	20	.073	81	65	72	59	43	47
SOUTH CAROLINA—													
All Saints.....	.336	.414	.367	8	.758	24	.084	83	74	82	57	48	38
Camden.....	.269	.331	.293	8	.745	25	.087	89	54	77	65	30	42
Charleston, [Dawson] (c).....													
GEORGIA—													
Augusta (d).....	.278	.318	.294	30	.510	23	.117	81	63	84	51	47	32
Hillsborough.....	.269	.282	.268	8	.682	11	.050	78	53	68	39	29	41
Savannah.....	.343	.397	.385	8	.823	20	.075	79	59	77	52	32	45
FLORIDA—													
Warrington.....	.503	.690	.524	7	1.065	10	.254	94	93	94	87	77	82
ALABAMA—													
Auburn.....	.255	.275	.268	7	.680	21	.069	69	50	60	41	21	28
Carlowville.....	.285	.375	.324	8	.812	23	e.065	74	71	80	24	37	54
Greensborough.....	.291	.312	.307	6	.684	19	.079	83	55	76	60	27	50
MISSISSIPPI—													
Columbus.....	.280	.294	.289	6	.691	19	.080	86	57	75	58	29	49
TEXAS—													
Austin.....	.351	.404	.372	6	.802	20	f.153	88	63	79	68	34	46
TENNESSEE—													
Glenwood.....	.233	.236	.241	7	.662	19	.059	81	58	76	57	31	45
Memphis.....	.237	.246	.249	7	.706	10	.000	79	54	69	27	21	■
KENTUCKY—													
Springdale (a).....	.213	.243	.245	7	.633	26	.066	90	71	83	75	39	52
OHIO—													
Bellecentre.....	.194	.213	.210	7	.543	17	.000	90	77	89	63	■	65
Cincinnati, [Harper].....	.209	.272	.209	7	.622	23	.000	83	70	72	67	42	50
Cincinnati, [Hurt] (g).....	.202	.284	.230	8	.591	15	.077	76	63	77	45	25	43
Hillsborough.....	.209	.231	.223	8	.596	25	.057	94	78	87	70	49	39
Medina.....	.162	.206	.165	8	.536	19	h.000	83	73	73	62	13	■
Perrysburg (a).....	.162	.209	.177	8	.551	25	.031	83	70	80	64	38	60
Savannah.....	.166	.203	.190	8	.564	20	.022	90	69	81	45	42	21
MICHIGAN—													
Marquette.....	.125	.143	.130	8	.295	27	.000	79	74	74	56	30	0
INDIANA—													
New Albany (a).....	.261	.303	.253	7	.624	15	.123	87	69	82	64	30	68
New Harmony.....	.217	.294	.233	7	.648	25	.057	86	66	85	70	36	54
Richmond.....	.162	.182	.164	7	.502	26	.036	78	60	67	56	30	37
ILLINOIS—													
Manchester (a).....	.176	.205	.207	7	.449	23	.046	97	79	98	78	44	80
Peoria.....	.166	.174	.175	5	.466	26	.036	86	62	79	63	27	38
MISSOURI—													
St. Louis.....	.189	.225	.208	7	.483	25	.076	90	74	83	63	39	51
WISCONSIN—													
Appleton.....	.114	.151	.136	5	.349	22	.000	64	68	70	17	■	31
Madison, [Sterling].....	.129	.134	.134	5	.403	25	.020	74	67	73	29	26	31
Waukesha.....	.142	.133	.137	5	.403	3	.000	85	67	75	53	■	■
IOWA—													
Fairfield.....	.149	.142	.150	29	.309	3	.040	73	51	65	45	16	13
Muscatine.....	.294	.349	.343	29	.591	15	i.142	75	75	76	44	49	53

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 27th.

c Mean force of vapor for the month, .348; obtained approximately from the mean dew point.

d For the last 18 days of the month only.

e Same amount on the 24th.

f Same amount on the 23d.

g Observations interrupted from the 19th to the 26th of the month, inclusive.

h Same amount on the 26th.

i Same amount on the 12th and 13th.



## No. 36.—PSYCHROMETER, NOVEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
KANSAS—	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches</i>						
Leavenworth City.....	.153	.177	.158	28	.361	3	.036	87	70	84	65	35	61
CALIFORNIA—													
Sacramento .....	.258	.304	.296	5	.491	11	.095	73	64	72	39	29	32
San Francisco.....	.358	.388	.393	7	.563	11	.139	84	71	89	39	36	48
WEST INDIES—													
St. George's, Bermuda (a) ..													
SOUTH AMERICA—													
Catharina Sophia, Surinam (b)	.787	.866	.852	3	1.023	23	.704	91	67	76	82	59	68

*a* Mean force of vapor for the month, .618; mean relative humidity for the month, 87.3.

*b* For changes in hours of observation, &c., see table of the thermometer for this month.

## No. 37.—PSYCHROMETER, DECEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal (a) .....	.108	.121	.109	1	.225	25	.005	75	71	69	09	23	23
Montreal (b) .....	.109	.122	.109	1	.225	27	.001	74	73	69	02	23	23
St. Martin (a) .....	.115	.141	.121	1	.282	27	.018	84	78	81	67	63	61
St. Martin (b) .....	.102	.130	.110	1	.202	27	.020	86	82	86	73	66	59
Toronto (c) .....	.147	.160	.143	9	.250	27	.047	83	76	82	60	55	68
Windsor .....	.131	.157	.146	18	.348	27	.044	87	87	85	73	50	56
Wolfville .....	.122	.129	.133	18	.348	12	.035	81	70	78	55	40	61
MAINE—													
Portland .....	.131	.146	.138	18	.329	26	.048	83	70	77	47	43	52
NEW HAMPSHIRE—													
Francestown, [Bixby] (c) ..	.122	.128	.123	1	.273	11	.036	76	60	75	46	27	47
VERMONT—													
Burlington .....	.119	.132	.134	18	.278	27	.044	83	73	82	55	49	57
Norwich (d) .....								23	23	23	15	15	14
St. Johnsbury .....	.094	.109	.103	18	.221	12	.020	81	66	72	33	35	47
MASSACHUSETTS—													
Amherst .....	.145	.161	.147	1	.314	27	.041	89	72	82	54	39	61
Bridgewater (c) .....	.187	.196	.177	1	.426	27	.063	94	75	86	67	36	56
Cambridge (e) .....								81	75	78	68	61	58
Lawrence .....	.125	.152	.140	18	.388	27	.031	76	66	76	45	29	38
Nantucket .....	.188	.181	.193	10	.391	20	.064	73	63	78	52	33	52
New Bedford .....	.174	.178	.173	1	.388	27	.064	86	69	83	62	24	55
Newburyport .....	.194	.193	.166	18	.403	12	.053	89	78	89	58	55	50
Princeton .....	.130	.149	.133	18	.337	11	.036	82	78	81	51	33	48
Westfield .....	.134	.135	.144	18	.305	25	.024	82	58	78	45	22	49
Worcester .....	.139	.176	.130	10	f. 311	25	.020	75	73	68	27	39	20
CONNECTICUT—													
Pomfret .....	.155	.179	.148	18	.374	27	.060	89	75	83	57	37	62
Wallingford .....	.159	.162	.144	18	.365	27	.042	87	62	78	60	28	53
NEW YORK—													
Bellport .....	.187	.180	.183	7	.354	4	.053	87	59	84	49	18	37
Clinton .....	.122	.140	.117	18	.282	26	g. 005	66	59	66	19	5	29
Fort Edward .....	.131	.149	.131	18	.300	25	.031	86	77	81	49	37	36
New York city .....	.178	.182	.162	18	.385	25	.043	74	61	68	44	36	32
Ovid .....	.133	.149	.139	9	.334	25	.047	69	66	70	45	23	39
Pompey .....	.033	.030	.031	9	.057	7	.009	82	70	77	39	15	32
NEW JERSEY—													
Bloomfield .....	.183	.191	.204	18	.469	11	.075	78	58	82	54	34	46
PENNSYLVANIA—													
Berwick .....	.201	.211	.181	9	.361	10	.090	81	71	77	41	54	38
Chromedale .....	.178	.181	.182	9	.540	27	.068	86	64	83	57	35	42
Easton .....	.161	.155	.157	18	.403	27	.056	82	62	79	48	26	44
Harrisburg, [Hickok] .....	.156	.151	.154	9	.354	10	.071	74	56	66	36	28	35
Murrysville .....	.155	.178	.174	9	.473	12	.063	83	67	84	58	34	66
Norristown .....	.184	.171	.188	9	.543	10	.053	82	60	78	39	18	31
Philadelphia .....	.187	.184	.193	9	.526	26	.078	79	60	73	56	27	49
Somerset .....	.166	.208	.185	9	.454	13	.033	93	84	94	38	59	69
Westtown .....	.179	.202	.196	9	.566	27	.062	89	72	87	64	39	53
DELAWARE—													
Newark (e) .....	.203	.237	.210	9	.556	13	.096	87	55	82	56	46	56
MARYLAND—													
Annapolis .....	.192	.213	.220	9	.459	12	.090	83	63	78	51	37	52
Baltimore .....	.181	.185	.184	9	.523	21	.077	74	59	69	36	28	31
Frederick .....	.189	.201	.198	9	.451	13	.097	86	71	85	65	47	68

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to tables used by the observer.

b According to the Smithsonian tables.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Dalton's hygrometer.

e Simmons's organic hygrometer.

f Same amount on the 1st.

g Same amount on the 27th.



## No. 37.—PSYCHROMETER, DECEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
VIRGINIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Berryville .....	.169	.175	.179	11	.477	13	.077	80	61	76	46	31	44
Montross .....	.173	.242	.177	9	.577	13	<i>a</i> .038	68	69	68	37	29	27
Rose Hill .....	.245	.232	.233	9	.612	23	.071	77	63	71	54	23	52
Salem .....	.242	.274	.280	9	.536	27	.123	80	73	79	70	53	68
NORTH CAROLINA—													
Murfreesborough .....	.306	.408	.352	9	.772	27	.167	97	89	93	91	76	89
SOUTH CAROLINA—													
All Saints .....	.335	.386	.363	9	.695	26	.155	87	71	86	58	38	57
Camden .....	.267	.322	.281	8	.662	27	.118	93	64	84	66	29	42
Charleston, [Dawson] ( <i>b</i> ) .....													
GEORGIA—													
Athens .....	.256	.285	.289	11	.640	11	.131	90	64	80	55	26	43
Hillsborough .....	.270	.285	.301	8	.649	10	.094	81	56	73	50	22	41
Savannah .....	.351	.382	.376	9	.725	11	.167	85	64	80	62	39	53
FLORIDA—													
Jacksonville .....	.461	.544	.475	8	.843	11	.203	90	79	89	74	68	74
Warrington .....	.501	.741	.497	6	<i>c</i> .977	24	.335	94	93	94	93	61	81
ALABAMA—													
Auburn .....	.250	.264	.267	9	.641	12	.121	71	52	65	43	26	29
Carlowville .....	.329	.475	.373	9	1.023	11	.117	83	76	83	55	32	32
Greene Springs .....	.322	.362	.323	8	.695	12	.142	87	67	79	60	33	62
Greensborough .....	.294	.321	.305	8	.708	26	.156	92	65	85	63	31	61
MISSISSIPPI—													
Columbus .....	.283	.301	.298	8	.671	10	.157	90	65	82	68	36	62
TEXAS—													
Austin .....	.278	.347	.308	2	.631	9	.157	89	69	79	62	40	40
Goliad .....	.358	.390	.387	7	.745	9	.155	86	66	82	65	29	44
TENNESSEE—													
Glenwood .....	.233	.250	.244	8	.639	10	.056	89	63	81	59	16	46
Memphis .....	.258	.261	.249	8	.618	10	.127	86	61	70	57	33	41
KENTUCKY—													
Springdale ( <i>d</i> ) .....	.194	.233	.239	8	.543	10	.103	89	74	85	70	45	60
OHIO—													
Bellecentre .....	.196	.216	.195	2	.469	12	.103	93	76	91	71	54	71
Cincinnati, [Harper] .....	.200	.243	.207	8	.505	26	.111	84	72	77	70	45	57
Cincinnati, [Hurt] .....	.160	.220	.181	8	.483	25	.066	77	75	78	44	39	57
Hillsborough .....	.193	.203	.197	8	<i>e</i> .466	11	.103	91	75	83	58	42	55
Medina .....	.172	.184	.172	6	.375	12	.058	84	72	79	66	43	31
Perrysburg ( <i>d</i> ) .....	.168	.183	.166	6	.334	9	.027	84	67	79	62	8	57
Savannah .....	.158	.189	.173	6	.374	12	.083	88	78	87	71	43	65
MICHIGAN—													
Marquette .....	.121	.134	.115	16	.212	8	.000	84	72	78	63	9	0
INDIANA—													
New Harmony .....	.199	.237	.225	8	.543	27	.123	88	72	88	68	48	51
Richmond .....	.160	.167	.162	8	.405	10	.073	81	61	71	50	28	40
ILLINOIS—													
Augusta ( <i>f</i> ) .....	.153	.195	.185	12	.282	22	.082	91	78	91	79	45	69
Manchester ( <i>d</i> ) .....	.172	.242	.192	13	.394	22	.078	100	85	99	100	48	90
Peoria .....	.156	.164	.177	8	.270	11	.050	88	64	86	68	26	57
Wheaton .....	.138	.150	.150	8	.261	29	.000	87	69	88	37	0	70
MISSOURI—													
St. Louis .....	.182	.188	.186	8	<i>c</i> .362	30	.093	86	63	76	66	28	38
WISCONSIN—													
Appleton .....	.109	.149	.133	14	.265	19	.013	71	74	78	43	45	58
Madison, [Sterling] ( <i>g</i> ) .....	.140	.169	.157	13	.262	21	.049	84	83	86	37	60	73
St. Croix .....	.114	.147	.126	15	.237	22	.042	96	84	95	82	40	75
Waukesha .....	.125	.126	.130	5	.222	26	.000	81	67	78	37	25	02

*a* Same amount on the 26th.*b* Mean force of vapor for the month, .361; obtained approximately from the mean dew point.*c* Same amount on the 31st.*d* For changes in hours of observation, &c., see table of the thermometer for this month.*e* Same amount on the 6th.*f* For the last 25 days of the month only.*g* Imperfect.

## No. 37.—PSYCHROMETER, DECEMBER, 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
IOWA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Fairfield.....	.124	.145	.131	15	.218	22	.033	77	61	55	43	24	40
Muscatine.....	.398	.451	.441	14	.604	5	.283	70	68	69	54	53	56
Sioux City.....	.117	.167	.136	16	.232	10	.048	91	85	95	81	51	88
MINNESOTA—													
Wabashaw.....	.163	.278	.257	7	.491	10	.059	77	76	79	45	55	56
KANSAS—													
Leavenworth City.....	.174	.218	.187	16	.348	24	.088	93	75	85	74	50	45
CALIFORNIA—													
Sacramento.....	.227	.270	.261	5	.348	21	.123	82	73	79	62	30	48
San Francisco.....	.303	.327	.335	4	.469	21	.203	89	74	89	77	42	79
MEXICO—													
Vera Cruz (a).....	.650	-----	.685	-----	-----	-----	-----	79	-----	81	-----	-----	-----
WEST INDIES—													
St. George's, Bermuda (b) ..	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SOUTH AMERICA—													
Catharina Sophia, Surinam (a)	.773	.811	.819	18	1.023	5	.693	91	72	82	85	59	74

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Mean force of vapor for the month, .558; mean relative humidity for the month, 81.1.



## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	8	14	0	4	5	22	24	16	0	93	5	13	0	3	6	21	10	12	70	
St. John's .....	3	9	0	3	15	7	8	49	0	93	---	---	---	---	---	---	---	---	---	
St. Martin .....	1	30	1	6	1	20	26	0	93	---	---	---	---	---	---	---	---	---	---	
Stanbridge .....	7	4	3	19	19	8	22	6	5	93	---	---	---	---	---	---	---	---	---	
Toronto .....	4	8	4	8	1	28	6	38	1	93	---	---	---	---	---	---	---	---	---	
Wolfville .....	0	12	16	2	3	10	28	19	2	92	1	11	15	1	3	13	23	13	80	
MAINE—																				
Carmel .....	1	15	0	2	0	12	10	38	11	89	0	13	0	2	0	7	4	10	36	
Cornish, [Guptill] .....	2	8	3	4	4	9	4	59	0	93	0	0	0	0	0	2	0	1	3	
Cornish, [West] .....	15	16	2	1	8	16	20	15	0	93	4	1	1	0	2	0	7	8	32	
Gardiner .....	3	33	0	5	0	5	0	20	20	91	5	0	0	1	0	6	3	4	19	
Monson .....	12	9	5	2	8	1	12	41	3	93	---	---	---	---	---	---	---	---	---	
Perry .....	9	15	1	1	0	7	12	48	0	93	12	4	0	0	0	5	11	17	49	
Portland .....	25	17	1	0	4	11	15	20	0	93	1	0	0	1	0	3	4	1	10	
Steuben .....	3	41	1	3	0	9	2	33	1	93	0	9	0	1	0	14	7	11	42	
NEW HAMPSHIRE—																				
Concord .....	0	19	0	4	0	4	0	66	0	93	---	---	---	---	---	---	---	---	---	
Francetown, [Bixby] .....	12	28	1	0	0	6	8	38	0	93	6	32	5	0	0	1	13	35	92	
Great Falls .....	1	19	0	0	1	20	8	44	0	93	0	0	0	0	0	3	0	0	3	
Manchester .....	9	12	0	2	6	7	19	38	0	93	10	11	0	1	2	7	28	9	68	
North Barnstead .....	3	20	1	3	3	14	18	31	0	93	2	5	0	0	0	0	0	25	32	
Shelburne .....	0	0	16	0	0	0	71	0	0	87	3	0	1	2	0	3	6	51	66	
Stratford .....	0	6	6	0	1	2	13	13	2	43	0	0	0	0	0	5	7	13	25	
West Enfield .....	8	0	5	3	11	11	10	45	0	93	19	0	5	7	1	7	8	23	70	
VERMONT—																				
Brandon .....	28	0	3	2	34	2	5	16	0	90	1	0	0	0	0	2	0	10	22	
Craftsbury .....	9	12	2	3	29	4	5	27	0	91	6	1	0	0	2	4	9	12	34	
Norwich .....	3	4	0	4	2	0	0	1	4	18	0	3	0	1	0	2	0	2	8	
Rupert .....	0	0	10	12	5	0	0	0	0	27	0	26	7	19	2	4	0	2	60	
Shelburn .....	32	5	4	0	34	1	0	15	0	91	3	5	2	9	0	0	0	0	19	
MASSACHUSETTS—																				
Amherst .....	2	8	1	22	3	0	1	53	0	90	0	1	1	0	1	1	6	10	20	
Boston .....	5	2	1	0	1	6	3	12	1	31	---	---	---	---	---	---	---	---	---	
Bridgewater .....	9	17	5	2	1	15	4	40	0	93	0	1	2	4	4	7	0	0	18	
Cambridge .....	7	9	2	5	2	13	12	30	12	92	---	---	---	---	---	---	---	---	---	
Canton .....	14	5	3	5	12	5	22	24	3	93	2	0	0	0	1	2	3	3	11	
Florida .....	0	9	0	13	7	11	6	47	0	93	0	9	0	16	2	18	4	32	81	
Lawrence .....	0	7	0	1	0	5	0	16	0	29	---	---	---	---	---	---	---	---	---	
Mendon .....	2	21	4	0	0	23	0	43	0	93	1	17	8	0	0	19	2	25	72	
Nantucket .....	5	14	3	5	6	2	5	53	0	93	---	---	---	---	---	---	---	---	---	
New Bedford .....	7	17	1	1	2	16	1	48	0	93	0	2	0	1	0	0	1	4	8	
Newburyport .....	14	7	4	2	5	2	22	13	0	69	---	---	---	---	---	---	---	---	---	
North Attleborough .....	19	9	1	4	12	6	9	33	0	93	18	9	2	1	14	4	7	7	62	
Richmond .....	0	18	0	14	1	8	0	52	0	93	0	13	0	10	1	9	1	33	67	
Westfield .....	14	11	1	5	5	6	25	17	0	84	---	---	---	---	---	---	---	---	---	
Weymouth .....	5	10	0	2	0	11	4	30	0	62	---	---	---	---	---	---	---	---	---	
Williamstown .....	11	1	2	26	9	4	11	26	1	91	---	---	---	---	---	---	---	---	---	
Worcester .....	18	17	0	4	6	6	17	25	0	93	---	---	---	---	---	---	---	---	---	
RHODE ISLAND—																				
Providence .....	7	21	1	2	3	13	5	41	0	93	---	---	---	---	---	---	---	---	---	
CONNECTICUT—																				
Columbia .....	1	8	8	33	6	16	1	0	20	93	0	5	1	0	1	5	0	17	29	
Georgetown .....	16	20	8	2	0	9	5	29	3	92	1	0	3	0	0	2	5	4	15	
New London .....	12	12	0	1	2	12	7	47	0	93	---	---	---	---	---	---	---	---	---	
Norwich .....	5	11	3	8	5	9	10	26	14	91	---	---	---	---	---	---	---	---	---	
Pomfret .....	5	19	2	2	2	14	2	47	0	93	2	12	0	2	1	7	0	20	44	
Saybrook .....	10	17	2	2	3	3	14	23	7	81	2	0	2	0	0	2	5	6	17	
Wallingford .....	20	13	2	1	5	8	7	31	4	91	3	1	1	0	0	3	12	7	27	
NEW YORK—																				
Angelica .....	0	4	1	13	4	26	21	24	0	93	0	0	0	1	0	30	20	5	56	
Baldwinsville .....	15	0	18	2	1	5	24	26	0	91	1	0	0	0	0	0	30	37	68	
Beverly .....	4	21	0	2	3	23	1	36	0	90	3	15	1	2	3	22	10	11	67	

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Blackwell's Island .....	25	4	2	7	0	15	16	24	0	93	25	4	2	7	0	15	16	24	93	
Cazenovia .....	7	0	0	6	17	12	12	32	0	86	3	0	2	8	4	3	15	27	65	
Cinton .....	6	4	6	11	11	22	12	28	1	91	1	0	4	2	3	6	14	9	39	
Fishkill Landing .....	1	42	5	9	3	15	7	11	0	93	0	0	4	0	0	0	13	3	20	
Flatbush .....	11	16	3	0	6	6	24	27	0	93	2	4	5	0	0	2	4	17	34	
McGrawville .....	0	0	0	19	0	8	35	19	0	90										
Mexico .....	11	7	5	27	6	6	11	20	0	93	1	0	0	0	1	1	14	5	22	
Morrisania .....	23	4	9	8	7	10	16	16	0	93										
New York city .....	2	14	0	6	0	14	18	39	0	93	1	3	2	3	0	25	30	5	59	
Nichols .....	15	1	1	1	9	0	1	1	2	31										
Ogdensburg .....	6	5	2	1	3	9	3	5	0	34										
Oswego .....	14	5	12	13	16	5	16	11	1	93										
Ovid .....	7	6	0	12	11	17	13	29	0	93	4	2	0	9	11	18	10	29	81	
Penn Yan .....	8	8	1	0	8	25	37	11	0	93										
Plainville .....	8	4	13	7	18	11	31	4	0	91	0	0	2	1	1	0	6	0	10	
Rochester, [Harkness] .....	16	1	7	2	12	5	21	7	22	93										
Rochester, [Palmer] .....	6	2	2	7	17	14	26	19	0	93	3	4	1	5	12	12	26	19	82	
Sag Harbor .....	13	9	4	2	6	12	10	37	0	93	0	5	1	1	1	11	10	7	34	
Saratoga .....	2	16	1	1	7	32	7	27	0	93	8	15	1	1	7	27	15	19	93	
Spencertown .....	25	7	2	8	16	5	11	28	0	93	12	1	0	3	9	3	11	21	60	
Townsendville .....	10	1	1	17	6	11	13	31	1	91	0	0	0	0	0	2	4	10	16	
Troy .....	3	3	1	1	9	7	21	31	17	93	1	1	0	0	0	1	1	1	11	
Utica .....	21	0	0	10	0	1	7	24	24	93										
Wampsville .....	2	0	10	6	14	5	52	4	0	93	2	0	12	7	13	5	42	4	85	
NEW JERSEY—																				
Bloomfield .....	1	7	0	0	0	21	10	48	0	87										
Burlington .....	7	13	7	11	1	9	25	25	0	93	4	0	0	0	1	4	11	13	33	
Lambertville .....	6	12	0	6	3	11	5	44	0	87										
Newark .....	4	13	2	0	1	13	1	27	0	61										
Sergeantsville .....	1	0	7	38	20	18	1	1	0	92	0	6	3	27	13	20	1	0	70	
PENNSYLVANIA—																				
Bedford .....	0	0	0	7	1	15	2	48	0	73	0	0	0	0	0	14	11	31	53	
Berwick .....	1	1	24	8	1	4	39	14	1	93										
Byberry .....	0	2	0	0	0	0	0	0	0	10	0	0	0	0	0	0	3	6	9	
Cannonsburg .....	0	4	21	1	0	9	55	3	0	93										
Carlisle .....	1	9	2	6	0	9	9	40	15	91	0	3	1	2	0	4	5	24	39	
Easton .....	9	10	0	7	0	0	10	39	17	92	2	0	0	0	0	2	10	20	34	
Fleming .....	14	2	17	8	2	3	36	4	93	7	0	1	8	2	1	10	23	47		
Gettysburg .....	11	12	11	2	7	16	11	30	0	86	4	4	0	0	3	17	16	16	60	
Harrisburg, [Heisely] .....	9	2	23	6	0	7	42	0	91	2	0	0	0	0	2	0	1	17	22	
Lewisburg .....	12	6	4	3	3	16	18	14	17	93	1	0	0	1	11	5	11	0	26	
Lima .....	6	18	2	4	4	3	0	39	17	93	1	1	0	0	0	10	15	33		
Meadville .....	0	0	1	5	21	5	12	17	28	89	1	0	1	1	7	8	14	15	47	
Morrisville .....	4	17	2	4	3	14	17	26	6	93	2	13	1	1	1	12	11	16	57	
Moss Grove .....	3	0	7	11	20	33	12	0	93	0	0	1	4	1	12	43	14	75		
Nazareth .....	17	12	2	0	1	10	16	18	13	89	9	0	0	0	0	2	11	0	26	
Norristown .....	0	2	15	7	0	7	28	22	0	81	0	0	11	0	0	8	39	5	63	
North Whitehall .....	5	15	3	3	1	4	7	34	21	93										
Philadelphia .....	0	12	1	0	0	20	29	31	0	93	0	0	0	0	0	1	4	5	10	
Pocopson .....	4	13	3	3	3	16	28	20	0	90	0	1	0	1	1	0	2	4	9	
Shamokin .....	21	1	34	1	5	1	14	16	0	93	5	0	0	0	1	3	35	12	56	
Tarentum .....	13	3	2	0	1	31	5	18	20	93	3	0	0	0	0	17	20	25	65	
West Haverford .....	4	5	4	0	6	3	4	32	4	62	2	1	2	1	0	2	7	23	38	
DELAWARE—																				
Newark, [Craven] .....	1	15	2	3	1	12	20	36	0	90	0	0	0	0	0	0	0	2	8	
MARYLAND—																				
Annapolis .....	15	18	0	4	9	12	4	23	8	93	0	0	0	0	0	1	0	0	1	
Bladensburg .....	0	10	2	1	0	14	0	29	0	56										
Frederick .....	13	6	11	0	8	13	13	29	8	92	1	0	0	1	1	0	19	10	32	
Ridge .....	8	13	4	0	6	12	8	33	0	90										
Sykesville .....	0	11	3	3	2	16	40	18	0	93	0	3	6	0	0	2	60	0	71	





## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
TEXAS—Continued.																			
Union Hill.....	46	0	1	5	25	16	0	0	0	93	25	4	1	12	18	18	4	0	82
Washington.....	38	0	0	0	48	0	0	0	0	86	42	0	0	1	44	0	0	0	87
TENNESSEE—																			
Glenwood.....	18	12	1	11	6	11	3	25	6	93	2	1	0	1	1	4	23	11	48
Walnut Grove.....	2	0	0	0	2	2	12	7	68	93	0	0	0	0	0	2	10	6	18
KENTUCKY—																			
Danville.....	8	0	5	0	3	22	23	23	0	93	1	4	0	0	0	11	26	7	49
Millersburg.....	6	0	3	2	3	5	20	17	35	91	1	0	0	0	0	1	13	1	16
Paris.....	5	9	0	2	5	22	32	18	0	93	1	2	0	0	0	4	24	0	31
Springdale.....	6	11	7	2	5	19	14	8	21	93									
OHIO—																			
Cincinnati, [Harper].....	12	1	4	0	3	16	30	27	0	93	0	0	0	0	0	0	1	0	1
Cincinnati, [Hartt].....	17	0	0	0	5	19	26	15	10	92	1	0	0	0	7	14	17	3	42
Cleveland.....	5	5	3	8	10	8	20	18	11	88	0	0	1	0	2	5	5	2	15
Farmers' College.....	3	6	0	5	6	16	6	24	27	93	2	2	0	0	4	9	5	8	30
Franklin.....	3	6	5	19	6	34	9	2	93		2	0	0	2	0	11	0	0	13
Gallopis.....											2	0	1	1	0	8	41	5	58
Germantown.....	8	5	1	1	7	23	23	15	7	90	3	0	0	0	0	5	16	20	44
Granville.....	0	8	3	0	0	24	24	1	23	83	0	2	0	0	0	1	8	1	12
Hillsborough.....	0	17	0	7	0	28	1	39	0	92	1	1	0	0	0	0	1	5	8
Hiram.....	0	8	1	7	0	33	18	26	0	93	2	4	0	6	0	13	4	10	39
Jefferson.....	0	9	0	12	0	41	8	20	0	90	1	32	6	18	2	7	0	12	78
Madison, [Atkins].....	3	4	1	10	14	9	14	6	1	62	0	0	0	0	1	0	0	1	2
Madison, [Cunningham].....	3	9	2	11	6	30	14	8	10	93	2	2	0	0	0	18	31	15	68
Oberlin.....	4	7	0	1	11	12	15	17	2	69									
Savannah.....	1	1	0	16	1	13	13	48	0	93	1	1	0	13	1	13	10	32	71
Sidney.....	4	0	0	8	1	31	12	12	0	68	0	3	1	3	0	27	12	22	68
Urbana.....	4	6	2	8	3	21	13	11	25	93	2	0	0	0	0	3	30	13	48
West Bedford.....	15	2	4	7	7	16	9	11	1	72	3	0	0	0	3	5	9	12	32
Zanesville.....	21	6	1	1	1	16	13	34	0	93									
MICHIGAN—																			
Battle Creek.....	5	1	9	2	5	19	30	12	10	93	2	0	1	0	0	13	43	14	73
Cooper.....	3	0	7	0	0	18	56	5	4	93	0	0	4	0	1	0	67	0	72
Copper Falls Mines.....	31	9	2	8	11	10	6	16	0	93									
Grand Rapids, [Streng].....	17	5	9	1	12	25	9	15	0	93	12	0	3	0	2	3	53	16	89
Grand Rapids, [Currier].....	1	6	6	11	5	15	8	13	28	93	1	0	0	0	0	1	0	7	9
Monroe.....	29	3	4	1	0	9	3	44	0	93	21	7	4	0	0	12	1	43	88
Romeo.....	2	4	3	7	10	16	22	19	7	90	1	1	1	1	1	4	8	12	29
INDIANA—																			
Cannelton.....	5	2	5	8	16	8	7	42	0	93									
Michigan City.....	14	8	4	7	6	35	21	29	0	124									
New Harmony.....	16	0	5	4	5	3	15	19	0	67	0	0	0	0	0	1	5	0	6
Richmond.....	6	6	4	3	4	25	19	0	19	92	0	0	0	0	0	0	2	1	3
Logansport.....	14	2	11	0	5	9	42	10	0	93									
ILLINOIS—																			
Athens.....	0	8	1	13	1	19	5	44	0	91	0	0	0	0	0	6	21	22	49
Augusta.....	1	6	0	10	7	9	24	30	0	93	0	2	2	0	5	1	10	6	26
Chicago.....	5	0	2	3	8	15	43	14	3	93	6	4	1	2	0	17	8	10	48
Fremont Centre.....	0	2	1	4	12	14	48	12	0	93									
Manchester.....	6	1	3	1	9	11	29	33	0	93	1	0	0	0	2	7	15	6	31
Marengo.....	2	2	5	4	5	24	47	4	0	93									
Ottawa.....	13	4	3	4	4	7	17	24	2	78	0	0	0	0	0	0	6	1	7
Peoria.....	13	8	6	2	9	6	38	11	0	93	1	0	0	0	0	0	8	0	0
Pekin.....	12	1	1	4	10	3	14	15	0	60									
Piasa Faras.....	8	5	2	17	8	12	10	31	0	93	2	0	0	0	1	3	10	10	26
Riley.....	7	1	2	8	5	9	22	32	6	92									
Warsaw.....	4	4	3	17	5	10	8	42	0	93	0	0	0	0	0	4	12	14	30
West Salem.....	9	4	2	4	14	5	14	18	23	93	0	0	0	0	0	12	42	5	59
MISSOURI—																			
Cape Girardeau.....	27	10	0	18	8	10	12	31	8	124	25	4	1	6	3	5	4	8	56
Palmyra.....	1	2	11	6	3	11	15	45	29	123	1	2	0	3	4	12	15	37	83
St. Louis.....	9	2	14	10	4	13	36	5	0	93									



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NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>WISCONSIN—</b>																			
Appleton .....	7	7	3	2	1	50	5	14	4	93	7	11	1	3	1	44	5	17	89
Beloit .....	16	0	1	6	17	19	12	22	0	93	0	0	0	0	1	0	2	0	3
Janesville .....	8	2	5	4	8	4	26	15	21	93									
Kenosha .....	19	0	1	0	1	20	14	19	15	89									
Madison, [Sterling] .....	7	1	1	2	12	17	13	20	1	74									
Manitowoc .....	8	1	2	5	3	16	22	36	0	93									
Milwaukee, [Pomeroy] .....	2	1	1	1	1	5	17	3	0	31									
Milwaukee, [Winkler] .....	1	2	6	0	2	10	29	43	0	93									
New London .....	11	0	2	0	1	9	43	27	0	93	7	0	0	0	5	7	7	27	53
Norway .....	2	2	4	3	4	14	45	17	2	93	0	3	0	0	3	9	32	7	54
Platteville .....	5	1	6	5	4	18	11	43	0	93	3	1	4	0	1	10	12	17	48
Prescott .....	6	4	2	9	11	21	2	18	20	93	5	5	0	3	0	1	0	7	21
Racine .....	8	0	1	3	5	9	43	23	1	93	7	0	0	0	0	4	8	3	22
Waukesha .....	0	5	1	4	1	31	1	46	0	89									
<b>IOWA—</b>																			
Bellevue .....	5	0	3	5	2	6	11	35	0	67	0	0	0	2	0	2	1	8	13
Border Plains .....	9	4	3	11	6	7	10	42	1	93	2	0	0	1	0	3	6	15	27
Fort Madison .....	0	7	0	16	0	15	3	52	0	93	1	0	0	1	2	8	28	16	56
Franklin .....	14	0	4	6	11	6	9	37	6	93									
Muscatine .....	3	0	0	6	2	24	6	46	0	93	0	0	0	0	0	9	2	3	14
Pleasant Plain .....	12	5	7	5	6	7	14	36	1	93	0	0	0	0	0	8	20	19	47
<b>MINNESOTA—</b>																			
Hazlewood .....	7	4	0	5	18	5	0	48	0	93	2	0	3	1	0	0	1	1	8
Lake Winnibigoshish .....	9	2	4	6	13	6	15	19	7	81	1	0	0	0	0	0	1	1	3
Princeton .....	18	2	4	3	10	15	12	18	11	93	1	0	8	1	9	0	3	2	24
<b>CALIFORNIA—</b>																			
Sacramento .....	28	2	5	19	20	3	1	15	0	93	2	0	0	4	6	13	1	0	35
San Francisco .....	10	0	0	6	11	1	3	0	62	93	2	1	0	2	17	8	23	3	56
<b>WEST INDIES—</b>																			
Port of Spain, Trinidad ..	0	23	38	21	0	3	0	3	0	88	0	25	43	15	0	3	0	2	88
St. George's, Bermuda ..	1	3	0	3	1	6	9	14	0	30									
<b>SOUTH AMERICA—</b>																			
Cathar'a Sophia, Surinam ..	17	46	12	8	2	2	2	4	0	93	1	27	33	20	0	0	0	1	82
<b>AZORES—</b>																			
Horta, Fayal .....	4	35	0	1	34	10	1	0	8	93	4	25	1	1	20	14	0	2	67

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal.....	10	11	0	2	11	22	13	12	0	84	7	11	0	1	11	16	15	7	68
St. John's.....	11	8	0	0	7	5	0	44	0	84	—	—	—	—	—	—	—	—	—
St. Martin.....	0	27	0	10	2	24	1	20	0	84	—	—	—	—	—	—	—	—	—
Stanbridge.....	7	3	1	13	34	2	10	8	0	84	—	—	—	—	—	—	—	—	—
Toronto.....	2	12	3	8	5	24	4	20	6	84	—	—	—	—	—	—	—	—	—
Wolfville.....	1	5	10	2	3	20	15	23	5	84	1	3	4	1	3	17	17	15	61
MAINE—																			
Cornish, [Guptill].....	4	1	4	3	10	12	16	34	0	84	1	0	0	0	0	0	1	0	2
Cornish, [West].....	3	8	4	1	0	31	15	13	0	84	2	0	1	0	1	7	8	0	27
Gardiner.....	0	13	0	11	1	19	5	22	13	84	0	1	0	2	5	14	2	0	30
Monson.....	8	5	4	0	24	7	10	22	4	84	—	—	—	—	—	—	—	—	—
Perry.....	5	8	3	4	2	28	0	26	0	84	4	0	3	1	2	21	5	0	39
Portland.....	11	8	0	1	15	19	14	16	0	84	1	0	0	0	0	3	10	7	23
Steuben.....	0	19	0	2	0	37	2	23	1	84	2	4	0	0	0	7	8	8	29
NEW HAMPSHIRE—																			
Concord.....	0	14	0	15	3	23	1	28	0	84	—	—	—	—	—	—	—	—	—
Francetown, [Bixby].....	4	2	3	2	1	18	16	37	0	83	1	0	5	2	0	14	22	37	81
Francetown, [Root].....	2	7	1	0	0	25	0	22	0	69	2	2	1	2	0	10	12	8	37
Londonderry.....	1	6	3	0	0	7	7	26	22	84	0	4	0	1	0	5	7	8	25
Manchester.....	3	2	0	0	14	9	3	10	2	43	2	2	0	4	11	0	0	0	25
North Barnstead.....	6	11	0	0	0	0	17	50	0	84	0	1	10	19	6	13	0	0	49
Shelburne.....	0	0	10	0	0	0	17	0	3	30	0	3	0	0	0	8	5	4	20
Stratford.....	0	1	11	0	2	8	13	10	1	46	0	0	0	1	3	16	10	10	40
West Enfield.....	2	1	0	7	35	8	4	27	0	84	0	1	0	11	14	5	3	21	58
VERMONT—																			
Brandon.....	18	2	0	3	32	13	7	0	1	82	1	0	0	0	1	18	11	10	41
Craftsbury.....	3	0	0	7	36	7	0	13	0	84	1	0	0	0	0	8	19	11	41
Norwich.....	8	0	1	12	10	14	8	26	5	84	15	12	15	10	6	1	0	1	60
Rupert.....	0	0	9	0	0	3	0	0	0	12	16	32	22	0	0	0	0	0	70
Shelburne.....	20	1	0	1	45	5	1	10	0	83	0	5	12	9	2	0	0	0	28
MASSACHUSETTS—																			
Amherst.....	0	4	1	33	0	14	2	28	0	84	0	0	0	1	0	0	10	16	35
Boston.....	0	1	2	0	3	7	3	8	4	28	—	—	—	—	—	—	—	—	—
Bridgewater.....	5	9	5	2	0	30	12	18	0	84	0	20	4	8	2	1	2	1	38
Cambridge.....	3	10	1	1	4	22	10	24	9	84	—	—	—	—	—	—	—	—	—
Canton.....	5	7	4	5	17	8	13	16	9	84	0	0	0	0	0	0	2	2	4
Florida.....	0	2	0	9	5	24	8	36	0	84	0	2	0	7	5	23	10	32	79
Lawrence.....	0	7	1	3	1	37	1	16	0	66	2	0	0	0	0	2	9	1	14
Mendon.....	0	7	4	1	1	39	2	30	0	84	0	8	4	0	2	29	0	20	68
Nantucket.....	3	6	2	10	3	31	6	23	1	84	—	—	—	—	—	—	—	—	—
New Bedford.....	0	8	2	4	1	41	3	25	0	84	1	1	1	0	0	3	3	7	16
Newburyport.....	1	4	3	1	12	12	28	17	0	78	—	—	—	—	—	—	—	—	—
North Attleborough.....	5	2	4	2	32	5	13	21	0	84	7	2	2	3	18	11	18	3	64
Plainfield.....	0	0	2	0	2	9	4	11	0	28	—	—	—	—	—	—	—	—	—
Richmond.....	0	2	0	4	0	46	0	32	0	84	2	3	0	2	0	35	0	23	65
Southwick.....	6	5	0	1	20	4	1	14	7	58	0	0	0	0	1	12	2	2	17
Westfield.....	4	0	10	20	0	10	18	8	0	84	0	0	0	0	0	1	0	0	1
Weymouth.....	0	0	1	9	1	20	0	25	0	56	—	—	—	—	—	—	—	—	—
Williamstown.....	7	0	2	24	11	2	7	20	0	81	2	0	0	1	7	4	1	3	18
Worcester.....	2	11	0	0	2	23	29	15	0	82	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia.....	2	9	2	0	15	13	11	14	14	83	0	1	0	0	8	12	9	8	38
New London.....	3	2	0	5	8	37	2	24	0	84	—	—	—	—	—	—	—	—	—
Norwich.....	0	8	1	11	3	19	11	8	23	84	—	—	—	—	—	—	—	—	—
Pomfret.....	2	11	0	4	14	21	4	28	0	84	2	8	0	2	11	17	2	9	51
Saybrook.....	4	7	4	0	3	23	8	15	11	84	0	0	2	0	5	8	9	4	28
Wallingford.....	11	3	1	2	21	18	5	18	5	84	1	0	0	0	0	12	11	5	29
RHODE ISLAND—																			
Providence.....	0	13	0	5	12	23	5	26	0	84	—	—	—	—	—	—	—	—	—
NEW YORK—																			
Angelica.....	0	1	0	21	6	41	11	0	0	84	0	0	0	2	4	35	0	0	47
Baldwinsville.....	0	1	10	3	4	17	21	27	0	83	0	0	1	0	0	7	31	22	61



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1857.

NAME OF STATION.	SURFACE CURRENT										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Beverly.....	1	6	0	12	15	30	2	15	1	82	1	3	0	6	5	19	8	9	51	
Blackwell's Island.....	16	12	12	4	4	13	12	11	0	84	3	1	1	0	6	7	7	26	66	
Cazenovia.....	0	0	1	6	23	10	12	31	1	84	0	0	0	2	8	10	25	21	66	
Clinton.....	3	5	2	9	13	21	18	13	0	84	0	0	1	1	2	8	36	7	55	
Fishkill Landing.....	0	13	2	12	21	21	7	8	0	84	0	0	0	0	6	3	17	0	26	
Flatbush.....	9	5	10	10	7	12	18	13	0	84	0	0	3	1	1	5	18	9	37	
Houseville.....	6	0	0	5	34	11	12	16	0	84	0	0	0	0	4	16	22	7	49	
McGrawville.....	0	0	0	25	3	23	20	13	0	84										
Morrisania.....	9	11	5	13	15	10	9	12	0	84										
New York city.....	0	8	3	16	0	28	10	19	0	84	0	4	4	12	0	18	19	3	60	
Nichols.....	9	0	0	1	14	0	3	0	1	28										
Ogdensburg.....	4	2	1	1	7	8	2	3	0	28										
Oswego.....	5	2	4	13	24	8	15	6	3	84										
Ovid.....	4	1	2	10	26	9	21	11	0	84	3	0	0	2	5	23	28	11	72	
Penn Yan.....	0	0	0	0	19	25	27	13	0	84										
Plainville.....	0	0	13	3	22	12	30	4	0	84	2	1	1	0	1	0	0	0	5	
Rochester, [Harkness].....	4	0	6	4	18	6	25	0	21	84										
Rochester, [Palmer].....	6	7	6	8	19	10	20	8	0	84	2	7	3	1	4	6	28	19	70	
Sag Harbor.....	2	7	5	5	28	10	11	15	1	84	0	1	1	0	5	18	7	4	36	
Saratoga.....	1	11	0	10	2	27	7	26	0	84	4	12	0	11	3	26	4	24	84	
Spencertown.....	6	0	0	17	20	11	1	29	0	84	3	0	1	6	10	16	10	27	73	
Townsendville.....	5	1	2	19	16	7	14	16	4	84	0	0	0	0	0	12	22	0	34	
Troy.....	2	1	0	6	22	7	18	16	12	84	2	0	0	3	10	3	9	2	29	
Utica.....	13	1	4	5	6	0	3	12	40	84										
Wampsville.....	0	0	1	6	28	5	38	6	0	84	0	0	2	6	25	3	36	8	78	
Wellsville.....	0	0	25	9	2	4	35	3	0	78	0	0	2	0	7	0	8	0	17	
NEW JERSEY—																				
Bloomfield.....	1	6	0	4	0	46	2	25	0	84										
Burlington.....	8	7	6	7	3	6	32	15	0	84	1	0	0	0	5	4	13	8	31	
Lambertville.....	2	11	3	5	11	20	2	24	0	78										
Newark.....	2	7	8	9	2	16	0	11	1	56										
Sergeantsville.....	2	15	5	18	23	12	8	0	1	84	0	14	2	10	10	12	1	0	49	
PENNSYLVANIA—																				
Bedford.....	0	0	0	9	0	26	7	30	0	72	0	0	0	8	0	18	8	12	46	
Berwick.....	4	8	19	8	6	22	13	0	0	84										
Cannonsburg.....	1	2	2	4	1	23	42	2	1	84										
Carlisle.....	1	2	2	10	1	11	7	15	26	79	1	1	2	4	0	0	5	7	26	
Chromedale.....	3	5	3	7	4	6	6	21	29	84	1	1	0	1	1	6	11	8	29	
Easton.....	2	1	3	9	6	2	23	14	13	80	0	0	2	1	3	4	18	13	41	
Fleming.....	5	0	0	27	11	0	4	35	2	84	0	0	0	0	3	4	27	16	50	
Gettysburg.....	2	5	5	1	12	20	15	11	13	84	2	0	0	0	5	16	21	9	53	
Harrisburg, [Heisely].....	0	1	5	32	11	0	5	29	0	83	0	0	0	6	3	0	3	9	21	
Lewisburg.....	6	4	2	0	13	26	16	5	12	84	0	0	1	0	4	7	12	5	29	
Meadville.....	0	0	0	6	25	5	8	16	24	84	1	0	0	1	2	20	22	10	56	
Morrisville.....	0	4	3	12	6	19	9	13	15	81	0	3	2	4	5	18	5	7	44	
Moss Grove.....	0	1	0	2	31	16	15	9	4	78	0	0	0	0	4	22	45	2	73	
Nazareth.....	8	7	0	7	4	10	13	11	21	81	3	0	0	1	2	3	8	4	21	
Norristown.....	0	1	12	10	8	12	26	3	0	72	0	0	8	0	1	8	30	0	47	
North Whitehall.....	2	3	5	1	7	5	3	20	38	84	0	0	0	0	0	5	4	8	17	
Philadelphia.....	0	8	2	3	5	31	10	21	0	84	0	0	0	0	0	6	5	0	11	
Pocopson.....	6	6	1	3	19	20	19	2	0	76	0	0	0	0	2	0	3	3	8	
Shamokin.....	12	6	10	0	11	15	20	10	0	84	0	0	0	0	2	11	46	5	64	
Tarentum.....	6	1	5	0	3	21	7	15	26	84	1	0	0	0	3	19	22	15	60	
West Haverford.....	1	1	2	1	13	13	2	16	7	56	2	1	0	0	1	5	8	15	32	
DELAWARE—																				
Newark.....	3	2	4	12	6	24	9	16	0	76	1	0	0	0	0	0	4	0	5	
MARYLAND—																				
Annapolis.....	7	5	0	6	30	14	4	7	11	84	3	0	0	0	11	19	0	0	33	
Bladensburg.....	0	1	5	8	2	17	2	16	0	51										
Frederick.....	4	2	0	4	10	12	11	19	22	84	0	1	0	0	7	3	23	2	36	
Ridge.....	10	5	3	14	21	10	4	11	1	79										
Sykesville.....	0	1	2	15	13	27	21	5	0	84	0	0	2	4	4	11	34	0	55	

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
DISTRICT OF COLUMBIA—																				
Washington, [S. I.]	0	4	0	8	0	46	4	14	8	44										
VIRGINIA—																				
Alexandria	3	4	1	10	31	9	4	22	0	84										
Ashland	1	0	0	6	7	17	0	10	43	84	0	0	0	0	0	27	0	0	36	
Berryville	3	0	2	7	14	8	12	17	15	78	3	0	0	0	0	6	12	4	25	
Crichton's Store	11	0	3	9	25	16	9	3	2	84	0	0	0	0	0	20	9	0	29	
Kanawha	7	0	0	14	27	5	7	15	0	84	0	7	33	9	0	0	0	0	49	
Lewisburg	0	0	0	0	0	3	0	0	0	3	0	0	0	0	3	5	20	0	28	
Longwood											3	13	39	4	2	1	1	1	64	
Montross	6	4	5	5	25	7	3	4	25	84	6	9	10	1	0	0	0	0	26	
Mossy Creek	1	16	0	4	0	45	2	15	1	84	1	2	0	0	0	14	6	20	43	
Mustapha	7	0	0	0	19	2	0	0	0	28										
Poplar Grove	0	0	25	0	0	2	20	5	32	84	0	0	0	0	3	20	22	6	51	
Portsmouth	14	5	5	4	9	21	10	12	0	80										
Rose Hill	12	4	6	0	11	11	3	3	21	70										
Rougemont	8	7	2	1	31	17	11	2	0	79	1	0	0	2	19	12	4	1	39	
Winchester	0	0	0	3	6	14	6	9	45	83	0	0	0	1	3	3	0	1	8	
Wirt Court-House	0	0	0	12	4	33	1	19	15	84	0	0	0	0	0	56	1	4	61	
NORTH CAROLINA—																				
Chapel Hill	4	7	11	1	15	15	19	12	0	84	0	0	0	1	10	21	3	3	38	
Goldsbrough	5	12	5	0	30	4	7	3	14	80	0	2	0	0	8	1	2	0	13	
Mumfresborough	0	0	5	12	3	24	6	0	15	83	0	0	0	2	0	8	32	0	42	
SOUTH CAROLINA—																				
All Saints	10	4	9	10	18	23	5	3	2	84	4	0	2	3	6	19	16	3	53	
Camden	11	11	1	14	2	23	5	12	5	84	1	0	0	6	3	15	11	3	39	
Charleston, [Dawson]	0	24	3	13	0	14	0	2	0	56										
Charleston, [Johnson]	1	11	3	7	0	5	0	1	0	28										
Mount Pleasant	16	7	11	2	2	2	2	10	1	53	1	0	1	2	1	2	0	3	10	
GEORGIA—																				
Factory Mills	0	2	18	12	2	5	31	4	0	74										
Savannah	8	8	10	24	0	9	4	12	0	84	0	0	0	3	0	1	3	0	7	
Sparta	2	10	4	19	0	19	3	15	0	81	1	0	0	4	8	11	6	4	34	
The Rock	7	16	5	9	4	12	11	17	0	81										
Whitemarsh Island	3	12	6	5	10	4	2	7	35	84	0	1	2	12	5	5	4	3	32	
Zebulon	0	3	27	14	2	6	23	9	0	84	2	1	3	5	4	6	9	5	35	
FLORIDA—																				
Atsena	7	15	14	7	3	13	11	0	13	83	1	4	4	0	0	7	3	0	27	
Belair	0	7	15	13	6	3	1	1	31	77	0	1	1	1	8	8	13	7	39	
Gainesville	10	21	10	3	2	17	4	15	0	82										
Jacksonville	1	43	5	11	4	11	0	0	0	84	0	0	1	10	1	17	3	0	40	
St. Augustine	0	42	12	16	2	6	0	6	0	84	0	15	3	27	1	4	5	2	57	
Salt Ponds	14	20	14	4	0	0	0	4	0	56	0	0	0	0	0	0	2	3	5	
Warrington	1	37	3	5	5	17	4	12	0	84	2	3	0	2	0	11	1	4	23	
ALABAMA—																				
Auburn	11	3	1	27	18	12	8	4	0	84	0	0	0	2	18	12	4	0	36	
Carlowville	13	4	7	7	27	7	8	11	0	84	0	0	0	5	10	4	3	1	23	
Greene Springs	1	14	1	18	4	9	1	6	0	54	0	0	0	1	14	9	2	1	27	
Greensborough	2	6	0	33	10	6	5	22	0	84	0	0	0	7	8	6	0	2	29	
MISSISSIPPI—																				
Columbus	8	5	7	16	28	5	5	10	0	84	1	0	0	4	16	11	14	3	49	
Port Gibson	8	13	5	19	15	4	5	2	13	84										
LOUISIANA—																				
Black River	15	5	0	14	40	3	3	4	0	84	2	0	0	1	14	21	7	4	49	
New Orleans, [Barton]	13	5	10	21	18	5	6	6	0	84	2	0	0	0	13	9	4	4	32	
New Orleans, [Taylor]	0	18	0	18	0	5	0	6	0	47										
TEXAS—																				
Austin	21	6	0	16	34	0	0	7	0	84	3	3	0	21	27	3	4	13	74	
Helena	19	4	12	15	32	1	0	0	1	84	1	0	2	13	8	3	14	1	42	
New Braunfels	8	5	26	7	16	0	0	3	17	82	0	0	0	0	3	0	1	0	4	
Union Hill	23	8	1	8	33	0	0	0	11	84	13	0	6	15	18	15	2	0	69	
Washington	58	0	0	0	25	0	0	0	1	84	57	0	0	0	19	0	0	3	79	



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
TENNESSEE—																			
Glenwood .....	7	4	3	24	24	3	2	13	4	84	0	1	0	0	8	28	15	5	57
KENTUCKY—																			
Danville .....	2	7	1	2	34	10	8	20	0	84	0	0	0	0	5	27	17	3	52
Paris .....	10	1	0	5	25	17	16	10	0	84	0	0	0	0	22	6	16	0	44
Springdale .....	1	6	5	2	17	28	6	9	10	84									
OHIO—																			
Cincinnati, [Harper] .....	4	0	0	1	10	41	14	14	0	84	0	0	0	0	0	1	0	0	1
Cincinnati, [Hurt] .....	0	0	0	0	12	18	23	4	12	69	0	0	0	0	11	14	16	1	42
Cleveland .....	5	6	3	13	21	14	11	8	2	84	0	0	0	0	0	26	17	0	43
Farmers' College .....	2	4	2	1	26	11	5	11	21	83	1	0	0	0	3	20	0	9	39
Franklin .....	3	2	2	31	0	11	21	14	0	84	0	0	0	2	8	5	4	1	20
Gallipolis .....	2	1	2	5	30	7	21	7	0	75	0	0	1	0	0	10	20	2	33
Granville .....	0	3	0	2	34	7	2	25	75	0	0	0	0	0	3	21	4	2	30
Hillsborough .....	2	9	0	4	11	44	0	13	1	84	0	0	0	0	1	16	0	3	20
Hiram .....	4	1	0	2	7	39	21	9	1	84	2	1	0	1	3	22	17	3	49
Jefferson .....	1	2	0	11	13	37	3	17	0	84	1	2	0	7	11	35	3	16	75
Madison, [Atkins] .....	1	8	1	10	19	13	26	6	0	84	0	1	0	0	8	6	8	1	24
Madison, [Cunningham] .....	0	5	1	5	22	23	13	7	7	84	2	3	0	1	1	32	26	5	70
Oberlin .....	5	2	2	4	24	20	8	17	1	83	0	1	1	0	3	16	10	3	34
Portsmouth .....	11	1	2	12	15	24	14	4	1	84									
Savannah .....	5	0	1	4	0	36	8	30	0	84	6	0	0	6	0	30	7	18	67
Sidney .....	4	5	0	8	15	25	7	4	0	68	0	2	0	2	0	38	4	15	61
Urbana .....	0	0	2	7	17	22	0	6	21	84	0	0	0	0	6	27	17	8	58
West Bedford .....	4	2	3	5	13	30	5	19	3	84	1	2	3	0	1	6	30	14	57
Zanesville .....	2	1	1	3	13	38	3	23	0	84	36	0	0	0	0	0	6	0	42
MICHIGAN—																			
Battle Creek .....	3	6	10	7	11	19	20	4	3	83	1	4	0	0	0	21	43	1	70
Cooper .....	0	2	12	1	4	4	53	1	7	84	0	0	14	1	0	2	47	0	64
Copper Falls Mines .....	21	13	0	17	7	10	7	8	0	83									
Grand Rapids, [Currier] .....	4	12	2	12	4	21	12	0	16	83	1	1	0	0	4	6	4	0	16
Grand Rapids, [Streng] .....	6	10	9	7	15	17	19	1	0	84	0	0	7	2	5	24	28	6	78
Monroe .....	5	3	2	9	15	17	0	31	2	84	4	3	2	13	14	16	1	28	81
Romeo .....	3	11	2	9	7	20	17	10	4	83	4	2	0	0	9	9	8	6	38
INDIANA—																			
Cannelton .....	4	0	3	19	22	11	1	24	0	84	0	0	0	8	15	7	2	15	47
Logansport .....	6	2	3	4	16	22	16	15	0	84									
Michigan City .....	11	11	3	2	3	40	29	13	0	112									
New Albany .....	13	7	0	8	3	19	22	12	0	84	5	5	0	5	4	15	17	9	60
New Harmony .....	9	1	4	9	23	8	14	5	0	73	0	0	0	0	2	1	7	0	10
Richmond .....	1	3	0	2	8	15	10	4	10	53									
ILLINOIS—																			
Athens .....	1	17	2	25	1	19	3	14	0	82	6	4	0	7	0	27	18	10	72
Augusta .....	8	9	9	4	11	18	18	4	3	84	4	3	3	1	5	9	9	2	36
Chicago .....	2	12	2	3	11	26	17	10	1	84	2	9	1	0	4	24	11	8	59
Fremont Centre .....	7	5	7	6	25	16	17	1	0	84									
Manchester .....	5	8	0	2	25	8	21	14	0	84	1	2	0	0	15	8	11	8	45
Marengo .....	1	6	13	14	15	24	9	2	0	84									
Ottawa .....	8	14	5	11	10	11	12	10	0	81	0	0	0	2	0	4	3	0	9
Pekin .....	3	4	0	10	19	5	4	0	0	53									
Peoria .....	13	10	8	3	25	7	16	2	0	84	0	0	0	0	0	3	7	1	11
Piasa Farms .....	7	12	0	3	25	9	8	20	0	84	0	3	0	2	8	15	4	5	37
Riley .....	6	9	2	8	11	8	22	11	0	83									
Upper Alton .....	1	0	0	7	18	34	8	16	0	84									
Warsaw .....	3	9	4	21	6	14	6	21	0	84	1	0	0	2	2	19	6	7	37
West Salem .....	11	2	3	5	36	4	2	9	12	84	0	0	0	0	2	20	18	1	41
MISSOURI—																			
Cape Girardeau .....	12	8	1	22	44	4	6	13	2	112	7	0	0	5	32	7	8	4	63
Palmyra .....	0	7	4	7	11	22	9	17	32	109	0	6	5	5	8	20	11	11	66
St. Louis .....	10	3	8	14	19	7	17	6	0	84									
WISCONSIN—																			
Appleton .....	1	23	2	2	4	31	15	4	2	84	2	25	2	4	3	28	10	9	83
Beloit .....	16	6	2	3	27	19	6	5	0	84	0	0	0	0	1	1	3	0	5

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
WISCONSIN—Continued.																				
Janesville .....	4	5	11	15	8	11	16	6	8	84										
Kenosha .....	4	4	12	2	13	18	13	1	14	81										
Madison, [Schue] .....	7	9	4	11	15	23	10	6	1	84										
Madison, [Sterling] .....	7	9	5	9	13	28	7	5	1	84										
Manitowoc .....	17	6	1	8	11	14	10	17	0	84										
Milwaukee, [Pomeroy] .....	2	5	2	1	6	3	9	0	0	28										
Milwaukee, [Winkler] .....	4	16	5	10	4	18	21	6	0	84										
New London .....	9	5	3	2	11	23	21	15	0	84	4	3	11	11	4	14	32	11	68	
Norway .....	10	14	2	2	6	22	26	11	11	84	6	14	2	1	7	11	19	2	62	
Platteville .....	0	9	11	19	2	15	14	14	0	84	0	6	7	10	1	10	28	11	68	
Prescott .....	5	2	1	12	14	12	11	10	28	84	3	6	0	4	1	3	0	5	22	
Racine .....	10	3	3	3	21	9	29	3	0	81	1	0	11	1	5	1	3	0	11	
Waukesha .....	0	18	1	6	8	35	7	5	0	80										
IOWA—																				
Bellevue .....	6	6	0	7	7	7	14	14	11	61	1	1	0	0	1	3	3	4	13	
Border Plains .....	14	10	2	16	11	10	8	13	0	84	4	1	0	0	2	1	4	5	17	
Fort Madison .....	5	15	1	15	7	18	3	20	11	84	3	4	1	11	11	20	16	2	51	
Franklin .....	6	7	6	15	4	8	12	18	8	84										
Maquoketa .....	4	5	13	2	2	4	21	1	2	54										
Muscatine .....	0	8	0	25	0	30	0	21	11	84	11	11	0	0	0	12	0	0	12	
Pleasant Plain .....	9	11	11	8	10	9	11	11	11	84	0	11	0	0	0	4	16	5	25	
MINNESOTA—																				
Hazlewood .....	10	10	5	8	16	3	7	25	11	84	1	2	1	3	2	0	4	3	16	
Lake Winnibigoshish .....	13	3	3	16	14	7	9	7	4	76	11	11	0	11	11	0	2	3	5	
Princeton .....	11	8	2	7	10	2	23	7	14	81	9	2	2	11	1	0	14	2	30	
KANSAS—																				
Council City .....	9	3	2	4	22	11	3	22	13	84										
UTAH—																				
Great Salt Lake City .....	11	5	13	14	39	11	11	20	0	112	11	11	1	0	19	1	9	1	37	
CALIFORNIA—																				
Sacramento .....	16	11	4	28	14	5	3	14	11	84	0	1	11	11	3	11	2	4	29	
San Francisco .....	11	0	0	7	17	1	6	2	40	84	11	2	0	2	13	17	14	6	58	
WEST INDIES—																				
Port of Spain, Trinidad ..	3	14	14	15	11	0	11	0	11	57	0	11	31	22	1	2	0	0	65	
St. George's, Bermuda .....	1	13	2	4	11	4	1	3	0	28										
SOUTH AMERICA—																				
Catharina Sophia, Surinam ..	4	25	12	4	3	11	11	0	0	48	1	7	23	13	0	11	0	11	44	
AZORES—																				
Horta, Fayal .....	20	21	11	11	2	13	3	8	11	84	12	18	1	4	3	11	4	13	64	



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1857.

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	7	13	0	0	6	22	35	12	0	95	8	10	0	1	5	17	24	6	71	
Red River Settlement .....	10	0	0	0	18	0	0	1	0	29	5	0	0	0	5	0	0	1	11	
St. John's .....	7	20	1	1	4	3	2	55	0	92	9	17	3	1	3	2	15	36	86	
St. Martin .....	0	22	1	13	2	30	8	17	0	93	—	—	—	—	—	—	—	—	—	
Stanbridge .....	7	3	2	11	28	9	19	6	8	93	—	—	—	—	—	—	—	—	—	
Toronto .....	0	4	1	8	3	17	5	42	13	93	—	—	—	—	—	—	—	—	—	
Wolfville .....	3	3	5	7	3	7	34	18	6	90	4	6	10	5	2	11	24	3	65	
MAINE—																				
Cornish, [Guptill] .....	4	5	3	11	8	7	12	43	0	93	—	—	—	—	—	—	—	—	—	
Cornish, [West] .....	6	11	10	4	6	21	21	14	0	93	1	2	0	0	1	9	10	10	33	
Gardiner .....	5	22	—	4	1	21	3	19	14	91	0	10	0	0	0	11	0	7	28	
Monson .....	8	16	0	2	22	3	13	27	2	93	—	—	—	—	—	—	—	—	—	
Perry .....	6	16	0	8	8	17	8	30	0	93	5	7	0	2	3	6	7	17	47	
Portland .....	16	6	7	11	10	8	14	21	0	93	5	0	0	0	2	3	7	6	23	
Steuben .....	3	21	0	6	0	37	5	21	0	93	5	11	1	1	2	10	8	7	45	
NEW HAMPSHIRE—																				
Concord .....	5	9	3	18	1	19	2	36	0	93	—	—	—	—	—	—	—	—	—	
Francetown, [Bixby] .....	7	8	1	6	1	18	10	42	0	93	10	2	1	5	0	8	20	42	88	
Manchester .....	13	5	3	5	8	18	13	28	0	93	5	4	1	8	3	16	21	8	66	
North Barnstead .....	1	0	0	4	1	21	21	45	0	93	1	0	0	1	7	13	27	21	70	
West Enfield .....	3	2	0	6	21	11	6	44	0	93	7	0	1	9	10	1	10	32	70	
VERMONT—																				
Brandon .....	24	1	1	5	25	3	12	14	7	93	10	1	2	0	2	6	9	19	49	
Craftsbury .....	9	9	3	4	29	5	16	16	0	91	6	3	0	0	1	2	26	11	49	
Norwich .....	1	0	0	0	4	22	30	35	1	93	10	9	20	16	19	0	0	0	74	
Rupert .....	0	1	13	0	3	0	0	0	0	17	6	45	6	7	5	0	0	4	73	
St. Johnsbury .....	21	0	0	0	32	0	3	37	0	93	—	—	—	—	—	—	—	—	—	
Shelburn .....	35	0	0	0	51	1	0	2	0	89	1	8	6	11	0	0	0	0	26	
Woodstock .....	3	1	0	1	20	10	14	12	30	91	2	0	0	0	1	0	19	18	40	
MASSACHUSETTS—																				
Amherst .....	1	5	0	23	0	10	3	51	0	93	7	2	0	1	0	10	0	17	37	
Bridgewater .....	8	8	2	6	8	19	13	29	0	93	7	12	7	15	4	8	0	3	56	
Cambridge .....	7	1	4	3	6	19	17	21	14	92	—	—	—	—	—	—	—	—	—	
Canton .....	2	2	3	3	19	5	8	16	2	60	0	0	0	0	0	0	1	0	1	
Florida .....	0	6	0	3	0	17	15	52	0	93	2	5	1	1	0	15	16	45	85	
Lawrence .....	2	6	6	17	3	10	6	43	0	93	0	3	0	0	2	3	11	0	19	
Mendon .....	1	13	0	7	3	32	2	35	0	93	1	12	0	7	3	26	1	18	68	
Nantucket .....	5	7	2	16	3	14	6	31	9	93	—	—	—	—	—	—	—	—	—	
New Bedford .....	7	9	0	14	6	23	2	32	0	93	4	0	0	0	1	1	5	4	15	
Newburyport .....	4	2	10	6	11	7	21	20	0	81	—	—	—	—	—	—	—	—	—	
North Attleborough .....	13	2	1	6	25	5	20	21	0	93	11	3	1	2	16	7	23	7	70	
Plainfield .....	0	0	4	2	0	7	19	24	6	62	—	—	—	—	—	—	—	—	—	
Richmond .....	0	6	0	12	1	29	0	45	0	93	3	1	0	9	1	27	0	38	79	
Southwick .....	5	7	2	13	13	1	4	22	4	71	4	0	0	1	3	11	5	6	30	
Westfield .....	3	4	8	13	8	10	18	28	0	92	0	1	0	0	0	0	2	0	3	
Weymouth .....	2	8	0	9	1	12	4	26	0	62	—	—	—	—	—	—	—	—	—	
Williamstown .....	12	0	3	12	18	1	18	27	0	91	5	0	0	1	3	0	2	4	15	
Worcester .....	16	7	1	1	16	6	32	12	0	91	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Providence .....	8	7	2	6	20	8	8	33	1	93	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Columbia .....	4	2	2	4	7	11	1	40	22	93	1	1	0	1	5	8	2	24	42	
New London .....	8	9	1	12	4	26	13	20	0	93	—	—	—	—	—	—	—	—	—	
Norwich .....	3	13	2	5	4	12	11	17	26	93	—	—	—	—	—	—	—	—	—	
Pomfret .....	6	5	1	5	14	15	7	40	0	93	4	2	0	3	11	7	4	18	49	
Saybrook .....	7	3	7	9	7	12	13	18	5	82	3	1	0	0	3	2	16	9	34	
Wallingford .....	5	4	0	13	9	12	5	32	12	92	4	1	0	0	2	6	17	14	44	
NEW YORK—																				
Angelica .....	0	0	1	5	2	43	26	16	0	93	0	0	0	0	0	28	6	6	40	
Baldwinsville .....	3	1	13	3	3	9	14	43	0	89	1	0	0	0	0	0	30	30	61	
Beverly .....	5	2	0	11	10	29	6	28	0	91	3	1	0	7	0	29	16	9	65	
Blackwell's Island .....	16	9	7	6	12	11	11	21	0	93	—	4	2	1	4	4	4	5	30	

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New York--Continued.																				
Cazenovia.....	1	0	2	2	16	12	26	32	1	92	0	0	0	1	4	7	38	24	74	
Clinton.....	5	9	4	3	9	16	36	10	1	93	2	0	4	0	1	3	29	6	45	
Eden.....	4	2	1	4	29	24	20	4	0	88	1	0	1	1	3	10	15	13	44	
Fishkill Landing.....	3	12	9	14	10	13	10	21	1	93	0	0	0	2	3	0	15	0	29	
Flatbush.....	3	7	5	11	12	5	20	30	0	93	3	1	1	0	3	5	22	5	40	
McGrawville.....	0	1	8	15	0	9	50	6	4	93										
Morrisania.....	0	0	15	19	23	15	21	0	0	93										
New York city.....	0	3	2	22	0	11	22	33	0	93	0	2	0	12	1	11	26	13	65	
Nichols.....	18	0	0	0	10	1	0	0	2	31										
Ogdeusburg.....	4	2	0	1	4	15	1	4	0	31	0	0	0	1	0	0	0	1	2	
Oswego.....	3	4	3	13	14	8	42	6	0	93										
Ovid.....	3	2	2	12	17	7	27	23	0	93	1	2	1	1	7	20	23	22	77	
Penn Yan.....	8	5	0	0	16	25	35	4	0	93										
Plainville.....	1	1	12	6	8	6	51	2	0	87	2	1	25	0	0	0	4	0	32	
Rochester, [Harkness].....	4	0	4	0	20	2	29	5	29	93										
Rochester, [Palmer].....	5	2	3	5	12	23	25	18	0	93	6	3	2	3	9	11	23	23	80	
Sag Harbor.....	4	4	5	10	12	11	21	21	1	89	2	0	0	0	0	14	12	10	38	
Saratoga.....	0	2	0	0	3	25	11	44	0	93	3	2	0	3	5	25	14	41	93	
Spencertown.....	12	3	0	7	21	11	4	35	0	93	12	3	0	0	17	11	3	35	81	
Townsendville.....	1	1	3	19	4	9	17	35	4	93	0	0	0	0	5	15	13	0	33	
Utica.....	2	1	6	6	8	0	15	14	40	92										
Wampsville.....	1	0	5	3	23	3	55	3	0	93	2	0	5	3	20	5	50	0	88	
Waterford.....	15	5	0	0	25	17	13	1	17	93										
Wellsville.....	0	0	41	2	0	2	48	0	0	93	1	0	0	0	0	4	1	2	8	
New Jersey--																				
Bloomfield.....	0	10	0	6	7	21	4	45	0	93										
Burlington.....	5	0	11	10	3	12	22	15	2	85	1	0	0	0	4	11	16	11	43	
Lambertville.....	0	7	1	14	4	9	3	44	0	82										
Newark.....	4	9	1	5	2	15	5	21	0	62										
Sergeantsville.....	6	16	16	29	13	13	0	0	0	93	3	10	5	23	4	12	0	0	57	
Pennsylvania--																				
Bedford.....	0	0	0	5	0	21	1	51	0	78	0	0	0	4	0	16	3	34	57	
Berwick.....	3	3	15	5	2	0	39	16	1	93										
Canonsburg.....	2	0	2	0	0	12	60	12	0	88										
Carlisle.....	0	1	3	12	0	18	11	28	20	93	0	0	3	7	1	6	6	19	42	
Chromedale.....	11	4	2	8	6	2	1	35	24	93	5	1	0	0	0	9	14	15	44	
Easton.....	3	0	5	10	8	1	23	26	9	85	5	0	1	0	3	4	16	14	43	
Fleming.....	6	0	0	7	13	4	5	58	0	93	5	1	0	0	0	1	32	20	59	
Gettysburg.....	11	6	0	3	9	19	18	23	4	93	3	0	0	0	0	15	19	20	57	
Harrisburg, [Heisely].....	4	0	0	20	8	5	4	50	0	91	3	0	0	2	0	1	2	22	30	
Harrisburg, [Hickok].....	3	1	18	4	0	7	34	14	0	90	0	0	0	0	0	0	10	1	11	
Lewisburg.....	0	0	3	4	7	21	18	22	12	93	3	0	0	0	3	7	9	12	34	
Meadville.....	1	0	0	2	11	3	10	20	44	91	2	0	0	0	1	2	22	15	42	
Morrisville.....	1	8	2	10	6	13	16	30	7	93	2	5	0	2	3	18	7	20	57	
Nazareth.....	7	3	0	7	9	11	19	6	12	74	4	0	0	1	3	5	11	3	27	
Norristown.....	1	0	6	8	3	13	36	11	0	78	1	1	1	1	0	6	40	5	55	
North Whitehall.....	4	0	1	4	9	5	11	24	35	93	2	1	0	1	7	2	8	21	42	
Philadelphia.....	0	0	2	14	8	20	11	35	0	93	0	0	0	1	0	5	6	8	20	
Pocopson.....	9	1	0	0	9	23	33	11	0	86	2	0	0	0	3	5	11	4	25	
Shamokin.....	3	2	2	2	4	13	47	20	0	93	0	0	0	0	0	1	62	10	73	
Tarentum.....	9	2	1	2	0	24	6	16	33	93	4	0	0	0	0	10	19	27	60	
West Haverford.....	1	1	0	3	7	9	2	29	9	61	4	0	0	0	3	4	10	16	37	
Delaware--																				
Newark.....	1	3	0	10	4	11	15	23	0	67	0	0	0	0	0	0	7	1	8	
Maryland--																				
Annapolis.....	8	10	0	14	14	6	7	26	8	93	7	5	0	0	2	22	3	2	41	
Bladensburg.....	1	0	0	5	2	3	2	32	0	45										
Frederick.....	0	3	0	8	3	10	25	30	12	91	1	0	0	0	1	5	28	5	40	
Ridge.....	1	1	4	7	13	4	5	31	0	69										
Sykesville.....	0	0	3	12	1	22	27	28	0	93	0	0	0	6	1	6	45	4	62	
District of Columbia--																				
Washington, [Smith. Inst.].....	0	7	0	14	1	19	8	34	8	91										



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1856.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—																				
Alexandria	14	3	■	3	9	15	13	34	0	93										
Ashland	1	0	0	1	4	23	0	13	49	91	0	0	0	0	0	14	13	4	31	
Berryville	4	1	1	8	12	11	15	32	7	91	4	0	0	0	0	5	14	3	26	
Crichton's Store	13	4	2	2	6	34	12	17	0	90	0	0	0	0	0	3	4	1	■	
Kanawha	0	1	3	25	3	7	17	32	5	93	0	11	24	14	0	0	0	0	49	
Lewisburg	1	0	0	0	0	0	4	0	0	5	1	0	0	0	0	1	20	0	22	
Longwood											■	5	35	8	9	1	1	0	61	
Montross	6	3	2	8	10	10	13	13	25	90	1	5	10	4	3	1	■	0	24	
Mossy Creek	5	12	0	1	0	35	7	33	0	93	9	4	0	0	0	6	4	21	44	
Mustapha	8	0	0	0	17	4	0	2	0	31										
Poplar Grove	0	0	9	0	0	■	18	23	43	93	1	■	0	0	1	11	27	16	58	
Portsmouth	13	10	5	10	■	11	9	26	0	93										
Rose Hill	7	13	1	9	2	19	5	16	13	85										
Rougement	8	5	1	1	15	30	20	12	0	92	3	0	0	1	6	21	9	9	49	
Smithfield	8	6	12	0	13	15	21	16	0	91	4	2	0	0	1	5	16	14	42	
Winchester	0	0	0	4	0	2	26	12	49	93	0	0	0	0	0	0	12	3	15	
Wirt Court-House	0	0	0	6	0	35	0	45	7	93	0	0	0	0	0	50	1	16	67	
NORTH CAROLINA—																				
Chapel Hill	6	13	2	5	2	18	28	19	0	93	1	0	0	1	1	21	9	5	38	
Goldsborough	16	6	7	0	14	13	17	5	3	81	0	0	0	0	0	■	4	1	7	
Murfreesborough	■	6	3	9	2	21	14	21	15	93	3	3	0	0	0	9	21	4	40	
SOUTH CAROLINA—																				
All Saints	12	14	0	11	17	21	11	7	0	93	■	4	1	0	3	11	17	1	39	
Camden	10	19	0	6	0	18	■	28	3	93	1	5	1	0	3	12	10	11	43	
Charleston, [Dawson]	3	18	4	■	0	15	0	13	0	62										
Charleston, [Johnson]	2	12	0	2	1	3	1	10	0	31										
Mount Pleasant	15	19	2	5	4	7	6	32	2	92	0	3	0	2	1	4	2	8	20	
GEORGIA—																				
Athens	2	2	11	2	2	2	11	13	19	64										
Augusta	14	23	9	9	2	14	10	3	0	84										
Factory Mills	0	6	15	9	4	1	36	16	0	87										
Savannah	11	11	5	14	14	13	3	22	0	93	0	0	0	0	0	1	4	0	5	
Sparta	2	15	5	14	3	15	5	34	0	93	1	2	0	4	1	7	11	7	33	
The Rock	21	3	12	9	6	1	23	17	0	92										
Whitemarsh Island	5	18	4	10	6	8	4	16	22	93	1	4	0	1	0	7	■	14	29	
Zebulon	0	8	25	4	0	6	30	20	0	93	1	0	0	0	3	3	7	2	16	
FLORIDA—																				
Alligator	3	17	3	7	2	7	2	10	6	57	0	0	0	1	1	0	0	3	5	
Atsena	23	17	5	5	7	7	13	12	4	93	9	5	1	4	2	9	8	2	40	
Belair	8	26	17	5	5	4	0	5	23	93	1	6	3	3	0	3	14	5	35	
Gainesville	13	16	8	3	7	12	12	21	0	92										
Jacksonville	2	28	2	12	1	15	3	29	0	92	1	7	1	0	1	21	5	7	43	
St. Augustine	12	39	5	7	0	5	0	25	0	93	11	21	2	2	0	5	1	11	53	
Salt Ponds	16	11	9	4	4	0	3	13	2	62										
Warrington	4	29	2	8	0	31	4	15	0	93	0	5	5	8	1	10	0	1	30	
ALABAMA—																				
Auburn	17	8	9	13	19	8	12	6	5	92	7	2	1	5	■	7	7	3	38	
Carlowlle	26	7	8	6	8	14	11	13	0	93	0	0	1	2	1	4	5	0	13	
Greene Springs	0	30	0	1	0	27	0	29	0	87	0	0	0	0	0	17	0	0	17	
Greensborough	7	5	1	19	8	5	10	36	0	91	1	0	1	1	0	3	28	2	36	
MISSISSIPPI—																				
Columbus	19	10	13	14	■	8	4	17	0	93	2	0	0	0	2	3	18	16	41	
Port Gibson	18	11	7	8	15	5	5	5	19	93										
LOUISIANA—																				
Black River	19	9	2	16	22	5	6	12	2	93	7	0	1	0	4	10	7	5	34	
New Orleans, [Barton]	15	13	6	15	8	4	4	4	3	72	0	1	0	0	1	1	2	2	7	
New Orleans, [Taylor]	0	25	0	4	0	0	0	15	0	53										
Trinity	16	7	14	7	38	1	4	6	0	93	4	0	0	0	1	4	6	2	17	
TEXAS—																				
Austin	36	2	0	14	37	2	0	2	0	93	15	5	0	9	15	5	■	18	69	
Helena	20	10	5	6	35	1	1	0	0	78	2	1	0	5	23	11	8	0	50	
New Braunfels	25	1	15	4	31	1	1	0	14	92	0	0	0	0	0	1	3	0	4	

## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1857.

NAME OF STATION.	SURFACE CURRENT										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TEXAS—Continued.																				
Union Hill.....	23	0	0	8	40	3	0	0	19	93	12	0	0	24	8	15	2	0	61	
Washington.....	62	0	0	0	23	1	1	0	0	87	6	14	0	6	2	1	0	3	4	
TENNESSEE—																				
Glenwood.....	18	0	8	13	14	6	5	17	6	93	1	0	0	0	1	5	36	12	55	
KENTUCKY—																				
Danville.....	11	3	1	1	15	17	9	36	0	93	1	0	0	0	1	17	17	11	47	
Paris.....	1	0	0	11	5	29	14	26	0	92	0	0	0	0	6	7	18	0	31	
Springdale.....	3	6	5	3	0	23	9	18	17	93										
OHIO—																				
Cincinnati, [Harper].....	8	0	0	0	2	37	35	11	0	93										
Cincinnati, [Hurt].....	2	2	1	8	2	0	1	9	0	31										
Cincinnati, [Hurt].....	0	0	0	0	0	10	21	7	1	39	0	0	0	0	2	10	17	2	31	
Cleveland.....	4	0	1	8	27	6	17	26	4	93	0	0	0	0	0	5	22	11	38	
Edinburg.....	6	31	19	32	4	0	0	0	1	93	1	0	0	0	2	26	11	24	64	
Gallipolis.....	10	1	10	4	15	3	15	15	20	93	0	0	0	0	0	2	25	2	29	
Hillsborough.....	0	15	0	0	1	40	0	31	0	93	0	0	0	0	0	13	3	14	30	
Hiram.....	12	0	0	0	11	18	19	24	9	93	3	0	0	0	1	4	22	9	39	
Jefferson.....	0	0	1	16	3	30	5	38	0	93	0	0	0	15	3	34	6	26	84	
Madison, [Atkins].....	0	0	0	10	19	13	47	4	0	93	0	0	0	0	0	5	13	1	19	
Madison, [Cunningham].....	1	0	1	8	7	22	28	14	12	93	1	0	0	0	0	33	32	10	76	
Medina.....	1	1	0	8	0	24	20	24	0	87	2	0	0	3	7	24	33	16	85	
Oberlin.....	4	0	2	2	15	23	12	24	11	93	0	1	0	0	0	5	35	3	44	
Portsmouth.....	3	2	1	5	1	32	35	13	1	93										
Savannah.....	0	0	0	8	0	20	21	44	0	93	1	0	0	8	0	21	10	21	61	
Sidney.....	3	4	1	3	16	21	12	17	0	77	0	0	0	1	0	33	7	28	89	
Urbana.....	2	0	1	5	9	10	23	10	33	93	2	0	0	0	1	10	38	6	57	
Welchfield.....	3	0	3	10	13	15	39	10	0	93	0	0	0	0	0	0	3	1	4	
West Bedford.....	8	2	1	3	8	23	7	37	4	93	2	0	0	0	0	7	24	23	56	
MICHIGAN—																				
Battle Creek.....	6	0	5	6	12	15	22	21	6	93	1	0	0	0	1	9	50	10	71	
Cooper.....	3	0	1	0	1	2	62	3	21	93	0	0	2	2	1	3	30	0	38	
Copper Falls Mines.....	19	11	0	20	0	17	7	9	0	92										
Grand Rapids, [Currier].....	2	9	4	10	3	25	11	7	21	92	0	2	0	0	0	10	12	4	28	
Grand Rapids, [Streng].....	13	4	4	0	18	12	25	11	0	93	8	1	0	1	4	13	27	12	66	
Monroe.....	10	7	4	7	2	14	0	47	0	91	6	5	4	7	3	18	0	36	79	
Romeo.....	2	6	3	3	10	17	18	26	5	90	2	1	0	0	2	6	10	12	33	
INDIANA—																				
Cannelton.....	8	3	4	8	26	4	8	32	0	93	1	1	3	4	11	0	3	14	37	
Evansville.....	11	1	1	6	5	10	28	25	0	87	7	0	0	1	0	7	12	4	37	
Logansport.....	24	4	3	3	7	16	27	9	0	93										
Michigan City.....	19	10	1	5	6	19	6	24	3	93	3	7	5	18	6	3	0	0	42	
New Albany.....	11	10	1	5	5	18	2	11	0	63	3	2	0	4	5	12	2	7	35	
New Harmony.....	16	0	10	0	11	3	20	13	0	82	0	0	0	0	0	0	5	0	5	
Richmond.....	2	2	2	0	2	8	12	3	10	41										
ILLINOIS—																				
Albion.....	1	8	3	3	5	11	5	8	0	44	1	0	0	1	2	2	1	2	0	
Attness.....	1	19	2	22	1	17	6	22	0	90	0	0	0	2	0	13	17	28	60	
Augusta.....	3	7	11	11	4	13	22	17	5	93	1	1	1	4	2	4	12	12	37	
Batavia.....	0	12	0	6	0	32	5	14	0	69										
Brighton.....	3	10	1	1	13	20	17	25	0	90	0	1	1	1	0	11	7	10	37	
Chicago.....	7	6	8	6	4	20	22	15	5	93	2	0	0	1	1	19	14	13	50	
Edgington.....	3	10	5	16	6	14	10	29	0	93	8	3	7	14	4	6	4	17	63	
Fremont Centre.....	3	5	7	11	9	19	29	10	0	93										
Manchester.....	8	5	1	1	21	8	30	18	1	93	4	0	2	0	4	8	15	11	44	
Marengo.....	1	2	9	11	7	41	15	4	0	90	0	0	0	0	1	0	0	0	1	
Ottawa.....	8	8	8	4	14	9	24	12	0	91	0	0	0	0	0	1	4	2	7	
Pekin.....	8	2	0	7	21	11	10	16	3	84										
Peoria.....	3	7	15	3	17	8	38	2	0	93	2	0	0	0	0	2	13	2	19	
Riley.....	8	0	1	5	20	4	24	14	14	90										
Warsaw.....	4	11	3	29	2	6	5	31	2	93	0	0	0	0	0	5	17	21	43	
West Salem.....	5	7	6	10	14	2	6	28	15	93	0	0	0	0	3	10	33	8	54	
Winnebago.....	5	6	7	12	11	17	16	19	0	93	0	2	0	0	0	0	0	0	2	



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MISSOURI—																			
Cape Girardeau.....	14	7	0	24	28	6	7	36	2	124	—	—	—	—	—	—	—	—	—
Palmyra.....	1	8	8	18	0	11	17	31	25	119	1	2	3	3	5	21	27	28	90
St. Louis.....	2	11	11	13	10	9	26	11	0	93	—	—	—	—	—	—	—	—	—
WISCONSIN—																			
Appleton.....	4	7	1	3	6	39	10	22	1	93	4	6	0	5	6	34	11	26	92
Beloit.....	22	1	3	3	29	15	11	9	0	93	3	0	1	0	0	0	2	1	7
Kenosha.....	6	2	7	3	3	15	17	9	28	90	—	—	—	—	—	—	—	—	—
Madison, [Schue].....	5	2	0	5	14	19	18	17	13	93	—	—	—	—	—	—	—	—	—
Madison, [Sterling].....	6	2	0	2	15	21	17	14	14	91	—	—	—	—	—	—	—	—	—
Manitowoc.....	10	4	7	7	8	14	24	19	0	93	1	0	0	0	0	2	1	7	11
Milwaukee, [Pomeroy].....	3	4	3	4	3	8	6	0	0	31	—	—	—	—	—	—	—	—	—
Milwaukee, [Winkler].....	0	9	9	9	1	25	12	28	0	93	—	—	—	—	—	—	—	—	—
New London.....	17	0	0	0	10	23	26	17	0	93	13	0	0	0	5	11	14	20	63
Norway.....	5	4	5	2	19	14	27	17	0	93	1	2	0	1	3	7	22	3	49
Platteville.....	0	5	6	20	0	13	10	39	0	93	0	0	2	17	0	13	6	23	61
Prescott.....	12	0	0	14	31	6	1	10	19	93	6	4	0	2	1	0	0	4	17
Racine.....	0	2	0	13	9	8	40	10	0	82	2	0	2	1	0	0	6	5	16
Waukesha.....	3	8	2	8	4	32	6	21	0	84	—	—	—	—	—	—	—	—	—
IOWA—																			
Bellevue.....	9	3	3	19	8	10	19	22	0	93	1	1	0	0	1	1	5	7	16
Border Plains.....	15	3	1	15	18	7	6	28	0	93	0	0	0	2	1	7	7	13	30
Fort Madison.....	3	17	1	15	3	19	6	29	0	93	0	0	0	0	2	14	28	16	60
Franklin.....	3	2	2	15	14	8	11	29	0	93	—	—	—	—	—	—	—	—	—
Maquoketa.....	9	9	7	5	5	7	14	2	8	66	1	0	13	1	2	0	0	1	18
Muscatine.....	0	21	2	25	0	13	0	32	0	93	0	0	0	0	0	12	0	7	19
Pleasant Plain.....	2	2	19	16	5	7	8	31	0	90	2	0	0	2	0	1	16	10	31
MINNESOTA—																			
Hazlewood.....	2	1	2	9	24	6	6	43	0	93	1	1	4	1	7	1	4	5	24
Lake Winnibigoshish.....	12	4	1	11	16	11	5	7	10	77	2	0	0	1	1	0	6	6	16
Princeton.....	18	3	8	5	14	5	11	6	23	93	7	1	1	1	4	0	7	1	22
KANSAS—																			
Council City.....	6	6	7	10	15	4	2	28	11	89	—	—	—	—	—	—	—	—	—
Manhattan.....	2	5	8	3	0	5	2	3	3	31	—	—	—	—	—	—	—	—	—
UTAH—																			
Great Salt Lake City.....	20	5	19	16	30	5	11	18	0	124	14	0	1	0	6	0	10	1	32
CALIFORNIA—																			
Sacramento.....	12	3	7	11	15	22	2	21	0	93	2	1	0	7	4	27	1	11	53
San Francisco.....	11	0	0	0	10	1	20	2	49	93	9	3	0	0	9	11	21	8	61
WEST INDIES—																			
St. George's, Bermuda....	1	3	0	2	2	15	2	6	0	31	—	—	—	—	—	—	—	—	—
AZORES—																			
Horta, Fayal.....	7	24	1	0	2	38	4	9	7	92	4	21	1	0	2	36	3	8	75

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal	■	20	0	4	14	8	21	14	0	90	9	14	0	4	12	8	17	12	76
St. John's	6	18	0	0	9	12	13	32	0	90	—	—	—	—	—	—	—	—	—
St. Martin	0	28	0	19	6	20	4	13	0	90	—	—	—	—	—	—	—	—	—
Stanbridge	6	13	10	10	16	5	12	8	10	90	—	—	—	—	—	—	—	—	—
Toronto	6	10	3	9	3	19	3	34	■	99	—	—	—	—	—	—	—	—	—
Wolfville	2	3	12	9	6	13	22	16	6	89	5	1	5	9	5	■	22	■	62
MAINE—																			
Cornish, [Guptill]	7	20	4	8	6	15	13	17	0	90	1	0	0	0	1	0	0	0	2
Cornish, [West]	4	22	5	7	7	15	17	13	0	90	1	3	0	1	1	4	9	4	23
Gardiner	2	21	7	8	5	13	6	11	17	90	0	10	0	3	3	13	2	5	36
Monson	8	13	10	6	16	5	10	22	0	90	—	—	—	—	—	—	—	—	—
Perry	1	10	5	17	12	21	3	21	0	90	6	1	3	12	3	10	3	4	42
Portland	6	16	8	8	17	8	15	12	■	90	3	2	1	1	7	5	10	4	33
Steuben	0	26	4	3	0	32	7	15	3	90	2	6	3	0	0	20	4	8	43
NEW HAMPSHIRE—																			
Concord	3	17	6	14	4	14	0	32	■	90	—	—	—	—	—	—	—	—	—
Francetown, [Bixby]	0	8	7	8	0	15	10	42	0	90	2	8	■	7	0	12	20	34	89
Manchester	2	12	4	6	14	6	9	19	0	72	2	10	3	7	6	■	11	12	60
North Barnstead	1	27	0	2	1	11	9	38	0	89	4	12	4	1	2	12	13	4	52
West Enfield	6	7	3	5	15	13	5	36	0	90	7	4	5	4	3	8	10	22	63
VERMONT—																			
Brandon	29	4	2	5	24	6	10	7	3	90	13	2	1	7	3	7	5	14	52
Craftsbury	5	13	11	4	20	16	8	12	1	90	3	7	4	2	5	11	18	■	59
Norwich	8	■	2	1	11	13	7	12	1	63	7	12	13	12	2	■	5	2	53
Rupert	0	8	0	■	■	0	0	0	0	08	15	27	■	13	15	9	■	3	82
St. Johnsbury	7	0	■	■	12	17	1	38	0	87	—	—	—	—	—	—	—	—	—
Shelburn	42	■	1	■	41	■	0	3	0	87	1	7	5	19	0	■	0	■	32
MASSACHUSETTS—																			
Amherst	4	15	5	10	■	11	6	27	■	84	0	4	2	1	0	14	3	■	33
Bridgewater	5	18	7	6	5	19	10	20	0	■	5	■	7	10	0	7	3	1	42
Cambridge	2	15	9	4	8	25	11	10	6	90	—	—	—	—	—	—	—	—	—
Florida	■	19	2	3	0	21	10	35	■	90	0	20	1	2	0	21	10	22	76
Lawrence	■	13	2	13	1	28	8	25	■	90	0	1	■	1	2	7	3	0	14
Mendon	0	17	4	1	3	33	0	32	■	90	1	17	4	1	4	28	1	15	71
Nantucket	3	14	8	9	6	24	■	15	4	89	—	—	—	—	—	—	—	—	—
Newburyport	5	16	4	2	15	6	23	4	0	75	—	—	—	—	—	—	—	—	—
New Bedford	1	19	5	7	3	24	11	20	■	90	2	2	0	0	0	5	8	3	20
Richmond	0	26	0	14	0	13	0	37	■	90	1	21	0	11	0	16	1	32	82
Southwick	4	15	3	3	9	6	■	19	6	68	1	3	0	1	6	7	2	4	24
Westfield	8	10	5	12	■	■	18	17	0	85	0	0	0	0	0	1	0	0	1
Weymouth	0	5	4	■	0	18	3	24	0	60	—	—	—	—	—	—	—	—	—
Williamstown	4	7	3	13	16	10	■	27	0	89	1	0	0	0	3	1	3	2	10
Worcester	8	9	10	0	■	10	29	16	■	88	—	—	—	—	—	—	—	—	—
RHODE ISLAND—																			
Providence	2	19	4	1	■	19	2	33	■	89	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia	0	19	0	2	1	15	3	40	10	90	0	19	2	1	2	7	2	31	64
New London	6	12	4	9	5	33	5	16	0	90	—	—	—	—	—	—	—	—	—
Norwich	1	16	1	8	7	16	7	20	14	90	—	—	—	—	—	—	—	—	—
Pomfret	2	20	1	4	13	14	3	32	0	89	1	17	0	3	7	8	1	17	54
Saybrook	2	7	2	6	6	15	12	7	8	65	0	2	0	■	2	5	6	4	19
Wallingford	1	15	1	3	11	16	7	22	11	87	2	9	3	0	2	14	16	6	52
NEW YORK—																			
Angelica	0	7	0	6	2	45	11	19	0	90	0	0	0	0	0	23	13	22	58
Baldwinsville	10	3	10	2	1	18	10	35	0	89	2	2	5	■	1	0	32	29	71
Beverly	10	15	0	14	4	23	2	18	2	88	0	11	2	10	4	14	10	11	62
Blackwell's Island	13	10	5	5	13	11	15	18	0	90	4	2	2	1	3	4	5	7	28
Cazenovia	2	2	2	7	11	8	13	42	2	89	2	0	1	4	2	11	19	36	75
Clinton	■	2	3	■	13	16	23	21	0	90	6	1	2	1	2	7	17	9	45
Eden	5	5	10	2	29	15	9	2	0	77	5	0	1	0	3	10	15	6	40
Fishkill Landing	4	19	2	17	9	12	11	16	0	90	3	0	0	1	3	4	21	0	32
Flatbush	4	9	7	5	15	12	21	17	0	90	3	4	1	1	1	10	11	8	39



## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
New York—Continued.																			
McGrawville.....	0	0	3	21	0	10	33	15	8	90									
Morrisania.....	9	10	10	10	12	6	11	10	0	78									
New York city.....	0	12	6	17	1	13	19	22	0	90	5	6	2	5	1	18	24	3	64
Nichols.....	11	0	0	0	11	1	3	2	2	30									
Ogdensburg.....	5	9	0	0	4	6	1	5	0	30									
Oswego.....	2	15	5	9	9	6	40	2	2	90									
Ovid.....	4	2	4	8	10	20	17	25	0	90	4	1	1	0	8	13	23	21	71
Penn Yan.....	11	8	0	2	10	18	32	9	0	90									
Plainville.....	3	3	4	1	5	5	60	2	0	83	0	1	57	0	1	1	7	0	67
Rochester, [Harkness].....	8	7	3	1	6	5	25	5	30	90									
Rochester, [Palmer].....	10	5	2	6	8	19	29	11	0	90	7	5	1	2	4	10	30	14	73
Sag Harbor.....	2	14	9	1	21	8	22	12	1	90	2	6	2	1	5	11	5	6	38
Saratoga.....	2	10	0	3	5	16	2	52	0	90	3	11	1	3	4	17	3	48	90
Sennett.....	21	4	1	4	20	8	8	16	0	82	5	0	2	0	1	3	11	4	26
Spencertown.....	14	13	3	4	8	10	9	29	0	90	20	9	8	3	6	9	9	13	77
Townsendville.....	4	5	1	15	2	14	17	26	6	90	2	1	0	0	1	10	20	9	43
Utica.....	7	0	4	8	9	2	3	17	39	89									
Wampsville.....	0	1	3	5	14	9	54	4	0	90	0	0	3	3	12	10	43	5	76
Waterford.....	14	11	0	0	23	12	22	1	7	90									
Wellsville.....	0	0	33	1	0	0	56	0	0	90	1	0	0	1	1	3	2	0	8
New Jersey—																			
Bloomfield.....	0	18	0	2	1	29	1	35	0	86									
Burlington.....	10	20	6	2	3	12	14	20	0	87	4	4	1	0	3	9	13	12	46
Lambertville.....	1	11	1	10	11	7	5	35	0	81									
Newark.....	1	12	4	8	3	7	11	16	1	63									
Sergeantsville.....	9	10	10	2	3	8	18	30	0	90	10	10	0	0	2	11	10	15	64
Pennsylvania—																			
Bedford.....	1	3	0	7	0	7	2	33	0	53	1	3	0	3	0	7	2	24	40
Berwick.....	3	1	14	7	3	6	22	9	2	67									
Cannonsburg.....	0	3	4	1	1	5	58	17	1	90									
Carlisle.....	1	3	4	10	3	14	11	20	19	85	1	1	4	3	3	12	8	15	47
Chromedale.....	8	12	5	12	4	0	30	13	90	0	5	2	1	0	12	10	18	48	
Easton.....	5	5	3	7	10	1	22	23	14	90	2	3	2	1	3	10	19	16	56
Fleming.....	1	4	9	12	0	2	16	46	0	90	3	1	4	0	2	2	39	13	63
Gettysburg.....	12	4	3	3	19	8	19	12	6	86	1	5	1	4	3	14	24	11	63
Harrisburg, [Heisely].....	10	3	2	17	8	0	1	48	0	89	3	0	0	5	3	0	0	22	33
Harrisburg, [Hickok].....	13	4	10	0	14	2	31	9	0	90	0	0	0	0	3	1	1	0	5
Lewisburg.....	9	1	3	6	13	4	20	17	16	89	4	0	2	3	4	7	13	7	40
Meadville.....	3	0	2	2	11	9	7	22	34	90	2	0	2	2	1	9	15	10	41
Morrisville.....	4	17	0	6	9	20	9	14	11	90	2	11	0	2	5	12	17	10	59
Murrysville.....	0	3	11	1	1	28	12	15	19	90	0	3	0	1	0	18	16	18	56
Nazareth.....	15	8	2	4	10	11	17	12	3	82	5	1	1	0	8	7	11	8	41
Norristown.....	1	4	5	6	1	8	36	17	0	78	0	6	3	0	2	4	29	20	64
North Whitehall.....	10	0	3	4	0	9	7	14	37	90	7	1	1	1	3	8	10	12	41
Philadelphia.....	4	9	2	10	4	24	16	21	0	90	0	0	0	0	1	5	3	4	13
Pocopsen.....	13	6	4	3	6	21	31	8	0	90	2	2	1	1	0	6	10	2	24
Shamokin.....	0	1	10	5	5	3	55	11	0	90	1	0	1	0	0	7	52	5	66
Tarentum.....	6	1	5	1	4	18	20	7	28	90	3	1	0	1	3	6	36	9	64
Delaware—																			
Newark, [Craven].....	1	12	1	6	0	4	5	31	0	60	0	7	0	3	0	1	5	17	33
Maryland—																			
Annapolis.....	18	14	0	8	19	14	4	12	1	90	11	3	1	1	12	17	4	0	49
Bladensburg.....	5	1	5	9	2	8	7	19	0	56									
Frederick.....	0	0	0	1	10	15	18	30	10	90	1	0	0	1	4	2	40	3	51
Ridge.....	11	8	1	19	13	0	2	22	0	82									
Sykesville.....	1	1	2	19	6	15	29	17	0	90	0	2	3	8	2	9	45	3	72
District of Columbia—																			
Washington, [Smith, In.].....	0	15	1	14	0	12	6	41	1	90									
Virginia—																			
Alexandria.....	14	14	1	1	8	10	7	35	0	90									
Ashland.....	0	0	0	0	4	25	1	24	36	90	3	0	0	0	0	7	21	7	38
Berryville.....	10	3	9	12	8	2	25	20	0	89	2	2	0	3	3	9	13	6	38

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Capon Bridge.....	1	1	3	1	4	4	31	13	22	80	2	1	1	3	2	1	35	7	52	
Crack Whip.....	26	5	2	8	13	3	3	16	14	90	0	0	0	0	1	3	3	4	11	
Crichton's Store.....	20	5	2	4	8	35	10	11	11	90	0	0	0	0	1	3	3	4	11	
Kanawha.....	0	0	0	19	10	6	20	32	3	90	0	6	36	13	2	1	11	1	59	
Lewisburg.....	1	0	0	0	0	2	1	0	0	4	3	11	11	11	3	1	24	6	37	
Montross.....	7	8	7	7	7	7	14	14	19	90	11	6	13	11	1	11	11	1	30	
Mossy Creek.....	5	20	0	6	2	34	1	22	11	90	6	7	11	0	11	10	3	22	48	
Mustapha.....	9	0	0	11	12	11	4	3	0	30	0	0	0	0	0	0	0	0	0	
Poplar Grove.....	0	0	12	2	0	16	22	36	90	90	2	1	0	0	1	14	30	18	115	
Portsmouth.....	14	14	7	15	5	9	5	21	0	90	0	0	0	0	0	0	0	0	0	
Rose Hill.....	10	18	8	6	12	7	1	10	12	84	0	0	0	0	0	0	0	0	0	
Rougement.....	10	12	11	11	28	5	17	9	11	89	6	2	1	0	6	7	28	8	58	
Smithfield.....	4	14	11	6	16	14	13	10	11	88	4	6	11	1	1	5	11	11	39	
Winchester.....	0	0	0	5	4	6	19	10	16	90	11	0	0	0	1	2	6	2	11	
Wirt Court-House.....	0	4	0	6	2	15	11	29	11	90	0	3	0	1	1	62	1	11	79	
NORTH CAROLINA—																				
Chapel Hill.....	8	14	4	4	4	17	25	14	0	110	0	2	0	0	1	24	11	5	46	
Goldsborough.....	11	11	7	1	16	11	25	11	1	82	2	11	0	11	2	0	11	0	4	
Murfreesborough.....	1	11	5	16	4	14	17	9	13	90	2	6	1	3	1	5	28	2	48	
SOUTH CAROLINA—																				
All Saints.....	11	9	5	8	18	20	12	7	11	90	5	1	0	3	11	19	24	3	55	
Camden.....	5	17	2	5	0	22	11	26	2	90	3	2	0	3	11	11	23	9	51	
Charleston, [Johnson].....	0	5	3	3	2	8	1	8	0	30	0	0	0	0	0	0	0	0	0	
Charleston, [Dawson].....	0	10	11	9	1	23	11	11	0	60	0	0	0	0	0	0	0	0	0	
GEORGIA—																				
Athens.....	2	7	4	4	4	5	16	19	24	85	1	0	11	0	0	0	11	0	1	
Augusta.....	14	4	6	12	6	9	20	4	11	75	0	0	0	0	1	0	0	0	1	
Factory Mills.....	3	4	10	11	7	11	21	20	0	87	0	0	0	0	1	0	0	0	1	
Savannah.....	11	14	6	9	11	17	7	20	0	90	0	0	0	1	0	0	2	0	3	
Sparta.....	0	11	4	14	11	19	11	31	0	90	11	2	0	2	1	15	12	11	43	
The Rock.....	4	3	2	23	3	6	18	31	11	90	11	0	0	0	0	2	0	11	2	
Whitemarsh Island.....	2	20	3	6	13	10	8	19	9	90	1	2	0	7	11	8	15	10	45	
Zebulon.....	11	11	18	7	2	5	36	11	0	90	2	11	1	2	6	6	9	2	28	
FLORIDA—																				
Alligator.....	10	7	11	10	5	10	16	18	3	90	8	2	9	2	8	11	9	3	47	
Atsena.....	13	13	8	5	5	19	12	11	4	90	1	5	3	4	5	15	4	5	42	
Belair.....	19	11	17	16	2	3	5	6	8	87	2	11	2	2	0	15	16	6	43	
Gainesville.....	9	9	8	11	9	20	7	23	11	89	0	0	0	0	0	0	0	0	0	
Jacksonville.....	4	23	1	11	9	22	1	26	11	90	11	12	1	1	0	26	6	3	49	
St. Augustine.....	7	34	7	4	1	4	1	32	11	90	1	24	3	2	1	5	1	13	55	
Salt Ponds.....	6	8	14	10	1	1	1	16	3	60	0	0	0	0	0	0	0	0	0	
ALABAMA—																				
Auburn.....	12	5	1	19	10	13	10	19	0	89	6	3	1	6	9	17	4	3	49	
Carlowville.....	26	11	5	2	3	10	16	17	11	90	3	1	0	1	6	2	12	1	26	
Greene Springs.....	0	26	0	0	0	35	11	14	0	75	0	0	1	2	0	14	0	2	19	
Greensborough.....	9	0	1	23	11	5	3	38	11	90	2	1	0	5	1	3	26	6	44	
MISSISSIPPI—																				
Columbus.....	21	3	5	12	13	7	2	27	0	90	4	1	11	3	1	9	14	16	48	
Port Gibson.....	26	6	4	13	6	3	7	4	18	87	0	0	0	0	0	0	0	0	0	
LOUISIANA—																				
Black River.....	36	4	0	12	28	3	1	6	0	90	2	0	11	1	8	18	8	2	39	
New Orleans, [Barton].....	15	15	12	10	15	4	6	9	0	86	6	0	0	1	5	10	7	2	31	
Trinity.....	26	4	11	2	32	5	8	1	1	90	2	0	11	1	11	14	7	1	36	
TEXAS—																				
Austin.....	41	0	11	14	22	4	0	11	0	90	5	2	0	7	16	12	7	19	68	
New Braunfels.....	33	1	21	4	14	11	3	3	10	89	0	0	0	1	5	1	7	11	14	
Washington.....	40	0	11	1	35	3	1	3	5	88	0	10	6	9	2	6	0	1	34	
TENNESSEE—																				
Glenwood.....	12	9	3	8	10	5	8	20	15	90	4	1	0	0	2	15	20	21	63	
KENTUCKY—																				
Danville.....	5	11	5	3	5	10	20	36	0	90	4	2	0	0	0	12	17	20	55	
Millersburg.....	8	0	1	4	10	1	12	14	34	84	0	11	0	0	0	1	22	3	26	



## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
KENTUCKY—Continued.																				
Paris .....	1	12	0	7	5	17	23	22	0	88	5	0	2	0	4	3	35	0	49	
Springdale .....	2	12	9	3	6	0	15	22	12	90										
OHIO—																				
Cincinnati, [Harper] .....	4	2	7	0	1	23	37	16	0	90	1	0	0	0	0	0	0	0	1	
Cincinnati, [Hurt] .....	5	0	2	2	5	11	41	18	5	90	1	0	0	0	3	4	28	13	49	
Cleveland .....	14	4	4	8	15	17	9	15	1	87	8	0	0	0	3	6	13	4	34	
Edinburg .....	1	30	23	29	0	5	0	2	0	90	0	1	0	0	0	21	27	17	66	
Farmers' College .....	4	4	0	7	4	7	15	21	24	86	4	0	1	0	2	8	15	16	46	
Hillsborough .....	0	14	1	14	3	21	2	35	0	90	1	6	0	0	0	12	2	15	36	
Hiram .....	10	2	5	4	20	15	16	13	5	90	2	0	1	0	4	4	22	5	38	
Jefferson .....	2	7	0	7	0	16	16	42	0	90	2	7	0	5	0	17	16	29	76	
Madison, [Atkins] .....	1	6	2	4	11	10	26	11	1	72	0	0	0	0	0	1	2	1	4	
Madison, [Cunningham] .....	1	9	2	3	8	18	19	17	13	90	4	6	1	0	1	30	20	13	75	
Medina .....	5	4	2	3	3	19	25	26	0	87	2	0	0	5	0	14	38	23	82	
Oberlin .....	7	6	2	4	10	19	13	20	9	90	2	0	2	0	1	4	32	5	46	
Portsmouth .....	0	4	1	8	14	31	22	5	0	89										
Savannah .....	7	0	0	4	0	18	35	26	0	90	5	0	0	4	0	19	26	20	74	
Sidney .....	1	3	1	4	5	30	14	15	1	74	0	4	0	2	1	29	16	17	69	
Urbana .....	3	3	2	14	6	13	12	8	29	90	8	0	0	1	4	10	33	15	71	
Welchfield .....	5	5	2	8	9	21	22	18	0	90	0	0	0	0	0	1	1	0	■	
MICHIGAN—																				
Battle Creek .....	9	4	8	10	10	0	29	6	8	90	5	0	0	2	1	8	45	13	74	
Cooper .....	2	1	0	0	0	0	65	0	22	90	0	0	1	0	0	3	52	0	56	
Copper Falls Mines .....	15	26	2	16	5	11	8	5	1	89										
Grand Rapids, [Streng] .....	14	9	9	8	■	3	20	18	0	90	12	4	5	0	5	10	34	6	76	
Grand Rapids, [Currier] .....	3	20	1	6	1	19	13	10	17	90	1	1	0	0	■	5	7	1	15	
Monroe .....	4	12	20	22	2	13	0	16	0	89	3	20	15	12	2	11	0	25	88	
INDIANA—																				
Cannelton .....	5	1	7	12	6	5	7	44	0	90	4	0	3	3	2	2	8	22	38	
Evansville .....	20	6	7	3	7	5	16	23	0	87	7	0	1	0	0	4	10	16	38	
Logansport .....	19	4	1	0	5	13	22	17	0	90										
Michigan City .....	19	11	3	10	4	9	3	29	2	90	14	7	4	8	3	4	2	20	62	
New Albany .....	0	7	0	9	6	16	7	36	0	90	6	1	0	8	5	11	5	21	57	
New Harmony .....	8	1	8	12	7	2	23	16	0	77	1	0	0	0	0	0	4	0	5	
Richmond .....	0	3	6	8	4	17	19	12	15	84	0	0	0	0	0	1	0	0	1	
ILLINOIS—																				
Albion .....	5	5	2	7	0	2	4	24	0	49	0	0	0	0	0	0	0	7	7	
Athens .....	0	6	1	26	1	7	6	32	0	79	1	4	0	5	1	12	11	39	73	
Augusta .....	5	8	3	9	8	12	14	25	6	90	3	■	0	1	5	6	12	15	44	
Batavia .....	0	22	0	6	0	28	2	32	0	90										
Brighton .....	1	10	4	21	14	8	14	18	0	90	0	0	3	3	6	9	4	4	29	
Chicago .....	11	7	13	9	5	12	23	8	2	90	7	4	3	0	2	16	15	11	58	
Edgington .....	3	13	0	15	14	6	4	35	0	90	3	8	0	10	10	7	5	32	75	
Fremont Centre .....	7	8	9	15	4	7	31	9	0	90										
Manchester .....	12	9	6	4	14	7	12	24	2	90	11	7	1	4	8	5	12	17	65	
Marengo .....	4	5	13	10	8	30	15	5	0	90										
Ottawa .....	11	4	5	10	8	6	29	7	0	80	3	0	0	0	0	2	0	1	6	
Pekin .....	14	4	5	10	18	2	9	25	3	90	6	1	0	5	5	6	5	16	44	
Peoria .....	14	1	11	3	23	4	30	4	0	90	4	1	0	0	1	1	9	3	19	
Riley .....	5	6	■	6	7	4	25	18	8	87										
Upper Alton .....	1	0	1	0	0	0	0	0	0	2	3	5	7	11	4	17	9	32	88	
Warsaw .....	8	10	1	23	5	5	2	33	0	90	0	5	0	1	2	12	11	23	54	
West Salem .....	9	5	9	5	9	1	8	30	14	90	0	0	0	0	2	5	39	3	49	
West Urbana .....	2	22	0	20	0	20	3	23	0	90	0	0	0	0	0	2	3	6	11	
Winnebago .....	6	15	3	18	2	14	10	22	0	90	1	5	0	0	0	4	6	14	30	
MISSOURI—																				
Cape Girardeau .....	8	7	4	20	13	13	9	44	2	120	6	0	0	4	3	13	23	39	88	
Palmyra .....	0	16	0	17	1	6	20	41	17	118	1	6	1	7	5	13	29	25	83	
St. Louis .....	4	7	10	12	7	5	32	13	0	90										
WISCONSIN—																				
Appleton .....	2	29	0	7	9	17	10	16	0	90	2	29	0	6	9	17	10	17	90	
Beloit .....	31	4	0	1	26	13	7	8	0	90	4	0	0	0	2	0	7	0	13	

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
WISCONSIN—Continued.																			
Janesville.....	13	6	2	23	3	9	26	8	0	90									
Kenosha.....	4	12	4	3	10	11	13	4	26	87									
Madison, [Schue].....	0	8	9	9	0	0	19	19	0	87									
Madison, [Sterling].....	15	2	2	3	15	9	12	23	7	88	0	1	0	1	0	0	0	0	2
Manitowoc.....	18	6	4	12	8	13	10	19	0	90	4	1	1	0	2	5	7	10	31
Milwaukee, [Pomeroy].....	11	0	0	22	1	11	13	15	0	90									
Milwaukee, [Winkler].....	9	18	10	19	1	7	8	18	0	90									
New London.....	25	3	1	4	6	23	17	11	0	90	19	0	0	3	0	5	19	18	73
Platteville.....	15	11	4	12	6	3	13	26	0	90	8	5	4	5	0	5	18	20	65
Racine.....	12	9	7	12	15	0	10	4	0	78	7	2	2	0	5	1	1	2	20
Waukesha.....	4	27	5	17	11	18	9	8	0	89	1	3	4	5	2	0	5	7	33
IOWA—																			
Bellevue.....	0	1	0	5	1	1	4	7	0	19	0	0	0	1	0	1	2	6	10
Border Plains.....	14	8	1	5	21	3	5	33	0	90	1	0	0	0	1	7	9	4	22
Fort Madison.....	7	8	0	13	5	20	5	32	0	90	8	3	1	3	3	4	34	11	67
Franklin.....	14	2	0	6	18	7	10	28	5	90									
Maquoketa.....	4	4	3	3	5	4	9	11	2	45									
Muscatine.....	0	9	0	15	4	23	5	28	0	90	0	5	0	1	0	16	0	16	38
Pleasant Plain.....	18	6	0	12	0	10	10	22	0	87	0	0	0	0	0	9	7	16	38
MINNESOTA—																			
Hazlewood.....	10	1	1	6	12	0	4	50	0	90	7	0	1	2	0	1	0	3	17
Princeton.....	13	5	4	1	8	2	21	25	11	90	5	0	5	1	0	2	10	0	34
KANSAS—																			
Council City.....	4	1	0	7	17	0	0	37	0	90									
UTAH—																			
Great Salt Lake City.....	44	5	10	5	19	2	12	23	0	120	11	1	3	0	2	0	0	0	23
CALIFORNIA—																			
Sacramento.....	20	1	5	0	19	25	2	9	0	90	5	2	1	4	1	6	0	0	19
San Francisco.....	4	0	0	0	3	1	40	0	42	90	1	0	0	0	0	0	29	0	47
WEST INDIES—																			
St. George's, Bermuda.....	3	1	2	5	1	0	1	8	0	30									
SOUTH AMERICA—																			
Catharina Sophia, Surinam.....	10	48	23	7	2	0	0	0	0	90	0	20	34	17	0	0	1	0	72
AZORES—																			
Horta, Fayal.....	0	15	14	14	4	5	12	5	15	90	3	14	12	0	3	5	10	10	66



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	5	23	0	2	7	19	31	6	0	93	3	20	0	1	8	19	23	7	81	
St. John's .....	12	7	7	1	8	27	21	10	0	93	---	---	---	---	---	---	---	---	---	
St. Martin .....	2	19	1	17	4	36	2	12	0	93	---	---	---	---	---	---	---	---	---	
Stanbridge .....	3	12	5	23	29	0	15	1	5	93	---	---	---	---	---	---	---	---	---	
Toronto .....	3	20	1	12	1	23	1	24	8	93	---	---	---	---	---	---	---	---	---	
Windsor .....	11	7	5	9	5	21	10	18	7	93	0	0	0	1	0	2	11	4	18	
Wolfville .....	3	12	13	1	2	14	22	5	21	93	1	4	3	4	0	12	32	2	58	
MAINE—																				
Cornish, [Guptill] .....	3	10	3	19	11	14	15	15	0	90	0	0	0	0	0	0	1	0	1	
Cornish, [West] .....	3	17	8	10	6	27	12	10	0	93	0	0	0	0	0	5	2	1	8	
Gardiner .....	2	15	1	23	3	17	0	13	15	93	0	1	0	2	1	17	1	7	29	
Monson .....	1	8	8	2	26	11	10	26	1	93	---	---	---	---	---	---	---	---	---	
Perry .....	4	7	0	15	25	15	2	25	0	93	1	6	0	5	20	9	6	3	50	
Portland .....	11	12	15	4	24	13	6	8	0	93	5	2	0	0	3	8	6	1	25	
Steuben .....	0	25	1	5	0	44	0	16	2	93	1	7	1	6	0	22	7	3	47	
NEW HAMPSHIRE—																				
Concord .....	1	17	0	17	4	24	2	26	2	93	0	0	0	0	0	1	0	0	4	
Francetown, [Bixby] .....	8	4	16	12	6	18	16	13	0	93	1	0	22	7	1	17	25	8	81	
Manchester .....	5	4	15	7	7	24	8	11	0	81	1	2	19	8	3	21	5	1	60	
North Barnstead .....	3	23	0	5	1	15	16	30	0	93	1	16	0	1	3	10	15	5	51	
Shelburne .....	0	0	30	0	0	0	50	0	4	84	0	7	9	7	0	0	15	20	58	
West Enfield .....	3	5	2	13	32	7	7	24	0	93	5	3	4	15	9	1	14	18	69	
VERMONT—																				
Brandon .....	20	0	2	5	29	4	9	16	8	93	6	5	3	0	4	12	12	9	51	
Craftsbury .....	4	11	4	8	31	8	14	11	2	93	4	5	1	3	10	11	24	3	61	
Rupert .....	0	0	6	7	0	0	0	0	0	13	11	45	4	0	5	3	0	9	77	
St. Johnsbury .....	0	3	3	6	22	12	10	36	0	92	---	---	---	---	---	---	---	---	---	
Shelburn .....	43	0	0	0	43	3	0	4	0	93	1	5	5	9	0	0	0	0	21	
MASSACHUSETTS—																				
Amherst .....	4	9	3	19	5	17	7	24	0	88	0	6	2	1	0	14	8	10	41	
Bridgewater .....	6	19	1	2	10	42	6	7	0	93	4	23	4	3	3	15	1	2	56	
Cambridge .....	1	20	8	1	1	29	9	7	17	93	---	---	---	---	---	---	---	---	---	
Florida .....	0	16	0	8	0	24	11	34	0	93	0	17	0	9	0	24	7	18	75	
Lawrence .....	0	17	4	17	3	36	0	16	0	93	0	0	0	0	0	2	1	0	3	
Mendon .....	0	24	1	2	6	57	0	3	0	93	0	24	0	2	6	40	0	2	74	
Nantucket .....	2	16	1	7	15	38	1	8	3	91	---	---	---	---	---	---	---	---	---	
New Bedford .....	6	12	1	5	17	35	0	10	1	93	0	0	0	0	0	4	4	1	11	
Newburyport .....	8	14	1	3	23	4	9	5	0	67	---	---	---	---	---	---	---	---	---	
Southwick .....	10	12	4	2	18	3	1	7	5	62	1	5	1	1	7	9	2	4	30	
Westfield .....	8	9	11	16	6	11	11	21	0	93	0	0	0	0	1	2	0	0	3	
Weymouth .....	2	7	4	8	2	23	1	15	0	62	---	---	---	---	---	---	---	---	---	
Worcester .....	10	3	15	2	9	18	18	15	0	90	---	---	---	---	---	---	---	---	---	
RHODE ISLAND—																				
Providence .....	4	19	0	3	23	23	1	13	0	86	---	---	---	---	---	---	---	---	---	
CONNECTICUT—																				
Columbia .....	1	13	3	2	14	13	3	19	25	93	1	15	0	2	9	8	3	18	56	
New London .....	5	17	6	14	9	29	5	8	0	93	---	---	---	---	---	---	---	---	---	
Norwich .....	3	20	1	11	5	8	3	12	28	91	---	---	---	---	---	---	---	---	---	
Pomfret .....	2	19	0	5	21	16	4	20	0	87	0	12	0	5	12	12	2	8	51	
Saybrook .....	7	15	3	10	7	16	2	5	4	69	0	0	1	2	1	8	5	1	24	
Wallingford .....	7	14	3	17	16	9	4	11	12	93	2	7	5	1	1	20	14	6	56	
NEW YORK—																				
Angelica .....	1	8	5	9	1	32	14	23	0	93	0	1	1	2	0	32	6	6	48	
Baldwinsville .....	1	7	11	1	4	8	48	24	0	84	1	7	3	0	0	7	32	0	59	
Beverly .....	3	4	0	9	1	13	1	11	0	42	1	4	0	4	1	15	2	4	31	
Blackwell's Island .....	10	19	10	12	20	12	6	4	0	93	2	3	3	6	5	3	3	2	27	
Cazenovia .....	1	6	8	7	7	22	6	34	2	93	1	5	3	6	9	17	19	10	70	
Clinton .....	4	4	4	11	11	19	13	27	0	93	3	2	3	2	12	10	12	7	51	
Eden .....	8	7	13	3	35	4	12	0	0	82	3	1	1	1	5	13	12	1	37	
Fishkill Landing .....	1	33	1	13	16	13	8	8	0	93	5	0	3	1	15	2	13	1	40	
Flatbush .....	8	13	7	7	31	11	11	5	0	93	5	3	2	1	2	9	13	5	40	
McGrawville .....	0	3	2	20	0	14	31	19	4	93	---	---	---	---	---	---	---	---	---	

## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Morrisania	0	0	4	34	27	24	4	0	0	93										
New York city	2	16	6	19	2	12	26	10	0	93	2	7	1	8	3	23	25	4	73	
Nichols	19	0	0	1	10	0	0	0	1	31										
Ogdensburg	0	10	0	0	5	0	0	0	0	33										
Oswego	1	11	12	10	14	10	28	0	7	92										
Ovid	7	5	2	13	12	19	27	8	0	93	0	5	1	1	5	27	25	8	72	
Penn Yan	6	14	3	1	10	25	30	4	0	93										
Plainville	2	2	13	8	9	5	42	4	0	85	1	3	34	0	1	4	7	0	53	
Rochester, [Harkness]	4	9	12	0	16	4	23	3	22	93										
Rochester, [Palmer]	12	0	3	4	14	25	16	10	0	93	5	0	2	0	4	16	17	14	64	
Sag Harbor	2	13	5	6	33	0	10	6	2	86	2	4	1	0	5	9	5	2	28	
Saratoga	3	15	2	7	7	43	9	7	0	93	4	15	1	8	0	42	5	0	93	
Spencertown	16	10	2	7	15	19	10	14	0	93	0	4	3	2	5	16	21	23	83	
Utica	17	22	2	0	1	0	2	1	35	89										
Wampsville	0	3	17	3	22	1	44	3	0	93	0	5	15	3	16	2	32	1	74	
Waterford	28	0	0	0	24	26	12	0	3	93										
Wellsville	0	0	41	0	0	0	49	2	1	93	1	0	0	0	3	0	2	0	8	
NEW JERSEY—																				
Bloomfield	2	11	0	15	1	32	7	25	0	93										
Burlington	6	13	8	3	12	21	20	7	1	91	6	6	1	2	8	15	0	7	54	
Lambertville	2	13	1	12	14	22	3	22	0	89										
Newark	3	8	4	12	4	17	0	12	0	62										
Sergeantsville	5	4	8	3	5	12	42	14	0	93	4	6	8	0	3	7	12	0	49	
PENNSYLVANIA—																				
Bedford	2	2	0	20	0	24	4	26	0	78	3	2	0	14	0	17	0	18	57	
Berwick	0	4	35	9	5	5	32	3	0	93										
Cannonsburg	0	4	22	1	0	8	48	4	2	92										
Carlisle	0	10	2	7	4	29	13	8	22	86	0	10	1	5	3	12	7	5	43	
Chromedale	10	21	3	13	10	6	7	13	10	93	2	4	1	0	0	18	13	10	51	
Easton	6	9	2	12	15	6	15	13	15	93	4	4	1	4	6	14	16	0	55	
Fleming	1	4	12	12	4	16	11	31	0	91	5	0	9	2	2	7	28	11	64	
Gettysburg	2	5	7	0	23	18	20	4	14	93	1	3	4	2	11	13	18	0	52	
Harrisburg, [Heisely]	9	4	8	9	11	6	39	16	0	93	2	0	1	1	6	5	18	5	38	
Harrisburg, [Hickok]	17	6	13	2	14	7	24	10	0	93	0	0	0	0	0	0	2	0	2	
Lewisburg	10	10	1	11	16	7	8	11	18	92	5	1	0	2	4	12	13	3	40	
Meadville	1	2	2	2	15	6	9	14	39	90	4	0	2	4	5	18	15	11	59	
Morrisville	5	16	5	5	14	18	10	10	10	93	2	11	1	4	4	12	18	8	60	
Murrysville	0	8	9	2	2	33	11	8	16	92	5	2	0	0	5	38	5	13	68	
Nazareth	10	15	9	6	14	13	10	11	1	82	3	1	0	1	4	2	3	2	16	
Norristown	1	4	3	8	12	11	39	9	0	78	0	3	8	1	4	12	27	8	63	
North Whitehall	9	8	8	4	10	9	0	7	32	93	7	6	4	1	5	9	6	3	41	
Philadelphia	1	16	3	7	8	36	4	18	0	93	0	2	0	0	2	9	3	4	20	
Pocopson	7	0	6	4	8	38	8	7	0	87	3	4	1	0	3	18	11	3	43	
Shamokin	1	2	9	12	1	14	49	5	0	93	1	6	0	0	0	7	45	0	59	
Tarentum	6	4	5	1	7	19	9	10	32	93	5	3	1	1	4	16	33	11	74	
West Haverford	5	8	0	6	4	26	5	5	4	63	4	2	1	0	1	0	14	8	39	
DELAWARE—																				
Newark	5	16	4	13	3	17	0	23	0	87	3	11	5	7	4	10	5	12	57	
MARYLAND—																				
Annapolis	15	15	2	12	19	19	4	5	2	93	3	1	0	0	4	32	4	2	49	
Bladensburg	1	0	3	7	1	20	0	14	0	57										
Frederick	5	10	3	4	0	16	14	17	14	92	4	0	0	0	4	9	28	4	49	
Ridge	4	13	4	17	13	9	1	14	0	75										
Sykesville	4	3	7	20	11	19	17	12	0	93	0	1	5	5	2	15	39	8	75	
DISTRICT OF COLUMBIA—																				
Washington, [Smith Inst.]	2	13	1	24	3	23	4	19	4	93										
VIRGINIA—																				
Alexandria	7	15	2	13	27	10	6	13	0	93										
Berryville	7	2	4	10	16	20	21	5	2	87	7	3	3	0	3	18	12	5	51	
Crack Whip	7	1	20	22	16	2	8	8	9	93	2	0	0	0	7	4	15	0	30	
Crichton's Store	20	3	7	4	12	39	5	5	0	93	0	0	0	0	1	10	0	0	11	
Kanawha	0	3	1	22	20	13	14	17	3	93	2	17	24	4	6	3	1	2	59	



No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Lewisburg .....	0	0	0	0	0	0	1	0	0	1	1	1	4	2	6	9	21	3	4	
Montross .....	3	5	5	12	9	23	8	5	21	91	5	10	8	1	1	3	1	1	30	
Mossy Creek .....	8	28	3	1	2	29	7	15	0	93	2	13	1	0	1	10	5	20	52	
Poplar Grove .....	0	0	17	1	0	4	24	8	38	92	5	3	4	0	11	19	21	7	67	
Portsmouth .....	12	12	5	10	10	23	5	16	0	93										
Rose Hill .....	4	14	2	11	7	24	2	3	17	84										
Rougemont .....	4	2	18	0	28	2	26	6	2	88	3	0	6	0	0	4	34	4	57	
Sistersville .....	10	18	1	10	19	4	0	0	21	83	4	2	0	0	5	13	1	1	26	
Smithfield .....	4	7	10	7	21	13	3	0	0	71	1	0	2	1	6	7	16	9	42	
Winchester .....	2	0	0	12	3	8	17	3	48	93	1	0	0	0	2	0	4	1	8	
Wirt Court-House .....	1	5	0	9	3	40	0	17	18	93	1	4	3	11	3	50	1	4	77	
NORTH CAROLINA—																				
Chapel Hill .....	13	8	10	1	15	19	24	3	0	93	4	2	3	2	15	19	8	1	54	
Murfreesborough .....	2	14	5	8	5	27	5	11	15	92	0	5	2	1	2	14	26	3	53	
Warrenton .....	0	20	1	35	0	23	0	14	0	93	0	14	0	0	0	0	0	0	14	
SOUTH CAROLINA—																				
All Saints .....	4	11	9	7	23	30	8	1	0	93	3	6	3	1	19	17	13	4	66	
Camden .....	0	14	3	9	6	24	14	18	5	93	4	5	0	4	3	24	13	10	63	
Charleston, [Dawson] .....	0	9	8	11	6	25	3	5	0	62										
Charleston, [Johnson] .....	1	6	0	9	4	11	2	6	8	47										
GEORGIA—																				
Athens .....	1	6	6	8	1	16	5	26	19	88										
Augusta .....	13	5	6	16	14	5	16	5	0	80										
Factory Mills .....	2	9	23	11	5	6	20	12	0	88										
Savannah .....	4	5	11	13	24	21	5	10	0	93	1	0	0	0	0	2	4	0	7	
Sparta .....	4	14	2	16	8	28	7	14	0	93	3	3	1	4	9	21	7	6	55	
The Rock .....	3	7	6	21	4	12	15	25	0	93										
Whitemarsh Island .....	1	13	3	10	28	8	12	11	7	93	2	1	0	3	4	14	7	0	40	
Zebulon .....	3	8	13	15	2	12	33	7	0	93	5	3	0	3	9	9	7	6	42	
FLORIDA—																				
Alligator .....	8	3	12	11	9	6	22	8	14	93	3	0	1	0	4	7	6	1	17	
Atsena .....	9	13	9	2	5	11	18	13	2	82	0	2	3	3	4	11	6	8	37	
Belair .....	5	11	14	18	11	6	10	7	11	93	0	0	0	2	0	23	27	10	62	
Gainesville .....	3	3	27	14	9	15	13	9	0	93										
Jacksonville .....	2	28	2	12	4	25	2	17	1	93	0	9	0	2	1	41	0	0	53	
St. Augustine .....	3	43	9	14	0	8	5	11	0	93	1	20	5	16	0	7	9	7	65	
Salt Ponds .....	22	8	7	16	0	0	2	7	0	62										
Warrington .....	1	8	1	18	4	45	4	12	0	93	2	8	0	0	0	3	1	12	26	
ALABAMA—																				
Auburn .....	0	0	1	30	12	19	17	10	0	89	3	1	1	3	23	17	5	4	57	
Carlowville .....	9	4	3	10	28	19	7	13	0	93	0	0	0	1	2	7	7	0	17	
Greene Springs .....	0	21	0	2	0	54	2	4	0	83	0	0	0	3	0	17	0	0	20	
Greensborough .....	8	2	2	17	19	4	12	16	0	80	1	0	0	4	8	3	35	4	55	
MISSISSIPPI—																				
Columbus .....	11	3	5	4	18	18	18	16	0	93	7	1	0	0	7	16	17	8	56	
LOUISIANA—																				
Black River .....	21	6	4	9	39	6	0	8	0	93	7	0	0	0	11	18	6	12	54	
Trinity .....	18	1	6	12	43	6	0	7	0	93	5	0	0	2	9	9	12	8	45	
TEXAS—																				
Austin .....	16	4	4	26	34	0	0	9	0	93	12	2	0	16	23	5	15	30	103	
New Braunfels .....	13	1	46	5	11	1	2	3	11	93	0	1	0	0	6	5	6	1	19	
Union Hill .....	18	5	4	24	29	3	1	5	4	93	14	5	5	20	19	4	1	4	72	
Washington .....	66	0	0	0	23	1	1	0	0	91	5	9	3	11	6	4	1	0	39	
TENNESSEE—																				
Glenwood .....	8	14	1	8	21	10	4	11	16	93	7	3	0	0	1	27	28	3	74	
KENTUCKY—																				
Danville .....	17	13	5	3	7	21	12	13	0	91	6	5	2	2	0	25	12	0	61	
Millersburg .....	5	6	12	5	6	6	17	10	21	88	2	1	3	0	0	2	30	5	43	
Paris .....	10	15	0	6	8	23	13	16	0	91	3	1	5	0	11	4	14	0	38	
Springdale .....	9	12	3	1	16	19	5	10	18	93										





## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
WISCONSIN—Continued.																			
Madison, [Sterling] .....	21	7	4	9	26	4	8	9	4	93	1	0	2	3	2	0	1	0	9
Manitowoc .....	19	14	10	13	7	7	11	12	0	93	1	1	2	2	2	5	7	6	26
Milwaukee, [Pomeroy] .....	8	29	13	16	0	7	8	12	0	93									
Milwaukee, [Winkler] .....	12	29	14	15	1	7	9	6	0	93									
New London .....	22	2	12	6	0	18	18	9	0	93	14	3	11	0	0	10	21	17	76
Platteville .....	9	13	20	12	6	10	15	8	0	93	6	0	10	4	0	9	28	4	61
Racine .....	18	9	2	0	31	1	10	2	0	73	5	0	0	0	2	0	4	0	11
Waukesha .....	4	14	8	3	19	15	1	6	21	91	1	4	0	0	1	0	4	0	10
IOWA—																			
Border Plains .....	15	0	0	22	16	5	2	21	0	93	1	2	0	0	0	2	2	5	12
Fairfield .....	7	5	18	6	5	11	5	12	22	91	3	4	25	3	3	0	0	3	41
Fort Madison .....	4	17	5	18	3	19	5	21	1	93	8	3	2	2	6	21	5	10	57
Franklin .....	19	1	11	8	15	8	19	6	0	93									
Muscatine .....	1	26	5	27	2	16	3	13	0	93	0	2	0	0	0	22	1	3	28
Pleasant Plain .....	7	16	9	8	9	27	6	8	3	93	0	2	0	0	0	12	4	10	28
MINNESOTA—																			
Hazlewood .....	4	10	5	10	24	5	4	31	0	93	4	4	5	0	3	0	0	5	21
Lake Winnibigoshish .....	17	11	2	17	6	0	3	8	10	80	1	1	4	2	3	2	3	5	21
Princeton .....	12	9	15	7	1	6	10	5	26	91	7	4	6	0	3	5	14	1	41
NEBRASKA—																			
Omaha .....	4	0	0	4	7	4	2	13	5	39	2	4	1	11	3	0	0	2	23
KANSAS—																			
Council City .....	12	5	6	4	14	2	19	12	19	93									
UTAH—																			
Great Salt Lake City .....	34	10	9	15	23	5	10	18	0	124	7	1	1	0	5	0	3	0	17
CALIFORNIA—																			
Marysville .....	33	0	0	7	53	0	0	0	0	93									
Sacramento .....	5	1	1	27	24	18	2	15	0	93	0	1	0	3	13	19	0	1	37
San Francisco .....	0	0	0	0	3	4	52	1	30	90	0	0	0	0	0	10	28	5	43
WEST INDIES—																			
St. George's, Bermuda .....	1	5	1	6	0	15	0	3	0	31									
SOUTH AMERICA—																			
Cathar'a Sophia, Surinam .....	6	29	21	29	6	2	0	0	0	93	1	10	37	35	0	1	0	0	84
AZORES—																			
Horta, Fayal .....	13	20	1	0	3	35	3	13	3	91	10	10	0	0	1	28	7	15	71





## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Morrisania .....	0	0	10	28	22	11	19	0	0	90									
New York city .....	2	22	5	12	2	12	26	9	0	90	0	1	17	4	1	21	31	2	77
Nichols .....	5	0	0	4	5	3	7	2	4	30									
Ogdensburg .....	0	0	1	2	0	14	2	2	0	30									
Oswego .....	0	5	1	11	15	8	39	3	0	90									
Ovid .....	4	2	2	14	14	18	19	17	0	90	1	0	0	2	4	24	13	28	72
Penn Yan .....	3	2	0	0	14	27	42	2	0	90									
Plainville .....	0	1	17	5	2	5	56	1	0	87	2	6	38	0	0	0	12	4	62
Rochester, [Harkness] .....	9	3	6	1	10	3	27	6	25	90									
Rochester, [Palmer] .....	13	4	5	7	10	11	16	24	0	90	8	5	4	3	8	7	21	24	80
Sag Harbor .....	3	10	13	9	10	20	14	4	0	83	1	1	0	1	2	4	18	10	37
Saratoga .....	0	22	0	9	8	21	20	10	0	90	0	20	0	9	8	24	18	11	90
Spencertown .....	20	0	2	8	28	8	7	17	0	90	5	0	0	1	11	16	22	25	80
Utica .....	9	0	0	11	16	0	9	7	30	82									
Wampsville .....	0	0	12	3	18	1	56	0	0	90	0	0	13	3	18	6	47	0	87
Waterford .....	4	0	0	0	12	28	36	0	10	90	0	0	0	0	10	10	10	8	38
NEW JERSEY—																			
Bloomfield .....	0	16	0	6	0	57	3	8	0	90									
Burlington .....	3	1	25	2	4	22	20	10	0	87	0	0	5	0	2	12	19	10	48
Lambertville .....	1	12	4	13	9	8	9	25	0	81									
Newark .....	0	14	4	13	2	11	4	12	0	60									
Sergeantsville .....	0	4	20	1	0	10	45	10	0	90	1	5	20	1	0	11	20	8	66
PENNSYLVANIA—																			
Bedford .....	0	0	0	1	0	31	17	29	0	78	0	0	0	1	1	26	15	15	58
Berwick .....	0	5	32	5	4	9	30	4	1	90									
Cannonsburg .....	0	0	1	0	0	0	82	0	7	90									
Carlisle .....	0	7	8	9	1	23	11	9	12	80	0	6	8	6	1	22	9	6	58
Chromedale .....	5	17	2	10	8	6	5	18	19	90	1	2	4	2	0	12	13	16	50
Easton .....	4	3	8	10	5	4	18	19	17	88	3	0	4	6	3	9	16	18	59
Fleming .....	0	0	9	17	1	22	10	29	2	90	1	0	1	2	1	9	35	13	62
Gettysburg .....	4	12	4	0	5	35	13	12	5	90	0	7	3	0	1	20	35	12	78
Harrisburg, [Heisely] .....	3	1	14	6	6	0	37	22	0	89	0	0	1	0	1	0	24	12	38
Harrisburg, [Hickok] .....	8	12	12	2	15	9	23	9	0	90	0	0	0	0	0	0	0	2	2
Lewisburg .....	3	3	2	16	8	14	3	16	25	90	3	0	1	4	4	13	10	13	48
Meadville .....	0	0	0	0	18	5	7	20	38	88	0	0	0	0	0	23	32	13	68
Morrisville .....	2	5	17	5	8	25	12	6	10	90	1	1	13	5	3	16	27	4	70
Murrysville .....	3	2	0	2	4	36	24	0	9	89	2	1	1	0	5	23	31	10	73
Nazareth .....	2	7	8	2	1	18	17	7	0	62	0	0	0	0	2	12	5	1	20
Norristown .....	0	2	12	10	7	30	15	2	0	78	0	1	16	5	0	22	18	0	62
North Whitehall .....	1	4	20	1	2	12	5	7	38	90	0	1	2	0	3	11	9	5	31
Philadelphia .....	1	16	4	9	3	28	15	14	0	90	1	0	1	0	0	8	4	3	17
Pocopson .....	2	11	4	4	9	30	24	4	0	88	1	3	3	1	5	17	27	3	60
Shamokin .....	0	0	17	4	5	15	44	5	0	90	0	0	0	0	0	1	63	4	68
Tarentum .....	3	0	0	0	15	15	20	0	28	87	1	0	0	0	1	17	42	14	75
West Haverford .....	0	3	9	3	0	26	12	5	2	60	0	0	2	0	0	9	18	7	38
DELAWARE—																			
Newark .....	0	7	12	9	2	17	6	34	0	87	0	0	10	7	4	15	6	20	68
MARYLAND—																			
Annapolis .....	8	21	0	4	14	27	4	10	2	90	5	1	0	1	3	29	0	2	41
Bladensburg .....	2	6	4	3	0	20	1	9	0	45									
Frederick .....	3	8	3	3	2	31	12	8	20	90	0	0	1	1	2	4	40	7	55
Ridge .....	2	5	6	9	9	18	9	14	1	73									
Sykesville .....	5	7	5	14	9	26	16	8	0	90	1	6	4	2	3	8	50	1	75
DISTRICT OF COLUMBIA—																			
Washington .....	0	21	1	12	2	29	2	22	1	90									
VIRGINIA—																			
Alexandria .....	8	10	0	11	19	13	4	24	1	90									
Berryville .....	2	10	3	6	6	39	14	10	0	90	2	0	3	0	1	18	18	17	59
Capon Bridge .....	0	0	0	0	0	4	12	1	15	32	0	0	0	0	0	4	19	1	24
Crack Whip .....	17	4	16	10	22	0	8	4	9	90	7	0	1	0	6	9	23	11	57
Crichton's Store .....	13	1	0	0	6	58	6	5	1	90	0	0	0	0	0	27	2	0	29
Kanawha .....	0	0	1	17	12	22	37	1	0	90	0	3	59	4	0	0	0	0	66

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Lewisburg	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	3	27	0	31	
Montross	3	2	4	3	6	32	11	0	18	79	0	11	5	0	1	1	0	0	18	
Mossy Creek	1	9	1	4	2	39	12	19	2	89	1	5	0	2	0	15	9	16	48	
Poplar Grove	0	0	8	1	0	1	19	8	46	83	1	1	0	0	0	17	33	0	61	
Portsmouth	9	3	3	4	7	32	19	13	0	90										
Rose Hill	4	9	0	0	5	33	7	7	14	88	1	0	0	0	0	1	3		5	
Rougemont	2	1	0	0	61	0	13	1	1	88	2	1	0	0	6	9	41	0	59	
Sistersville	20	15	0	1	2	0	0	0	15	53	0	0	0	0	0	0	1	2	12	
Smithfield	5	7	0	2	28	24	8	4	0	84	2	1	0	0	5	11	25	11	55	
Winchester	0	0	0	1	0	0	40	2	41	90	0	0	0	0	0	0	2	0	2	
Wirt Court-House	2	1	0	5	7	42	1	17	12	87	0	1	0	0	0	65	3	5	76	
NORTH CAROLINA—																				
Chapel Hill	4	3	0	0	15	16	48	0	0	90	0	1	0	0	7	37	11	2	58	
Murfreesborough	0	3	0	12	4	40	11	8	10	88	0	2	0	1	0	11	41	4	59	
Warrenton	0	0	0	4	5	71	2	0	0	80	0	1	0	0	0	0	0	0	1	
SOUTH CAROLINA—																				
All Saints	3	7	0	0	13	33	18	1	0	90	0	2	0	0	2	30	43	4	81	
Camden	3	8	0	7	4	45	13	3	7	90	0	1	0	0	0	34	21	12	68	
Charleston, [Dawson]	0	14	2	10	2	0	0	35	0	60										
Charleston, [Johnson]	0	6	0	3	3	14	2	2	0	30										
GEORGIA—																				
Athens	2	2	8	3	0	10	32	0	14	77										
Augusta	5	6	12	7	4	18	26	3	0	81										
Factory Mills	1	11	15	3	5	4	37	11	0	87	0	0	0	0	0	1	0	0	1	
Savannah	1	5	0	0	34	28	0	0	0	89	0	0	0	0	0	0	2	0	2	
Sparta	0	5	0	8	5	39	10	15	0	90	2	1	0	5	2	28	13	5	56	
The Rock	3	1	0	14	7	15	16	34	0	90										
Whitemarsh Island	2	3	1	7	29	15	11	7	11	86	1	1	1	2	0	13	11	17	46	
Zebulon	5	3	15	3	1	10	37	16	0	90	5	3	4	2	3	4	13	12	46	
FLORIDA—																				
Alligator	0	1	10	22	20	10	11	4	12	90	2	0	12	0	1	1	4	1	21	
Atsena	0	6	4	4	2	11	12	3	3	45	0	1	5	3	4	9	7	4	33	
Belair	0	0	10	17	10	4	8	11	15	86	0	1	0	1	1	30	21	5	59	
Gainesville	1	8	15	13	15	12	20	0	0	90										
Jacksonville	0	22	1	19	10	27	5	4	1	89	2	16	3	1	1	29	9	0	52	
St. Augustine	0	13	8	23	2	17	0	27	0	90	0	11	4	14	0	26	0	20	75	
Salt Ponds	3	3	5	33	2	0	0	7	1	60	0	0	0	0	0	0	16	8	24	
Warrington	1	9	1	11	2	62	0	4	0	90	0	5	0	0	0	5	0	1	11	
ALABAMA—																				
Auburn	2	1	1	19	10	16	31	8	0	88	3	0	1	6	7	31	13	7	68	
Carlowville	12	5	0	9	13	12	20	12	0	89	0	0	1	0	2	0	12	0	15	
Greene Springs	0	31	0	0	0	41	0	0	1	73	0	0	0	5	0	10	0	1	16	
Greensborough	17	0	2	12	15	12	0	13	0	80	0	0	0	1	3	0	25	2	31	
MISSISSIPPI—																				
Columbus	6	7	11	7	7	24	15	12	0	89	1	0	1	4	4	24	11	8	53	
LOUISIANA—																				
Black River	23	7	0	9	39	5	1	0	0	90	1	5	0	3	13	9	5	11	47	
Trinity	0	0	13	3	46	2	8	6	0	90	2	2	0	3	14	5	7	4	37	
TEXAS—																				
Austin	19	3	2	4	49	1	4	8	0	90	20	3	4	3	34	2	14	7	87	
New Braunfels	7	2	16	21	14	0	1	0	19	80										
Union Hill	5	6	1	24	27	3	12	4	0	82	3	2	8	1	10	16	0	2	47	
Washington	61	1	0	0	20	2	1	1	4	90	3	12	3	0	0	4	0	2	24	
TENNESSEE—																				
Glenwood	6	0	3	9	20	22	3	6	19	90	6	0	0	5	1	20	35	9	76	
KENTUCKY—																				
Danville	4	12	0	2	7	39	12	14	0	00	2	1	0	1	1	22	30	5	62	
Paris	7	8	1	1	11	30	13	17	0	88	0	0	0	0	6	11	31	2	50	
Springdale	3	4	4	1	11	31	8	4	24	90										
OHIO—																				
Cincinnati, [Harper]	2	0	1	0	6	29	35	17	0	90										
Cincinnati, [Hurt]	2	0	0	2	0	40	24	3	12	89	0	0	0	1	0	17	26	0	47	



## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued																				
Cleveland.....	5	5	2	6	19	14	13	14	8	86	0	0	0	0	2	20	14	6	42	
Edinburg.....	0	44	18	22	0	0	0	0	6	90	0	0	0	0	0	29	24	20	73	
College Hill.....	0	2	1	0	2	18	17	13	35	88	2	0	0	1	0	15	14	5	37	
Hillsborough.....	1	8	0	7	3	42	3	21	1	86	0	1	0	1	1	24	1	12	40	
Hiram.....	2	3	0	2	16	26	14	15	11	89	2	0	1	0	2	17	27	15	64	
Jefferson.....	0	1	0	0	2	79	1	7	0	90	0	0	0	0	2	81	1	6	90	
Madison, [Cunningham]..	4	3	3	4	1	28	13	7	27	90	3	0	0	0	0	30	26	17	76	
Medina.....	6	2	0	2	3	40	20	13	0	86	3	1	0	3	1	39	22	15	84	
Oberlin.....	4	1	1	4	7	25	10	19	18	89	0	0	0	0	1	13	40	7	61	
Savannah.....	3	0	0	0	3	56	19	9	0	90	0	0	0	0	3	43	14	9	69	
Sidney.....	0	1	0	1	3	42	5	16	0	68	0	0	0	0	1	40	0	19	66	
Urbana.....	0	0	2	9	8	26	10	3	32	90	0	0	0	2	5	17	28	8	60	
Welchfield.....	3	1	1	6	8	39	18	14	0	90	0	0	0	0	9	11	43	11	74	
MICHIGAN—																				
Ann Arbor, [Winchell]...	2	0	4	7	14	12	19	13	19	90	3	0	0	1	0	4	46	11	65	
Battle Creek.....	3	2	3	2	7	24	25	13	11	90	0	0	0	0	0	18	44	13	75	
Cooper.....	0	1	2	0	0	0	34	0	53	90	0	0	0	0	1	16	19	0	36	
Copper Falls Mines.....	8	10	2	21	10	16	7	13	0	87	1	3	0	2	1	17	5	3	32	
Grand Rapids, [Currier]..	1	10	4	3	2	36	5	10	14	85	4	0	0	0	6	23	41	15	89	
Grand Rapids, [Streng]..	4	3	10	10	5	30	18	10	0	90	4	0	0	0	6	23	41	15	89	
Port Huron.....	10	0	0	0	12	22	6	34	0	90	5	0	0	1	4	29	12	20	71	
INDIANA—																				
Evansville.....	5	0	0	2	13	42	13	14	0	90	14	0	0	7	3	3	20	14	61	
Logansport.....	7	1	6	1	6	25	26	18	0	90	3	3	0	0	6	26	7	3	48	
Michigan City.....	14	6	4	2	14	33	5	6	6	90	3	3	0	0	6	26	7	3	48	
New Albany.....	1	2	0	2	6	24	24	21	0	80	2	2	0	2	5	13	15	8	47	
New Harmony.....	12	2	2	9	8	25	16	5	0	79	2	0	0	0	0	3	3	0	8	
Richmond.....	1	0	0	0	5	33	13	5	31	88	0	1	0	0	0	0	0	0	1	
ILLINOIS—																				
Athens.....	1	3	0	25	0	20	3	27	2	81	0	1	0	0	1	8	32	18	66	
Augusta.....	2	7	5	12	8	18	21	14	3	90	1	2	0	3	1	7	17	11	42	
Brighton.....	8	2	0	2	11	54	6	4	0	87	1	1	0	0	2	22	2	7	35	
Chicago.....	5	12	6	4	2	33	17	6	5	90	1	0	0	0	0	29	17	14	61	
Edgington.....	11	2	0	10	10	26	4	26	1	90	10	2	0	8	6	26	4	28	84	
Fremont Centre.....	0	2	6	15	16	20	25	6	0	90	0	0	0	1	12	26	20	5	64	
Manchester.....	1	3	0	1	26	38	19	2	0	90	0	0	0	1	12	26	20	5	64	
Marengo.....	0	1	2	25	4	51	6	1	0	90	0	0	0	0	0	0	0	0	0	
Ottawa.....	3	2	0	10	10	22	19	16	2	84	1	0	0	0	0	10	8	5	24	
Pekin.....	12	4	1	0	33	9	12	13	6	90	3	0	1	0	2	11	21	8	46	
Peoria.....	5	1	7	3	32	6	36	0	0	90	4	1	12	4	4	1	12	4	42	
Riley.....	2	2	3	6	6	21	11	18	17	86	0	1	0	3	0	53	7	26	90	
Upper Alton.....	4	10	1	17	10	25	7	15	1	90	1	0	0	0	3	8	28	5	45	
Warsaw.....	2	3	5	3	27	11	10	8	21	90	1	0	0	0	3	8	28	5	45	
West Salem.....	6	7	4	9	17	32	6	9	0	90	1	0	0	2	1	15	5	10	34	
Winnebago.....	3	0	1	14	3	39	11	19	0	90	1	0	0	0	0	3	14	14	32	
MISSOURI—																				
Cape Girardeau.....	5	7	5	22	12	35	6	23	4	119	3	3	1	9	5	37	17	20	95	
Palmyra.....	1	5	1	13	4	29	19	16	30	118	4	0	0	6	2	19	27	20	78	
St. Joseph.....	1	1	15	15	19	6	23	10	20	110	0	0	0	0	0	0	0	0	0	
St. Louis.....	4	5	7	16	12	22	16	8	0	90	0	0	0	0	0	0	0	0	0	
WISCONSIN—																				
Appleton.....	3	14	2	6	10	19	15	20	1	90	4	15	2	0	10	20	17	22	90	
Bay City.....	2	30	2	5	7	13	19	0	0	87	1	3	3	0	1	11	20	4	43	
Beloit.....	16	0	3	4	27	16	7	17	0	90	2	0	0	0	3	8	3	3	19	
Janesville.....	5	2	0	13	9	25	17	13	6	90	0	0	0	0	0	0	0	0	0	
Kenosha.....	2	5	5	3	10	31	4	4	21	85	0	0	0	0	0	0	0	0	0	
Madison, [Sterling].....	8	1	1	5	22	21	13	14	2	87	0	0	0	0	0	0	0	0	0	
Manitowoc.....	6	5	10	17	17	6	8	21	0	90	4	0	0	1	0	6	19	15	45	
Milwaukee, [Pomeroy].....	4	5	2	28	7	16	12	16	0	90	0	0	0	0	0	0	0	0	0	
Milwaukee, [Winkler].....	3	10	13	19	8	11	14	12	0	90	0	0	0	0	0	0	0	0	0	
New London.....	17	6	1	0	7	25	18	16	0	90	19	3	0	1	0	7	26	14	78	

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
IOWA —																			
Border Plains.....	5	3	1	11	30	7	0	33	0	90	0	0	0	0	0	0	9	7	25
Fairfield.....	0	0	1	9	5	15	14	21	25	90	1	12	33	0	0	1	0	0	47
Fort Madison.....	0	5	0	5	5	49	8	18	0	90	0	0	0	1	1	6	44	6	58
Franklin, [W. W. Beal]..	5	2	3	4	18	6	27	12	13	90									
Iowa City.....	6	5	5	14	5	13	14	17	11	90	3	1	1	1	2	7	8	4	27
Muscatine.....	13	3	3	22	6	24	7	12	0	90	0	5	0	0	0	19	3	4	31
Pleasant Plain.....	3	7	0	7	19	24	10	17	2	89	1	0	0	0	0	1	8	34	44
MINNESOTA—																			
Hazlewood.....	3	0	0	11	22	3	0	51	0	90	1	2	0	6	1	2	2	6	20
Princeton.....	13	3	2	3	7	6	16	5	35	90	2	0	0	0	1	2	25	2	32
NEBRASKA—																			
Bellevue.....	29	1	0	0	27	0	0	0	1	58	8	0	0	0	4	1	3	6	22
Omaha.....	12	3	3	11	14	10	5	20	12	90	3	12	4	25	1	3	1	7	56
KANSAS—																			
Council City.....	4	5	2	3	37	2	9	7	21	90									
UTAH—																			
Great Salt Lake City.....	42	5	18	10	30	1	0	0	0	120	1	0	0	0	1	0	4	0	0
CALIFORNIA—																			
Sacramento.....	5	0	2	21	27	20	2	13	0	90	0	2	1	5	10	10	1	0	29
San Francisco.....	1	0	0	0	1	0	57	1	30	90	1	0	0	0	1	0	57	1	60
WEST INDIES—																			
St. George's, Bermuda....	1	1	0	4	2	13	4	5	0	30									
SOUTH AMERICA—																			
Catharina Sophia, Surinam	2	26	29	24	7	1	0	0	1	90	1	17	32	24	1	0	0	0	75
AZORES—																			
Horta, Fayal.....	2	5	1	5	10	43	4	6	11	87	5	3	0	3	7	43	2	7	70



No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	4	11	2	2	15	26	14	10	9	93	3	8	2	4	11	28	19	7	82	
Red River Settlement.....	8	4	0	1	16	4	1	3	1	38	1	7	0	1	0	1	0	1	1	
St. John's .....	5	12	8	6	0	10	46	6	0	93	—	—	—	—	—	—	—	—	—	
St. Martin .....	0	11	1	17	6	47	2	9	0	93	—	—	—	—	—	—	—	—	—	
Stanbridge .....	2	7	6	33	26	1	8	5	5	93	—	—	—	—	—	—	—	—	—	
Toronto .....	3	15	6	22	2	20	0	18	7	93	—	—	—	—	—	—	—	—	—	
Wolfville .....	1	7	1	7	3	19	3	7	35	83	1	5	1	7	1	28	8	9	60	
MAINE—																				
Cornish, [Guptill].....	3	5	1	25	16	10	11	22	0	93	0	0	0	0	0	4	3	2	0	
Cornish, [West].....	5	8	13	12	8	25	15	7	0	93	1	0	0	0	1	4	2	3	11	
Monson .....	1	2	5	25	15	11	5	28	1	93	—	—	—	—	—	—	—	—	—	
Perry .....	0	0	4	35	5	26	5	16	0	91	1	0	3	4	1	4	6	9	28	
Portland .....	6	10	19	14	20	11	8	5	0	93	0	1	2	0	5	9	8	3	28	
Steuben .....	1	20	0	6	0	58	2	4	2	93	0	8	2	0	0	22	5	3	40	
NEW HAMPSHIRE—																				
Concord .....	0	26	0	11	0	24	0	10	15	86	0	0	0	0	1	0	0	1	2	
Frauncestown, [Root].....	5	5	5	19	2	20	13	18	3	90	5	3	10	0	0	20	16	13	69	
Manchester .....	0	0	19	8	7	21	13	3	1	72	0	0	10	9	1	17	29	0	66	
North Barnstead.....	0	5	1	7	1	18	11	43	0	86	0	1	1	3	0	6	14	32	57	
Shelburne .....	0	0	37	1	0	0	31	0	0	69	2	0	4	6	0	9	12	7	40	
West Enfield .....	2	0	0	14	36	16	6	11	8	93	0	1	1	14	14	22	9	10	71	
VERMONT—																				
Brandon .....	11	0	0	8	48	9	5	4	8	91	0	0	1	7	4	20	14	5	51	
Craftsbury .....	4	6	4	5	35	16	9	0	5	93	4	1	0	5	4	21	17	13	65	
Rupert .....	—	—	—	—	—	—	—	—	—	—	10	68	0	0	4	0	0	10	92	
St. Johnsbury .....	4	2	3	3	28	9	8	21	0	78	—	—	—	—	—	—	—	—	—	
Shelburn .....	7	2	0	1	70	4	0	8	0	92	0	16	2	9	0	0	1	0	28	
MASSACHUSETTS—																				
Amherst .....	3	3	2	34	1	18	4	17	0	82	1	4	3	5	3	9	1	12	38	
Cambridge .....	2	10	12	6	0	41	6	3	13	93	—	—	—	—	—	—	—	—	—	
Florida .....	1	12	0	7	2	25	15	28	3	93	1	12	0	3	2	26	13	24	81	
Lawrence .....	0	12	6	17	1	44	2	11	0	93	0	0	0	0	0	3	0	0	3	
Mendon .....	0	21	4	1	2	59	3	3	0	93	1	18	2	3	2	48	5	4	83	
Nantucket .....	1	16	4	5	9	48	1	1	8	93	—	—	—	—	—	—	—	—	—	
New Bedford .....	0	17	4	9	7	49	1	4	1	92	1	2	2	1	1	7	2	1	17	
Newburyport .....	4	7	14	8	12	8	18	0	0	71	—	—	—	—	—	—	—	—	—	
Princeton .....	0	7	27	2	0	0	40	0	0	93	0	6	19	1	0	5	38	3	72	
Richmond .....	0	4	1	28	2	33	0	25	0	93	1	5	4	22	2	14	3	10	61	
Westfield .....	8	7	11	27	8	8	12	12	0	93	—	—	—	—	—	—	—	—	—	
Weymouth .....	0	8	1	13	0	32	1	7	0	62	—	—	—	—	—	—	—	—	—	
Williamstown .....	7	0	3	32	28	9	1	12	0	92	0	0	1	3	2	2	0	0	8	
Worcester .....	7	9	12	8	6	29	9	6	0	86	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Providence .....	1	19	2	6	10	37	2	14	1	92	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Columbia .....	0	12	7	0	22	20	4	3	25	93	0	10	7	1	15	16	3	1	53	
New London .....	0	16	4	15	19	35	1	3	0	93	—	—	—	—	—	—	—	—	—	
Norwich .....	0	23	1	6	19	14	1	3	26	93	—	—	—	—	—	—	—	—	—	
Pomfret .....	4	23	7	2	10	37	3	7	0	93	0	17	5	4	8	29	3	3	69	
Saybrook .....	2	14	9	12	11	29	7	0	7	91	1	5	7	2	5	10	4	3	37	
Wallingford .....	8	12	2	5	22	18	1	5	20	93	1	15	0	4	0	24	10	1	55	
NEW YORK—																				
Angelica .....	0	0	1	10	11	38	6	27	0	93	0	0	0	0	0	23	10	0	33	
Baldwinsville .....	0	0	12	3	3	19	28	17	0	82	1	3	1	1	2	8	32	9	57	
Beverly .....	3	10	0	11	8	26	0	9	1	78	2	10	3	10	3	26	2	2	58	
Blackwell's Island .....	7	16	9	12	24	17	4	4	0	93	—	—	—	—	—	—	—	—	—	
Cazenovia .....	3	5	3	11	4	26	8	17	14	91	0	1	1	15	12	17	24	8	78	
Clinton .....	7	7	8	3	19	33	8	8	0	93	6	0	7	4	11	17	4	7	56	
Eden .....	5	10	1	8	19	14	15	8	0	80	0	0	6	1	5	12	8	5	37	
Flatbush .....	3	19	8	6	30	14	10	3	0	93	0	4	7	4	6	15	13	5	54	
McGrawville .....	0	1	5	25	3	15	26	4	10	89	—	—	—	—	—	—	—	—	—	
Morrisania .....	6	14	6	32	17	9	5	3	0	92	—	—	—	—	—	—	—	—	—	

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
New York city .....	2	24	1	11	4	21	28	2	0	93	2	8	7	1	2	31	28	0	79
Nichols .....	5	0	0	1	13	2	5	3	2	31									
Ogdenburg .....	3	4	2	4	2	20		0	0	35									
Oswego .....	7	1	1	4	32	10	16	12	11	93									
Ovid .....	9	2	8	12	30	15	7	10	0	93	1		5	5	19	17	12	9	71
Penn Yan .....	0	0	0	0	8	48	37	5	0	93									
Rochester, [Harkness] .....	14	5	8	3	20	2	15	3	23	93									
Rochester, [Palmer] .....	21	5	2	9	8	22	19	4	0	90	3	1	1	3	7	7	10	6	38
Sag Harbor .....	1	15	7	7	29	22	8	1	0	90	3	5	2	0	1	10	7	3	31
Saratoga .....	0	13	4	21	4	42	2	7	0	93		14	4	21	4	40	2		93
Spencertown .....	0	1	1	14	27	22	12	15	0	92	1	0	4	4	2	14	17	36	78
Townsendville .....	4	1	0	24	16	13	3	15	17	93	3	1	1	8	9	13	12		53
Wampsville .....	0	1	12	1	46	1	31	0	0	92	0		12		30	1	29	0	75
Waterford .....	13	9	0	0	23	35	3	1	4	88	3	1	1	2	0	0	1		8
Wellsville .....	0	0	44	0	0	0	31	1	2	78	1	0	0	2	3	2	1		9
NEW JERSEY—																			
Bloomfield .....	0	26	0	2	0	58	0	0	1	93									
Burlington .....	3	11	25	12	0	20	7	2	7	93	3	7	7	3		15	13	2	59
Lumbertville .....	3	15	7	15	5	27	4	8	0	84									
Newark .....	0	17	0	6	5	23	1	9	1	62									
Sergeantsville .....	7	11	12	5		19	27	9	0	93	7	11	7	1	4	21	15	4	70
PENNSYLVANIA—																			
Bedford .....	0	5	0	28	0	29	3	15	0	80	1		0	15	0	24	2	11	59
Berwick .....	3	3	39	5	5	10	23	5	0	93									
Cannonsburg .....	1	0	28	3	0	4	49	1	7	93	0	0	0	0	0	2	1	0	3
Chromedale .....	0	19	7		0	15	3	0	25	93	0	3	10	5	0	24	10	6	66
Easton .....	4	6	7	15	10	3	19	8	19	91	2	3	7	7	3	23	8	5	58
Fleming .....	0	1	12	19	8	14	11	19	8	92	1	0	9	3	0	16	18	4	57
Gettysburg .....	10	8	4	3	23	24	8	5	8	93	7	8	1	4	20	24	16	10	90
Harrisburg, [Heisely] .....	2	0	7	7	34	7	22	8	0	87	1	0	3	0	19	0	14	0	49
Harrisburg, [Hickok] .....	16	10	24	5	12	8	12	4	2	93	0	0	0	0	0	1	0	0	1
Lewisburg .....	0	8	3	8	17	17	1	5	29	92	5	0	4	2	0	19	2	3	41
Morrisville .....	0	0	14	11	14	24	1	0	20	93	0	12	5	8	0	30	10	2	67
Murrysville .....	0	6	0	7	5	25	7		37	93	0	7	13	5	5	17	13	2	62
Nazareth .....	5	11		14	16	3	11	1	1	65	2	2	2	4	12	6	5	0	33
Norristown .....	0	5	10	24	17	18	3	4	0	81	0	2	13	17	1	21	11	1	66
North Whitehall .....	1	12	9	1	6	8	3	1	52	93	2	7	4	1	7	12	1	1	35
Philadelphia .....	2	20		14	11	32	4	4	0	93	0	7	3	2	5	17	2	1	37
Pocopson .....	7		4	6	20	28	13	0	0	87	1	5	1	1	7	15	10	0	40
Shamokin .....	0		3	3	4	12	71	0	0	93	2	1	2	1	0	58	0	0	70
Tarentum .....	5	3	5	8	11		3	3	49	93	4	4	1	2	7	16	29	9	72
West Haverford .....	1	7	12	5	3	28	2	0	4	62	1	2	5	0	1	22	16	1	48
Westtown .....	7	8	3	11	21	25	3	14	1	93	2	3	2	1	4	22	2	7	43
DELAWARE—																			
Newark .....	0	14		23	11	22	2	8		89		11	7	19	7	21	1	3	59
MARYLAND—																			
Annapolis .....	4	26	1	15	25	17	4	1	0	93	0	2			4	30	0	0	36
Bladensburg .....	1	7	4	7	0	13	1	7	0	40									
Chestertown .....	1	7	6	8	1	32	17	3	0	75	0	6	4	8	1	20	12	1	52
Frederick .....	3	15	2	4	4	17	14	10	22	91	2	4	3	2	10	5	28	2	56
Sykesville .....	9	14	7	14	18	14	10	7		93	2	2	11	7	3	8	47	1	81
DISTRICT OF COLUMBIA—																			
Washington, [Smith. In.] ..	0	22	2	17	0	27	4	17	1	90									
VIRGINIA—																			
Alexandria .....		20	12	11	16	5	5	1	1	77									
Ashland .....	0	2	0	0		30	1	7	51	93		2	0	0	0	15	22	3	42
Berryville .....	7	15	4	16	17	20	4	9	1	93	3	8	1	4	7	32	12	6	73
Crack Whip .....	11	7	26		24	5	3	1	10	93	5	4	2	0	14	11	24	1	61
Crichton's Store .....	12	8		2	25	23	3	5	3	90		0	0	2	0	30	0	0	47
Lewisburg .....											1	7	4	6	0	10	8	1	32
Potomouth .....	3	19	7	17	10	23	9	5		93									
Rose Hill .....	4	12	8	4	15	24	4		18	89	0	0	0		0	1	0	1	2



## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Rougemonst .....	6	1	6	0	43	8	22	2	4	92	10	0	4	0	9	9	36	5	73	
Salem .....	1	11	20	10	1	21	17	11	1	93	0	10	21	1	1	4	26	8	71	
Sistersville .....	2	20	0	1	6	1	0	1	29	60	0	1	0	0	0	0	0	0	1	
Smithfield .....	3	7	12	14	27	18	3	6	0	90	4	7	4	10	7	22	25	2	81	
Wirt Court-House .....	2	10	0	17	3	27	1	10	21	91	0	10	0	16	0	49	0	9	84	
NORTH CAROLINA—																				
Chapel Hill .....	12	15	3	2	14	17	25	5	0	93	1	11	4	4	9	37	5	1	72	
Murfreesborough .....	2	18	4	8	19	25	7	3	0	86	1	10	4	6	13	30	7	5	76	
Warrenton .....	0	25	0	5	1	60	2	0	0	93	---	---	---	---	---	---	---	---	---	
SOUTH CAROLINA—																				
All Saints .....	10	14	8	9	17	18	12	4	0	92	4	15	2	9	13	41	21	3	108	
Camden .....	4	15	2	15	6	29	7	9	0	93	5	7	2	5	0	19	22	5	65	
Charleston, [Dawson] .....	0	19	3	15	0	4	0	21	0	62	---	---	---	---	---	---	---	---	---	
Charleston, [Johnson] .....	1	7	1	5	0	12	2	3	0	31	---	---	---	---	---	---	---	---	---	
GEORGIA—																				
Athens .....	0	22	1	10	0	14	6	10	14	77	---	---	---	---	---	---	---	---	---	
Augusta .....	11	9	12	32	5	14	3	4	0	90	---	---	---	---	---	---	---	---	---	
Savannah .....	10	3	12	20	16	19	2	11	0	93	---	---	---	---	---	---	---	---	---	
Sparta .....	2	22	1	20	8	17	5	15	0	90	5	8	0	10	1	20	14	6	64	
The Rock .....	11	17	16	11	3	8	6	21	0	93	---	---	---	---	---	---	---	---	---	
Whitemarsh Island .....	7	11	3	13	20	11	6	7	15	93	5	3	0	7	4	19	11	13	62	
Zebulon .....	2	7	12	13	4	14	22	19	0	93	8	7	0	5	4	6	9	9	48	
FLORIDA—																				
Alligator .....	1	4	12	23	7	16	8	4	18	93	6	10	12	2	2	0	4	7	43	
Atsena .....	1	12	19	9	3	16	20	11	2	93	1	4	14	8	4	13	18	8	70	
Belair .....	4	5	13	2	8	2	1	2	4	41	1	0	3	3	0	3	19	8	37	
Gainesville .....	5	10	36	16	7	6	8	4	0	92	---	---	---	---	---	---	---	---	---	
Jacksonville .....	1	41	8	6	0	25	3	8	1	90	8	23	4	4	3	2	2	1	47	
St. Augustine .....	1	17	8	31	0	13	0	23	0	93	0	12	8	28	0	23	0	19	90	
Salt Ponds .....	0	1	10	32	5	7	3	3	1	62	---	---	---	---	---	---	---	---	---	
Warrington .....	0	10	7	15	18	33	5	2	3	93	13	6	2	2	1	6	6	4	40	
ALABAMA—																				
Auburn .....	1	3	6	39	14	7	13	9	0	92	1	14	7	17	15	17	8	5	84	
Carlowville .....	9	11	8	9	14	17	15	10	0	93	0	1	0	7	8	4	10	1	31	
Greene Springs .....	3	12	9	2	3	5	7	2	1	44	1	3	0	0	3	2	0	1	10	
Greensborough .....	20	1	1	16	3	1	4	7	0	53	6	0	0	4	6	1	28	1	46	
MISSISSIPPI—																				
Columbus .....	24	6	18	4	15	8	0	11	1	93	9	12	0	7	1	8	6	15	58	
LOUISIANA—																				
Black River .....	24	8	3	15	31	3	1	7	1	93	6	7	2	3	15	7	3	5	48	
Trinity .....	14	6	18	19	31	3	1	1	0	93	5	3	8	3	12	5	3	2	41	
TEXAS—																				
Austin .....	7	25	6	13	36	4	0	2	0	93	11	25	8	9	29	10	8	11	111	
New Braunfels .....	1	2	30	21	19	0	0	0	15	88	0	0	0	1	0	1	1	0	3	
Union Hill .....	0	13	3	39	26	3	2	0	0	86	2	12	1	10	20	9	5	2	61	
Washington .....	73	0	0	0	0	0	6	1	6	92	5	11	3	3	0	2	2	2	28	
TENNESSEE—																				
Glenwood .....	3	12	4	11	10	14	8	3	28	93	0	13	2	2	3	10	30	9	75	
KENTUCKY—																				
Danville .....	12	12	4	1	10	26	3	25	0	93	4	10	0	0	0	23	13	11	61	
Paris .....	5	10	1	7	4	21	10	35	0	93	6	0	4	0	5	2	32	1	50	
Springdale .....	4	8	1	3	2	23	7	11	34	93	---	---	---	---	---	---	---	---	---	
OHIO—																				
Cincinnati, [Harper] .....	14	2	11	14	23	15	7	7	0	93	---	---	---	---	---	---	---	---	---	
Cleveland .....	17	7	0	7	24	0	9	10	11	91	6	6	3	3	2	7	12	5	44	
Edinburg .....	2	40	18	3	0	12	4	1	13	93	0	9	2	0	0	30	33	3	77	
Hillsborough .....	2	26	1	10	2	22	2	21	1	87	3	10	0	3	1	11	2	6	36	
Hiram .....	14	4	6	8	12	22	6	4	17	93	8	2	2	6	4	12	13	7	54	
Jefferson .....	3	3	0	7	1	53	2	24	0	93	3	2	0	7	2	46	2	24	86	
Madison, [Atkins] .....	7	11	2	6	5	18	6	8	28	91	4	1	2	0	1	1	7	1	17	
Madison, [Cunningham] .....	1	11	0	6	8	10	15	11	18	80	0	15	1	5	1	25	11	15	73	
Medina .....	5	17	2	7	8	27	7	20	0	93	4	10	0	5	8	22	24	17	90	

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1857.

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Oberlin.....	14	0	4	3	7	0	16	10	23	91	7	6	2	1	0	6	36	10	68	
Savannah.....	0	9	0	1	0	64	0	14	0	93	1	8	0	1	0	50	5	13	73	
Sidney.....	5	8	0	11	3	27	10	11	0	75	1	26	1	16	0	19	1	9	73	
Urbana.....	1	12	0	5	4	12	5	13	41	93	3	15	0	1	1	13	16	20	69	
Welchfield.....	4	7	11	16	8	27	7	13	0	93	5	6	0	2	1	8	20	17	65	
MICHIGAN—																				
Ann Arbor.....	12	0	10	14	15	15	11	6	10	93	2	0	0	0	0	14	33	9	53	
Battle Creek.....	6	10	0	6	12	15	16	8	20	93	14	14	0	2	1	13	9	15	68	
Cooper.....	2	0	0	0	0	1	10	3	77	93	1	3	0	5	0	1	0	0	19	
Copper Falls Mines.....	13	0	2	24	0	15	4	13	0	89										
Grand Rapids, [Currier].....	1	13	5	10	0	28	2	13	21	93	1	5	2	2	0	16	5	11	42	
Grand Rapids, [Streng].....	5	13	4	11	3	13	27	17	0	93	10	28	0	3	5	9	20	9	00	
Monroe.....	0	0	1	6	5	37	11	13	0	83	4	0	1	7	2	33	14	13	74	
New Buffalo.....											3	7	18	17	14	9	2	2	72	
Port Huron.....	22	3	0	1	0	33	2	21	0	91	11	10	2	2	0	19	2	11	57	
INDIANA—																				
Evansville.....	7	4	0	1	10	36	8	27	0	93	6	9	10	2	4	13	8	10	62	
Logansport.....	28	10	0	2	2	17	12	22	0	93										
Michigan City.....	28	6	1	3	15	21	4	7	8	93	17	1	0	0	10	5	5	1	39	
New Harmony.....	17	1	4	11	7	0	10	16	0	72	1	1	0	0	0	0	0	0	2	
Richmond.....	2	11	2	0	0	14	9	0	46	90										
ILLINOIS—																				
Athens.....	2	13	2	28	2	7	11	13	3	81	2	18	0	1	2	4	16	33	76	
Augusta.....	4	10	10	19	7	16	7	9	11	93	5	4	0	4	2	10	12	5	42	
Brighton.....	2	10	0	16	14	33	1	11	0	93	1	5	2	3	0	18	0	8	46	
Edgington.....	10	10	0	24	3	36	1	8	1	93	16	6	0	16	2	24	3	17	84	
Fremont Centre.....	9	16	12	13	8	10	16	0	0	93										
Manchester.....	4	2	1	0	36	32	12	6	0	93	4	2	1	1	13	35	0	0	71	
Marengo.....	0	9	6	22	0	48	2	0	0	93										
Ottawa.....	7	19	3	11	6	22	6	0	7	90	6	0	0	1	2	4	4	4	27	
Pekin.....	15	9	4	2	24	9	2	9	19	93	10	0	1	0	8	8	10	4	47	
Peoria.....	13	21	10	1	29	2	14	3	0	93	0	2	0	0	2	1	5	3	19	
Riley.....	5	4	7	11	6	6	7	10	32	88										
Warsaw.....	2	16	4	23	11	29	2	5	0	92	2	9	2	3	5	11	3	11	46	
West Salem.....	4	11	5	4	15	4	3	0	38	93	10	4	3	0	0	7	15	13	52	
West Urbana.....	21	20	2	6	22	0	1	15	0	93	4	0	0	0	1	2	1	9	17	
Winnebago.....	7	8	7	18	4	21	13	15	0	93	4	6	1	4	1	3	12	7	38	
MISSOURI—																				
Cape Girardeau.....	11	21	7	17	17	12	5	17	17	124	14	15	2	1	13	18	5	23	91	
Palmyra.....	8	8	2	10	3	38	7	3	23	102	3	10	1	4	0	42	7	3	70	
St. Joseph.....	0	17	1	54	5	8	2	7	26	120										
St. Louis.....	12	15	12	20	9	7	8	10	0	93										
Springfield.....	7	10	3	13	19	1	0	2	31	86	2	2	4	5	2	0	0	2	17	
WISCONSIN—																				
Appleton.....	4	27	0	3	5	15	14	18	7	93	3	26	0	1	4	16	18	19	87	
Bay City.....	1	36	1	1	31	18	3	2	0	93	1	4	1	0	0	18	3	1	28	
Beloit.....	25	7	3	13	18	8	15	4	0	93	3	1	1	1	0	1	0	1	14	
Janesville.....	13	6	9	16	12	16	5	10	6	93										
Kenosha.....	1	7	13	6	14	11	2	4	34	92										
Lind.....	11	4	5	0	18	2	8	4	0	52	14	4	1	1	6	2	8	2	38	
Madison, [Sterling].....	8	1	0	6	18	8	9	10	2	62	0	0	0	0	0	0	0	1	1	
Manitowoc.....	14	4	5	20	11	12	10	17	0	93	10	5	2	0	0	0	12	7	42	
Milwaukee, [Pomeroy].....	14	21	9	20	0	0	5	21	0	93										
Milwaukee, [Winkler].....	5	20	12	20	2	0	18	10	0	93										
New London.....	4	4	1	1	3	29	28	23	0	93	16	5	0	0	2	25	25	9	82	
Platteville.....	5	11	7	35	0	12	7	16	0	93	0	3	5	4	2	26	1	17	58	
Waukesha.....	8	4	1	1	17	10	7	3	31	82	1	0	0	0	1	4	10	0	17	
IOWA—																				
Bellevue.....	11	0	2	17	10	7	16	30	0	93	5	4	2	6	5	3	1	12	38	
Border Plains.....	20	6	3	27	24	6	1	6	0	93	2	1	0	0	2	6	5	11	27	
Dubuque.....	6	9	4	23	11	10	3	3	20	89	4	7	5	3	4	13	4	17	57	
Fairfield.....	1	1	2	17	10	7	5	12	38	93	5	2	0	4	3	0	0	2	22	



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Iowa—Continued.																				
Fort Madison.....	5	19	1	11	2	43	3	4	2	90	1	10	3	0	2	13	19	10	58	
Franklin.....	11	7	2	4	34	4	3	2	26	93										
Iowa City.....	1	4	6	15	7	17	1	11	27	89	0	3	1	1	1	1	2	2	11	
Muscatine.....	2	21	0	16	11	25	5	13	0	93	0	10	1	6	0	18	2	10	47	
Pleasant Plain.....	4	9	4	15	22	16	3	14	6	93	2	1	0	0	1	20	10	20	54	
MINNESOTA—																				
Lapham.....	1	1	1	11	19	1	3	0	4	41	6	3	3	0	0	1	0	3	16	
Princeton.....	10	0	6	6	18	6	11	0	36	93	2	0	0	2	16	6	11	1	38	
NEBRASKA—																				
Bellevue.....	33	1	0	3	45	1	1	3	2	89	5	0	0	1	5	1	6	0	18	
Omaha.....	7	3	5	15	30	4	2	9	17	92	4	4	0	2	18	17	0	12	66	
KANSAS—																				
Council City.....	3	6	7	8	33	13	0	0	23	93										
Lawrence.....	1	2	1	16	38	9	0	1	0	68	1	2	2	0	4	0	1	0	10	
UTAH—																				
Great Salt Lake City.....	41	0	18	6	27	8	12	12	0	124	0	0	0	0	3	0	1	0	4	
CALIFORNIA—																				
Sacramento.....	8	0	1	23	38	17	0	6	0	93	0	0	0	0	1	2	0	1	4	
San Francisco.....	0	0	0	0	1	0	55	0	37	93	0	1	0	0	5	1	28	0	35	
WEST INDIES—																				
St. George's, Bermuda.....	0	5	0	11	6	8	0	1	0	31										
SOUTH AMERICA—																				
Catharina Sophia, Surinam	7	15	10	29	29	2	0	1	0	93	0	4	26	44	1	0	0	1	76	
AZORES—																				
Horta, Fayal.....	3	24	2	8	0	16	6	1	24	93	7	13	4	6	13	9	8	4	64	

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	7	14	0	1	13	15	22	15	6	93	6	12	0	1	11	13	18	19	80	
Red River Settlement.....	14	3	11	1	16	16	17	5	1	84	6	11	10	3	11	1	10	0	52	
St. John's .....	13	6	11	14	26	0	16	7	0	93	---	---	---	---	---	---	---	---	---	
St. Martin .....	0	12	0	22	2	33	7	17	0	93	---	---	---	---	---	---	---	---	---	
Stanbridge .....	6	9	6	15	28	1	14	11	8	93	---	---	---	---	---	---	---	---	---	
Toronto .....	3	14	1	10	3	29	0	29	4	93	---	---	---	---	---	---	---	---	---	
Wolfville .....	1	5	0	3	9	16	13	2	44	93	0	7	0	3	10	14	14	0	48	
MAINE—																				
Cornish, [Guptill] .....	7	6	2	10	21	6	11	29	0	92	---	---	---	---	---	---	---	---	---	
Cornish, [West] .....	7	6	3	8	9	26	23	11	0	93	1	0	0	0	1	2	5	2	11	
Gardiner .....	1	11	4	17	6	13	2	23	16	93	1	3	2	4	2	12	4	11	39	
Monson .....	5	2	0	16	17	1	5	47	0	93	---	---	---	---	---	---	---	---	---	
Perry .....	2	1	0	17	14	13	5	40	1	93	4	1	0	0	3	12	12	7	39	
Portland .....	9	10	1	12	24	14	10	13	0	93	2	0	0	2	3	6	15	6	34	
Steuben .....	3	10	0	10	0	42	4	15	9	93	2	6	0	0	0	19	10	10	47	
NEW HAMPSHIRE—																				
Concord .....	1	12	0	14	0	31	0	23	10	91	0	0	2	0	0	3	0	2	7	
Francetown, [Bixby] .....	6	1	2	16	7	9	26	26	0	93	4	1	4	14	4	11	34	6	78	
Manchester .....	0	1	5	22	3	23	15	11	0	80	0	1	3	15	1	25	11	3	59	
North Barnstead .....	1	4	0	7	0	34	8	37	0	91	0	3	0	6	0	26	17	19	71	
Shelburne .....	0	0	33	0	0	0	59	0	1	93	2	1	5	4	3	7	33	17	72	
West Enfield .....	2	2	2	0	33	17	6	29	2	93	5	1	0	0	19	11	8	32	76	
VERMONT—																				
Brandon .....	10	1	0	16	35	6	4	12	9	93	2	0	0	0	1	7	16	28	54	
Craftsbury .....	0	8	3	8	23	19	17	13	2	93	0	0	0	2	6	15	26	17	66	
Rupert .....	---	---	---	---	---	---	---	---	---	---	14	58	9	0	6	0	0	4	91	
St. Johnsbury .....	2	0	0	0	27	0	13	42	3	87	---	---	---	---	---	---	---	---	---	
Shelburn .....	19	0	0	0	56	3	0	13	0	91	3	9	11	9	0	0	0	0	32	
MASSACHUSETTS—																				
Amherst .....	3	1	0	9	16	19	15	13	0	76	0	2	0	0	0	3	5	2	12	
Cambridge .....	3	4	7	7	2	26	7	16	21	93	---	---	---	---	---	---	---	---	---	
Florida .....	0	0	0	7	2	31	9	44	0	93	0	0	0	7	3	23	11	28	72	
Lawrence .....	6	11	9	19	5	21	6	16	0	93	0	0	0	0	0	0	1	0	1	
Mendon .....	0	16	2	0	4	37	2	32	0	93	1	10	2	0	4	31	3	25	76	
Nantucket .....	3	18	1	7	8	26	11	7	11	92	---	---	---	---	---	---	---	---	---	
New Bedford .....	2	12	1	11	5	34	4	24	0	93	2	3	1	0	1	6	6	14	33	
Newburyport .....	4	5	5	9	20	9	18	13	0	83	---	---	---	---	---	---	---	---	---	
Princeton .....	4	3	11	9	2	13	29	22	0	93	0	3	6	2	0	11	34	6	62	
Richmond .....	2	3	0	18	0	30	0	39	0	92	4	3	0	17	0	29	7	8	68	
Westfield .....	7	2	9	11	8	9	21	24	0	91	0	0	0	0	1	0	1	0	2	
Weymouth .....	2	4	0	13	0	31	2	10	0	62	---	---	---	---	---	---	---	---	---	
Williamstown .....	2	0	4	5	10	16	21	10	6	74	0	0	0	2	1	1	4	5	13	
Worcester .....	6	3	8	4	10	14	28	11	0	84	---	---	---	---	---	---	---	---	---	
RHODE ISLAND—																				
Providence .....	12	0	1	7	11	12	9	18	1	77	---	---	---	---	---	---	---	---	---	
CONNECTICUT—																				
Columbia .....	0	10	2	1	13	14	9	23	21	93	0	8	0	2	9	9	8	17	53	
New London .....	0	4	3	15	17	36	13	5	0	93	---	---	---	---	---	---	---	---	---	
Norwich .....	0	7	0	15	5	20	6	3	37	93	---	---	---	---	---	---	---	---	---	
Pomfret .....	8	7	2	6	16	15	5	32	0	91	5	5	1	2	0	13	8	21	64	
Saybrook .....	7	9	3	12	14	23	7	13	4	92	3	2	2	1	1	11	9	9	38	
Wallingford .....	6	11	2	10	13	15	6	13	17	93	1	2	1	2	2	15	17	8	48	
NEW YORK—																				
Baldwinsville .....	1	2	3	3	1	15	35	31	0	91	0	1	2	1	0	3	34	14	55	
Bellevue .....	36	0	2	0	42	5	1	1	2	90	---	---	---	---	---	---	---	---	---	
Bellport .....	6	8	0	20	17	21	11	6	4	93	7	3	0	2	0	1	2	5	20	
Beverly .....	3	3	0	16	4	12	0	15	1	54	2	3	0	8	4	9	5	7	38	
Blackwell's Island .....	11	8	8	8	18	19	8	13	0	93	---	---	---	---	---	---	---	---	---	
Cazenovia .....	1	2	4	6	9	8	30	22	7	89	0	3	1	5	4	11	30	11	65	
Clinton .....	0	0	3	1	10	42	20	14	0	93	3	0	0	0	5	23	15	23	69	
Eden .....	4	0	2	0	23	22	34	1	0	88	0	2	1	0	1	3	18	9	34	
Fairmount .....	9	2	7	18	15	13	18	10	0	92	---	---	---	---	---	---	---	---	---	



## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Flatbush .....	3	9	3	6	24	15	13	20	0	93	1	4	1	4	4	7	14	13	48	
Houseville .....	12	1	3	0	27	14	20	14	2	93	1	0	0	0	4	34	23	15	77	
McGrawville .....	0	4	3	10	0	11	35	5	23	91	—	—	—	—	—	—	—	—	—	
New York city .....	2	9	4	17	0	15	30	16	0	93	0	0	2	0	1	21	35	3	62	
Nichols .....	12	1	1	3	8	2	3	1	0	31	—	—	—	—	—	—	—	—	—	
Oswego .....	8	3	0	4	31	10	21	14	1	93	—	—	—	—	—	—	—	—	—	
Ovid .....	8	5	1	11	12	23	9	29	0	93	5	2	6	3	14	9	6	14	59	
Penn Yan .....	2	0	0	0	33	4	52	2	0	93	—	—	—	—	—	—	—	—	—	
Rochester, [Harkness] .....	12	0	3	0	24	7	22	4	21	93	—	—	—	—	—	—	—	—	—	
Rochester, [Palmer] .....	13	7	1	1	10	20	30	10	0	92	3	1	1	0	2	4	12	8	31	
Sag Harbor .....	9	2	10	12	21	12	16	10	1	93	0	2	0	0	2	11	16	4	35	
Saratoga .....	1	13	4	12	4	34	21	4	0	93	1	13	4	11	5	32	24	3	93	
Spencertown .....	14	2	0	2	16	19	14	26	0	93	9	0	1	0	2	17	14	37	80	
Townsendville .....	7	1	3	12	14	11	9	26	10	93	2	0	0	0	5	10	21	17	55	
Wampsville .....	0	1	3	0	22	11	59	2	0	93	0	0	4	1	17	5	48	2	77	
Waterford .....	6	1	0	1	14	14	16	0	9	61	0	0	0	0	0	1	5	1	7	
Wellsville .....	0	0	39	1	0	2	50	1	0	93	0	0	0	2	2	2	1	3	10	
NEW JERSEY—																				
Bloomfield .....	0	9	0	14	0	53	0	14	0	90	—	—	—	—	—	—	—	—	—	
Burlington .....	11	6	7	13	15	7	27	5	1	92	2	0	1	4	3	16	25	2	53	
Lambertville .....	4	3	2	13	10	19	2	31	0	84	—	—	—	—	—	—	—	—	—	
Newark .....	1	9	0	8	4	20	2	18	0	62	—	—	—	—	—	—	—	—	—	
Sergeantsville .....	2	0	0	1	4	15	50	6	0	78	0	0	0	2	4	14	13	4	37	
PENNSYLVANIA—																				
Bedford .....	0	0	0	8	1	21	5	42	0	77	0	1	0	4	1	15	7	25	53	
Berwick .....	5	2	28	5	8	5	35	3	1	92	—	—	—	—	—	—	—	—	—	
Cannonsburg .....	0	0	16	3	1	7	54	7	5	93	—	—	—	—	—	—	—	—	—	
Chromedale .....	4	14	3	12	6	3	6	15	30	93	2	3	1	5	2	14	19	18	64	
Easton .....	1	2	3	15	10	11	21	12	14	89	1	2	2	2	8	10	13	16	54	
Fleming .....	1	3	3	11	4	17	0	39	6	93	4	0	1	2	3	10	6	25	51	
Gettysburg .....	15	3	5	3	16	19	10	14	8	93	2	1	2	2	13	7	21	20	68	
Harrisburg, [Heisely] .....	2	0	0	22	5	1	21	32	0	83	1	0	0	8	1	1	15	18	44	
Harrisburg, [Hickok] .....	12	6	20	4	4	8	29	0	1	93	0	0	0	0	0	0	1	1	2	
Lewisburg .....	4	1	2	8	2	24	25	7	20	93	2	1	17	3	0	1	2	3	29	
Meadville .....	0	1	0	1	13	8	9	19	42	93	1	0	1	0	2	5	20	17	46	
Morrisville .....	2	4	4	8	17	24	3	8	23	93	1	1	1	5	7	30	12	0	63	
Mount Joy .....	10	4	0	26	4	0	1	10	35	90	0	2	0	4	0	3	7	11	27	
Murrysville .....	0	3	0	4	2	17	13	9	44	92	0	1	2	2	1	12	28	19	65	
Nazareth .....	9	3	2	7	6	9	15	6	7	64	2	1	1	1	3	2	8	3	21	
Norristown .....	0	0	2	13	4	31	28	0	0	78	0	1	3	6	1	21	23	2	57	
North Whitehall .....	0	0	3	0	6	6	9	6	63	93	0	0	5	0	5	6	14	7	37	
Philadelphia .....	6	4	5	14	9	25	8	22	0	93	0	0	1	2	2	13	7	10	35	
Pittsburg, [Martin] .....	1	0	7	3	9	5	24	1	43	93	2	10	20	4	1	0	2	0	39	
Pocopson .....	5	3	3	10	17	25	25	1	4	93	0	2	0	1	7	11	23	2	46	
Shamokin .....	0	1	1	3	14	17	57	0	0	93	0	1	0	0	1	2	45	6	55	
Tarentum .....	17	0	0	4	7	15	9	5	36	93	4	0	0	0	4	6	54	9	77	
West Haverford .....	2	5	0	7	3	17	5	22	1	62	3	2	3	3	2	10	11	7	41	
Westtown .....	7	9	5	10	8	23	1	26	3	92	0	3	2	3	3	11	7	24	53	
DELAWARE—																				
Newark .....	3	13	3	3	2	10	5	29	0	68	2	13	3	2	2	8	5	14	49	
MARYLAND—																				
Annapolis .....	17	16	4	17	13	9	9	7	1	93	1	0	0	0	0	24	5	2	32	
Bladensburg .....	0	9	1	0	1	12	1	8	0	32	—	—	—	—	—	—	—	—	—	
Frederick .....	0	10	0	4	5	9	12	13	35	88	5	0	0	3	2	4	36	4	54	
Sykesville .....	10	3	4	10	7	15	32	12	0	93	2	0	3	11	1	3	52	1	73	
DISTRICT OF COLUMBIA—																				
Washington, [Smith Inst] .....	0	16	2	9	2	26	4	31	3	93	—	—	—	—	—	—	—	—	—	
VIRGINIA—																				
Alexandria .....	2	10	6	5	20	10	11	23	0	82	—	—	—	—	—	—	—	—	—	
Ashland .....	0	0	0	16	1	13	1	13	49	93	1	0	0	0	0	9	15	4	29	
Berryville .....	3	12	6	10	12	22	15	13	0	93	8	1	1	4	8	21	21	11	76	
Crack Whip .....	5	9	15	2	17	3	7	3	4	65	2	1	2	0	9	2	31	1	48	





## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Madison, [Atkins].....	3	11	2	8	3	11	11	12	25	86	1	0	0	0	1	0	2	3	7	
Madison, [Cunningham] ..	2	12	2	12	5	21	6	10	22	92	3	2	0	0	5	24	14	16	64	
Medina.....	16	14	3	3	1	28	6	21	0	92	2	8	0	1	0	13	16	6	46	
Savannah.....	3	0	0	3	4	38	20	25	0	93	2	0	0	2	2	27	16	14	63	
Sidney.....	1	6	5	23	6	29	11	9	0	90	0	16	0	15	2	21	8	11	73	
Urbana.....	1	0	4	9	7	14	5	8	34	82	2	2	2	0	4	17	21	8	56	
Welchfield.....	7	3	5	20	6	26	12	14	0	93	1	2	0	3	2	9	14	11	42	
MICHIGAN—																				
Battle Creek.....	8	4	5	4	22	13	13	6	18	93	6	2	0	0	4	8	31	12	63	
Cooper.....	0	0	4	0	0	0	32	0	57	93	0	1	1	2	0	3	25	3	35	
Copper Falls Mines.....	11	9	0	29	12	13	6	13	0	93	0	3	0	3	0	12	4	3	25	
Grand Rapids, [Currier]..	1	9	7	12	0	37	5	5	17	93	6	6	5	1	3	7	38	12	78	
Grand Rapids, [streng] ..	5	9	4	10	5	24	25	11	0	93	1	4	0	5	3	69	5	1	88	
Monroe.....	1	3	0	6	5	68	8	2	0	93	0	2	4	4	0	12	25	17	64	
New Buffalo.....	13	3	0	9	1	37	6	24	0	93	10	2	0	5	0	24	4	14	59	
Port Huron.....	8	4	5	4	22	13	13	6	18	93	6	2	0	0	4	8	31	12	63	
INDIANA—																				
Evansville.....	6	3	1	3	21	31	5	23	0	93	1	12	21	7	3	2	5	3	54	
Logansport.....	19	6	11	2	1	14	13	27	0	93	0	0	0	0	0	0	0	0	0	
Michigan City.....	20	10	1	10	28	12	2	6	4	93	0	0	0	0	0	0	0	0	0	
New Harmony.....	5	1	0	15	14	13	5	11	0	64	0	0	0	0	0	0	0	0	0	
Richmond.....	0	4	3	4	3	21	7	10	29	81	0	0	0	0	0	0	0	0	0	
ILLINOIS—																				
Athens.....	1	9	0	25	0	29	1	27	0	83	0	3	0	4	0	3	10	41	61	
Augusta.....	4	3	9	12	16	14	8	12	15	93	5	3	2	2	8	8	10	5	43	
Brighton.....	0	6	1	4	18	48	1	15	0	93	0	4	3	5	0	20	1	8	41	
Edgington.....	5	13	0	16	1	27	2	28	1	93	5	9	0	16	1	30	2	24	88	
Fremont Centre.....	11	12	11	14	12	12	15	6	0	93	0	0	0	0	0	0	0	0	0	
Manchester.....	1	6	3	0	19	28	27	9	0	93	2	1	4	1	13	14	22	6	63	
Marengo.....	0	10	4	34	6	34	3	2	0	93	0	0	0	0	0	0	0	0	0	
Ottawa.....	6	12	11	8	7	18	9	15	8	88	1	1	2	0	2	10	3	13	32	
Pekin.....	6	9	2	9	22	9	3	16	17	93	7	2	0	0	8	8	8	10	43	
Peoria.....	0	21	11	3	16	12	18	12	0	93	0	1	0	0	1	3	12	2	19	
Riley.....	4	7	16	8	8	9	7	14	18	91	0	0	0	0	0	0	0	0	0	
Warsaw.....	2	10	1	22	11	26	7	13	0	92	10	2	0	2	6	8	5	11	44	
West Salem.....	7	4	5	8	19	8	6	5	31	93	4	1	0	0	3	7	37	16	68	
West Urbana.....	2	11	1	16	12	20	9	22	0	93	6	0	0	0	0	0	0	0	7	
Winnebago.....	2	21	1	14	5	17	12	21	0	93	1	1	1	0	1	1	29	5	39	
MISSOURI—																				
Cape Girardeau.....	14	8	8	17	23	20	1	26	9	123	10	11	0	14	8	28	0	14	85	
Palmyra.....	1	7	4	4	7	23	13	3	48	110	2	7	4	1	3	33	24	4	78	
St Joseph.....	0	13	1	44	5	23	0	12	24	122	0	0	0	0	0	0	0	0	0	
St. Louis.....	6	9	16	16	17	5	16	8	0	93	0	0	0	0	0	0	0	0	0	
Springfield.....	4	7	1	7	21	3	0	0	41	84	0	0	0	0	0	0	0	0	0	
WISCONSIN—																				
Appleton.....	14	22	0	1	3	31	10	11	1	93	10	18	15	1	5	28	8	7	92	
Bay City.....	1	27	0	1	18	28	6	7	0	88	5	21	12	6	0	7	0	0	51	
Beloit.....	14	8	7	10	15	15	10	14	0	93	2	0	0	0	0	2	2	2	8	
Janesville.....	6	13	9	9	19	9	5	10	13	93	0	0	0	0	0	0	0	0	0	
Kenosha.....	1	6	20	3	11	11	4	5	29	90	0	0	0	0	0	0	0	0	0	
Madison, [Sterling] ..	6	7	3	5	15	15	6	18	0	75	0	0	0	0	0	0	0	0	0	
Manitowoc.....	11	6	0	10	17	15	11	17	0	93	1	0	0	0	0	3	18	5	27	
Milwaukee, [Pomeroy].....	11	11	11	17	0	23	13	7	0	93	0	0	0	0	0	0	0	0	0	
Milwaukee, [Winkler].....	8	15	17	16	6	11	8	12	0	93	0	0	0	0	0	0	0	0	0	
New London.....	15	3	3	1	8	18	28	17	0	93	6	3	0	0	0	9	25	18	61	
Platteville.....	3	13	5	20	18	5	11	18	0	93	0	5	7	4	3	30	4	15	68	
Waukesha.....	16	2	0	3	15	6	8	8	35	93	1	0	6	0	5	7	12	1	32	
IOWA—																				
Bellevue.....	7	12	2	16	12	11	11	22	0	93	2	7	0	5	1	4	2	13	34	
Border Plains.....	22	1	3	20	27	5	5	8	2	93	2	0	0	0	0	1	6	15	24	
Dubuque.....	9	6	2	11	15	18	2	6	18	87	4	3	2	7	3	9	9	13	50	
Fairfield.....	1	3	4	13	12	10	7	13	30	93	9	5	9	2	3	0	3	0	31	

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
IOWA—Continued.																			
Fort Madison.....	0	2	0	18	5	44	■	23	1	93	2	2	0	3	1	15	23	■	55
Franklin.....	3	9	9	8	32	3	7	5	17	93	—	—	—	—	—	—	—	—	—
Iowa City.....	1	6	2	13	14	19	4	10	20	89	—	—	—	—	—	—	—	—	—
Muscatine.....	0	13	0	25	4	39	7	5	0	93	0	7	0	2	0	27	1	9	46
Pleasant Plain.....	5	7	9	4	16	22	7	10	2	82	0	0	0	1	0	6	24	10	41
Sioux City.....	1	6	7	17	28	7	2	25	0	93	0	3	0	6	1	3	5	12	30
MINNESOTA—																			
Hazlewood.....	0	3	2	3	17	6	5	27	0	63	0	2	2	0	0	2	9	1	16
Princeton.....	9	6	7	14	13	3	12	6	23	93	3	1	2	0	3	3	24	6	42
NEBRASKA—																			
Omaha.....	9	9	1	7	24	15	■	8	18	93	2	6	1	1	9	20	10	15	64
KANSAS—																			
Council City.....	7	2	5	10	33	10	5	6	15	93	—	—	—	—	—	—	—	—	—
Lawrence.....	12	3	0	7	44	10	7	8	2	93	1	1	0	0	1	5	10	0	18
DAKOTA—																			
Fort Union.....	4	12	11	■	■	8	25	24	0	93	1	4	8	3	1	4	10	11	42
UTAH—																			
Great Salt Lake City....	51	0	15	13	25	0	12	8	0	124	1	0	2	0	6	0	3	0	12
CALIFORNIA—																			
Sacramento.....	8	2	0	29	25	21	3	5	0	93	0	0	0	6	■	3	1	0	16
San Francisco.....	0	0	0	0	0	1	52	0	40	93	0	0	1	0	2	7	40	0	50
WEST INDIES—																			
St. George's, Bermuda...	0	4	1	2	1	13	3	7	0	31	—	—	—	—	—	—	—	—	—
SOUTH AMERICA—																			
Catharina Sophia, Surinam.	2	20	19	30	4	12	2	4	0	93	0	14	25	23	0	3	1	3	69
AZORES—																			
Horta, Fayal.....	13	22	2	■	7	9	10	1	23	93	21	9	1	5	5	10	21	3	75



## No. 46.—WINDS—NUMBER OF OBSERVATIONS—SEPTEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	5	11	1	0	7	23	17	22	4	90	2	11	0	0	8	18	11	13	63
Red River Settlement .....	22	0	0	0	17	12	13	3	0	67	8	16	2	4	17	1	0	2	50
St. John's .....	8	16	0	8	6	10	23	19	0	90	—	—	—	—	—	—	—	—	—
St. Martin .....	0	7	3	15	3	40	6	16	0	90	—	—	—	—	—	—	—	—	—
Stanbridge .....	5	5	2	15	27	8	15	8	7	90	—	—	—	—	—	—	—	—	—
Toronto .....	1	10	2	12	1	20	0	26	18	90	—	—	—	—	—	—	—	—	—
Windsor .....	9	4	3	1	2	23	15	16	17	90	0	0	0	0	0	2	3	1	6
Wolfville .....	0	5	2	5	1	7	30	12	28	90	1	1	1	6	0	12	20	19	60
MAINE—																			
Cornish, [Guptill] .....	9	2	1	8	15	6	10	39	0	90	0	0	0	0	1	0	1	2	4
Cornish, [West] .....	0	5	5	3	4	33	25	15	0	90	0	1	0	0	0	2	3	7	13
Gardiner .....	1	8	3	14	4	11	3	26	20	90	0	0	0	2	2	8	1	15	28
Monson .....	3	0	2	7	22	3	3	45	5	90	—	—	—	—	—	—	—	—	—
Perry .....	5	1	0	4	4	24	3	49	0	90	3	0	0	2	3	4	10	18	40
Portland .....	13	8	6	2	19	10	15	17	0	90	4	0	0	0	3	9	9	6	31
Steuben .....	5	14	0	2	0	39	5	17	8	90	3	1	1	1	0	24	13	4	47
NEW HAMPSHIRE—																			
Claremont .....	2	6	5	13	2	10	7	28	0	73	0	1	8	3	1	1	0	1	15
Concord .....	1	7	2	21	0	17	2	27	13	90	0	0	0	0	0	3	1	4	8
Francestown, [Bixby] .....	6	0	1	16	1	14	29	22	0	89	2	0	1	5	0	7	42	8	65
Francestown, [Root] .....	11	5	1	14	1	11	17	25	4	89	3	1	0	5	0	6	7	30	52
Manchester .....	0	0	0	11	1	13	10	19	0	54	0	0	0	11	0	8	5	5	29
North Barnstead .....	0	1	0	3	0	10	18	58	0	90	1	0	0	3	0	12	17	30	63
Shelburne .....	0	0	14	0	0	0	66	2	8	90	1	0	3	2	0	6	36	14	62
West Enfield .....	0	0	0	3	22	16	3	44	2	90	0	0	0	5	10	11	4	33	63
VERMONT—																			
Brandon .....	14	0	5	7	31	9	1	13	2	82	6	0	0	0	2	5	6	22	41
Craftsbury .....	7	5	0	5	36	10	13	11	3	90	7	1	0	0	6	8	17	20	59
Rupert .....	—	—	—	—	—	—	—	—	—	—	5	37	5	5	14	6	12	4	88
St. Johnsbury .....	4	0	0	4	22	4	16	28	11	89	0	0	3	0	9	0	21	5	38
Shelburn .....	11	0	0	0	45	3	0	12	0	71	0	2	6	10	1	1	0	0	20
MASSACHUSETTS—																			
Amherst .....	3	1	2	28	7	12	0	29	0	82	0	1	0	3	1	12	7	8	32
Cambridge .....	2	5	3	3	1	14	18	21	19	90	—	—	—	—	—	—	—	—	—
Florida .....	1	6	4	5	1	15	0	58	0	90	0	6	4	5	1	11	0	40	67
Lawrence .....	1	4	4	10	5	29	10	27	0	90	—	—	—	—	—	—	—	—	—
Mendon .....	0	10	0	4	2	37	0	37	0	90	0	8	1	5	—	17	0	30	63
Nantucket .....	5	20	3	10	1	19	2	13	17	90	—	—	—	—	—	—	—	—	—
New Bedford .....	7	16	0	5	3	32	7	20	0	90	1	0	1	1	0	2	8	6	19
Newburyport .....	4	4	9	8	11	11	17	22	0	86	—	—	—	—	—	—	—	—	—
Princeton .....	5	9	11	1	1	15	30	18	0	90	0	1	5	0	0	4	29	11	50
Richmond .....	1	2	0	10	0	32	0	28	0	73	1	1	0	7	1	8	0	11	29
Westfield .....	5	5	7	13	8	9	17	25	0	90	0	0	1	0	0	0	0	0	1
Weymouth .....	2	5	4	5	2	23	4	15	0	60	—	—	—	—	—	—	—	—	—
Williamstown .....	0	3	4	6	5	12	17	26	14	87	0	1	0	0	2	8	17	2	30
Worcester .....	6	3	2	10	1	21	38	7	0	88	—	—	—	—	—	—	—	—	—
RHODE ISLAND—																			
Providence .....	5	14	1	0	6	29	3	28	2	89	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia .....	5	2	12	2	3	17	10	24	15	90	2	0	6	0	0	4	7	16	35
New London .....	12	14	4	14	3	28	2	6	0	90	—	—	—	—	—	—	—	—	—
Norwich .....	1	20	1	5	5	8	5	17	28	90	—	—	—	—	—	—	—	—	—
Pomfret .....	5	13	2	4	8	27	3	26	0	88	2	8	2	3	5	11	2	14	47
Saybrook .....	10	10	11	8	1	18	8	18	5	89	0	3	5	0	0	9	4	6	27
Wallingford .....	7	9	0	5	14	13	2	24	16	90	1	5	1	1	0	13	13	6	40
NEW YORK—																			
Baldwinsville .....	0	0	4	1	0	11	54	16	0	86	0	0	0	1	0	2	36	7	46
Blackwell's Island .....	17	21	4	4	13	16	10	5	0	90	—	—	—	—	—	—	—	—	—
Bellport .....	15	4	5	16	6	15	13	16	0	90	—	—	—	—	—	—	—	—	—
Canton .....	4	6	0	2	5	48	3	9	1	78	2	5	0	1	4	27	6	7	52
Cazenovia .....	6	1	2	5	7	28	10	24	6	89	3	0	2	5	5	13	19	23	70
Clinton .....	8	3	2	2	11	38	14	12	0	90	5	0	0	1	9	16	8	21	60

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK--Continued.																			
Eden.....	9	7	7	2	23	20	9	3	0	80	4	2	1	0	6	7	16	2	38
Flatbush.....	11	9	5	8	14	15	7	21	0	90	1	1	1	2	0	6	14	11	36
McGrawville.....	0	0	3	15	1	7	38	23	1	88									
Morrisania.....	8	12	3	14	17	6	16	11	0	87									
New York city.....	7	11	4	7	4	18	27	12	0	90	1	3	0	2	1	23	11	0	43
Nichols.....	10	2	0	0	11	0	3	0	4	30									
Ogdensburg.....	6	0	0	2	1	12	6	3	0	30									
Oswego.....	17	0	3	5	33	6	18	5	3	90									
Ovid.....	4	1	2	6	20	26	13	18	0	90	3	0	2	2	7	25	11	19	69
Penn Yan.....	1	0	0	0	24	23	35	7	0	90									
Rochester, [Harkness].....	9	3	3	1	24	3	14	3	30	90									
Rochester, [Palmer].....	15	9	0	3	16	19	15	9	0	90	4	0	4	1	3	0	17	14	49
Sag Harbor.....	7	14	10	7	17	15	8	12	0	90	1	2	0	0	0	0	12	3	27
Saratoga.....	2	15	1	14	3	41	3	11	0	90	2	14	1	14	3	41	4	11	90
Spencertown.....	23	0	0	4	25	20	1	15	0	90	2	0	0	2	5	4	6	15	34
Townsendville.....	6	0	1	14	15	13	13	15	13	90	2	0	1	2	2	7	18	10	42
Wampsville.....	1	0	9	5	34	9	31	1	0	90	2	0	8	2	23	4	34	2	75
Waterford.....	16	1	0	0	23	22	16	0	12	90	1	0	0	0	0	5	4	3	13
Wellsville.....	0	0	41	3	0	2	37	7	0	90	0	0	0	0	0	1	0	0	1
NEW JERSEY--																			
Bloomfield.....	5	21	0	0	0	39	4	21	0	90									
Burlington.....	14	25	16	10	1	13	8	1	1	89	4	5	5	2	6	4	0	4	36
Lambertville.....	6	17	2	8	4	19	1	19	0	76									
Newark.....	8	18	0	1	0	21	1	11	0	60									
Sergeantsville.....	4	4	10	0	0	16	47	0	0	90	1	3	6	0	0	6	20	8	44
PENNSYLVANIA--																			
Bedford.....	0	2	0	11	2	18	5	40	0	78	0	1	0	3	2	8	7	21	42
Cannonsburg.....	0	14	16	0	0	3	30	9	16	88	0	0	0	0	0	1	1	0	2
Chromedale.....	3	21	6	3	3	6	3	13	32	90	1	0	3	5	0	7	17	8	41
Easton.....	5	6	7	5	4	3	21	15	15	81	1	1	2	2	2	5	11	0	30
Fleming.....	3	0	8	17	4	11	16	26	5	90	2	0	4	0	2	4	13	19	46
Gettysburg.....	14	9	4	2	18	13	4	7	11	82	3	6	2	1	0	14	9	7	48
Harrisburg, [Heisely].....	4	3	5	20	13	1	3	37	0	86	1	0	0	7	4	1	0	18	31
Harrisburg, [Hickok].....	11	12	15	3	12	4	20	13	0	90									
Lewisburg.....	8	2	4	6	5	18	19	14	21	87	1	2	1	0	1	5	3	9	22
Meadville.....	5	0	1	3	11	3	6	7	54	90	2	2	0	1	1	12	11	0	38
Morrisville.....	7	16	1	5	3	23	7	11	17	90	3	12	1	3	0	26	0	5	59
Mount Joy.....	8	1	0	23	0	3	0	8	47	90	1	2	4	10	3	2	5	6	33
Murrysville.....	2	9	6	2	0	16	4	10	41	90	2	2	0	4	0	12	17	10	47
Nazareth.....	12	15	1	1	4	0	13	7	12	74	3	0	0	0	0	2	7	5	17
Norristown.....	0	3	4	9	4	7	44	7	0	78	0	2	8	3	0	0	23	0	44
North Whitehall.....	4	3	8	0	1	6	7	10	46	85	0	2	5	0	0	3	12	3	25
Philadelphia.....	3	14	4	12	3	22	9	23	0	90	0	5	3	2	0	0	7	5	28
Pittsburg.....	1	0	11	4	0	6	13	2	39	84	1	5	15	1	1	0	1	1	25
Pocopson.....	7	13	4	2	9	24	17	0	0	82	2	1	0	1	1	8	8	4	25
Shamokin.....	0	0	3	6	15	7	59	0	0	90	2	0	0	0	0	1	54	0	57
Tarentum.....	10	1	2	2	4	8	6	13	44	90	4	0	1	2	2	16	18	9	52
West Haverford.....	4	5	2	5	0	20	3	18	3	60	0	1	1	1	1	5	17	11	37
Westtown.....	8	12	3	18	2	12	4	27	3	89	1	4	1	5	1	12	2	20	46
DELAWARE--																			
Newark.....	6	31	4	7	0	14	1	21	0	84	2	9	2	4	0	3	1	0	29
MARYLAND--																			
Annapolis.....	19	31	1	9	12	7	3	8	0	90	0	3	0	1	1	24	0	3	32
Bladensburg.....	1	22	1	3	1	11	1	6	0	46									
Frederick.....	2	12	1	2	1	9	14	16	27	84	0	1	1	2	1	3	21	4	33
Sykesville.....	13	16	2	11	10	10	18	10	0	90	1	7	0	4	5	5	33	0	61
VIRGINIA--																			
Alexandria.....	7	29	1	5	3	11	4	27	0	87									
Ashland.....	11	0	0	10	4	8	0	1	56	90	0	0	0	3	1	6	9	3	22
Berryville.....	9	19	4	9	6	18	11	14	0	90	7	1	3	1	5	10	19	11	57
Crack Whip.....	9	10	15	4	31	2	11	2	6	90	7	2	1	1	8	3	18	3	43
Crichton's Store.....	42	7	2	2	1	19	6	7	4	90	0	0	0	0	0	18	5	0	23



## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
VIRGINIA—Continued.																			
Kanawha .....	58	0	0	1	28	0	0	0	3	90	6	5	9	18	1	4	3	1	47
Lewisburg .....											1	0	0	0	0	12	7	0	20
Mos-y Creek .....	7	18	0	6	7	44	0	7	1	90	2	7	0	1	0	10	0	3	23
Portsmouth .....	2	34	10	8	2	7	6	21	0	90									
Rose Hill .....	5	17	8	7	5	5	8	12	11	78	0	0	0	0	0	0	2	3	5
Rougemont .....	17	2	12	0	16	4	10	10	16	87	9	0	2	1	2	3	24	6	47
Salem .....	2	6	11	7	0	11	29	24	0	90	0	4	9	2	0	6	24	2	47
Smithfield .....	11	20	19	7	8	6	6	12	0	89	5	10	15	4	3	5	11	10	63
Wirt Court-House .....	2	5	0	3	0	17	0	20	19	66	0	3	0	4	0	17	0	20	44
NORTH CAROLINA—																			
Chapel Hill .....	24	17	4	0	1	8	19	17	0	90	3	13	5	1	0	20	6	7	55
Murfreesborough .....	14	16	7	1	5	6	3	7	0	59	7	13	3	0	3	5	2	3	36
Warrenton .....	3	53	3	1	0	7	5	18	0	90									
SOUTH CAROLINA—																			
All Saints .....	20	34	5	5	7	5	8	6	0	90	7	29	5	3	2	15	22	5	88
Camden .....	5	36	7	0	2	8	3	21	9	90	3	13	6	6	0	14	5	5	52
Charleston, [Dawson] .....	1	36	6	5	0	10	0	2	0	60									
Charleston, [Johnson] .....	2	21	1	0	0	3	0	3	0	30									
GEORGIA—																			
Augusta .....	18	25	7	5	2	3	14	4	0	78									
Hillsborough .....	4	20	31	3	6	6	9	11	0	90	1	2	1	0	0	0	0	1	5
Philomath .....	0	1	0	3	0	15	0	0	0	19									
Savannah .....	13	35	4	6	12	3	6	11	0	90	0	0	1	0	4	3	0	0	8
Sparta .....	9	37	7	5	2	11	5	10	0	86	0	7	6	6	3	10	1	2	40
The Rock .....	14	23	9	12	5	7	1	19	0	90									
Whitemarsh Island .....	4	14	1	1	4	5	4	2	6	41	1	1	0	2	3	8	0	3	18
Zebulon .....	1	29	45	0	0	0	21	3	0	90	0	4	9	4	4	5	4	1	31
FLORIDA—																			
Alligator .....	12	19	21	9	3	8	7	3	8	90	1	5	3	2	0	19	12	4	46
Belair .....	4	22	17	10	5	4	4	10	12	88	0	0	5	20	1	16	6	4	52
Gainesville .....	14	37	13	2	5	5	8	6	0	90									
Jacksonville .....	8	41	1	6	1	7	5	9	0	78	0	9	6	0	2	23	2	1	43
St. Augustine .....	0	59	2	10	0	4	0	15	0	90	0	53	4	2	0	2	0	17	78
Salt Ponds .....	4	28	16	9	0	1	0	2	0	60									
Warrington .....	9	19	24	12	13	4	5	0	4	90	0	1	0	0	1	1	9	1	13
ALABAMA—																			
Auburn .....	6	4	27	19	5	5	21	1	0	88	0	13	0	1	1	10	1	0	26
Carlowville .....	6	16	17	12	11	14	8	6	0	90	1	0	3	7	15	9	4	1	40
Greene Springs .....	15	7	31	5	1	6	11	2	0	78	1	0	5	0	0	1	3	1	11
Greensborough .....	20	0	2	3	1	2	3	14	0	45	0	0	0	3	1	0	8	2	14
MISSISSIPPI—																			
Columbus .....	17	5	16	25	7	7	2	10	1	90	5	1	6	11	4	10	10	2	49
LOUISIANA—																			
Black River .....	21	18	5	18	16	0	0	2	10	90	8	1	7	3	7	5	3	4	36
Trinity .....	0	4	47	12	25	0	2	0	0	90	2	1	5	5	12	7	0	2	34
TEXAS—																			
Austin .....	20	3	7	2	54	0	2	1	1	90	3	5	6	14	13	7	5	0	53
Union Hill .....	6	30	18	18	11	2	2	2	1	90	12	7	5	10	21	0	1	0	56
Washington .....	54	0	0	0	24	0	0	2	10	90	3	1	0	0	2	1	0	0	7
TENNESSEE—																			
Glenwood .....	13	8	3	11	10	6	2	4	33	90	3	5	1	7	3	17	24	4	64
KENTUCKY—																			
Danville .....	6	9	10	4	0	33	3	13	0	78	1	0	4	2	0	21	4	7	39
Paris .....	4	12	4	12	7	14	13	23	0	89	0	0	3	0	4	0	22	0	29
Springdale .....	0	6	9	2	3	15	11	3	41	90									
OHIO—																			
Bellefontaine .....	2	8	3	8	4	36	10	11	0	82	0	6	0	2	0	35	5	12	60
Cincinnati, [Harper] .....	7	4	3	2	1	34	29	10	0	90	0	0	0	0	0	1	0	0	1
Cleveland .....	14	6	4	17	15	10	7	8	2	83	3	0	1	0	1	4	9	6	24
Edinburg .....	2	34	4	17	1	2	0	2	28	90	0	0	0	0	0	13	31	13	57
Hillsborough .....	2	12	1	9	0	25	1	24	1	75	0	1	0	4	0	11	2	9	27
Hiram .....	6	5	4	8	24	21	6	8	6	88	2	3	2	0	5	9	18	10	49

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Jefferson.....	0	9	0	9	0	39	0	33	0	90	0	6	0	9	0	31	0	23	69
Lancaster.....	0	3	8	4	2	10	7	4	27	65	0	3	9	4	3	6	7	2	34
Madison, [Atkins].....	8	6	8	9	5	5	14	7	28	90	2	0	1	0	0	0	12	0	15
Madison, [Cunningham].....	1	19	2	6	4	17	5	6	24	84	0	6	1	4	4	22	4	8	49
Medina.....	7	6	3	7	0	26	15	11	0	75	1	6	1	4	0	18	27	9	66
Savannah.....	1	13	0	2	0	46	6	22	0	90	0	10	0	1	0	26	3	14	54
Urbana.....	1	8	4	10	2	9	8	6	42	90	2	3	2	0	3	15	23	7	55
Welchfield.....	7	6	4	28	12	17	6	10	0	90	1	2	0	3	6	9	10	5	36
MICHIGAN—																			
Battle Creek.....	5	6	8	3	19	16	9	5	19	90	5	3	1	0	1	20	16	10	56
Cooper.....	0	0	2	0	0	0	42	1	45	90	0	0	2	0	0	1	26	0	29
Grand Rapids, [Currier].....	0	20	0	7	1	27	3	7	24	89	1	4	0	2	0	10	6	7	30
Grand Rapids, [Streng].....	8	11	5	2	8	34	11	11	0	90	2	7	2	2	1	20	25	7	66
Marquette.....	3	18	0	8	2	29	0	20	1	87	0	0	0	2	0	1	0	3	12
Monroe.....	4	0	0	11	3	25	24	23	0	90	3	0	0	11	3	22	0	19	67
New Buffalo.....											0	1	1	1	1	32	20	11	67
Port Huron.....	9	7	0	1	1	40	3	11	3	75	3	1	0	0	0	22	12	8	46
INDIANA—																			
Evansville.....	7	2	0	6	28	22	13	12	0	90	4	1	0	4	5	4	21	3	45
Logansport.....	13	5	8	3	1	11	21	28	0	90									
Michigan City.....	18	6	2	7	32	5	2	11	0	90	17	4	1	0	16	4	0	4	55
New Albany.....	6	4	0	7	5	30	7	28	0	87	2	2	0	5	5	18	6	10	48
New Harmony.....	2	0	4	15	16	13	5	15	0	70									
ILLINOIS—																			
Athens.....	2	11	3	19	4	29	1	15	0	84	0	2	3	4	0	18	21	17	65
Augusta.....	3	2	9	7	15	24	7	0	14	90	8	1	4	0	7	10	9	8	42
Aurora.....	5	12	3	10	13	22	11	14	0	90	0	4	1	3	2	28	14	13	65
Batavia.....	0	17	0	1	0	50	0	12	0	90	0	9	0	1	0	47	0	11	68
Brighton.....	3	0	0	7	13	30	16	13	1	89	0	2	0	4	0	13	4	8	37
Chicago.....	6	3	0	9	30	21	0	15	0	90									
Edgington.....	9	10	2	7	7	40	0	15	0	90	7	8	0	7	0	35	0	11	76
Fremont Centre.....	0	15	0	6	27	18	13	11	0	90									
Manchester.....	5	2	2	1	40	14	16	10	0	90	3	2	1	1	26	0	10	8	60
Marengo.....	0	5	0	19	19	41	1	5	0	90									
Ottawa.....	1	11	2	9	16	21	4	11	6	81	1	1	0	0	4	16	1	3	26
Pekin.....	12	6	5	3	29	13	1	9	12	90	2	3	3	2	5	15	11	10	51
Peoria.....	8	10	10	3	24	10	20	5	0	90	1	0	1	0	4	4	10	1	21
Riley.....	2	7	3	7	11	20	5	6	15	76									
West Salem.....	5	3	1	0	28	0	6	5	30	90	0	0	0	0	0	7	28	0	35
West Urbana.....	14	5	2	12	22	22	1	12	0	90	0	0	0	0	0	2	0	0	2
Winnebago.....	1	12	1	12	11	28	1	24	0	90	1	2	0	0	1	8	15	7	34
MISSOURI—																			
Cape Girardeau.....	17	13	6	17	35	7	4	21	0	120	17	1	0	5	26	21	2	9	81
Palmyra.....	1	4	2	7	2	19	10	1	0	55	0	4	1	7	1	20	10	2	45
St. Joseph.....	0	7	0	33	1	46	0	16	16	119									
St. Louis.....	8	0	10	11	25	9	7	12	0	90									
Springfield.....	0	2	1	12	6	15	1	0	13	50									
WISCONSIN—																			
Appleton.....	12	21	2	0	4	36	8	3	0	86	0	16	1	0	4	33	2	5	71
Bay City.....	1	21	1	0	9	39	10	8	0	89	0	5	0	0	0	24	0	2	31
Beloit.....	18	7	1	10	27	10	13	4	0	90	1	1	0	0	3	5	0	2	12
Janesville.....	0	5	2	5	26	20	11	10	8	90									
Kenosha.....	4	5	10	5	10	10	5	3	32	84									
Lind.....	7	4	3	3	27	12	20	0	0	85	0	1	0	1	11	10	18	2	49
Madison, [Sterling].....	4	3	3	2	28	27	8	13	0	88									
Manitowoc.....	12	4	2	5	19	21	12	15	0	90	0	2	0	0	3	12	15	5	37
Milwaukee, [Pomeroy].....	3	11	0	29	5	11	3	22	0	90									
Milwaukee, [Winkler].....	7	14	3	23	4	13	11	15	0	90									
New London.....	22	6	0	0	6	36	6	14	0	90	14	0	0	2	6	19	11	11	69
Platteville.....	10	5	5	27	10	9	5	19	0	90	7	4	2	2	3	15	8	18	59
Waukesha.....	8	5	4	0	11	8	4	8	0	43	0	0	0	0	2	0	5	0	13



## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1857.

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
IOWA—																				
Bellevue.....	3	4	2	11	27	12	5	25	0	87	0	1	1	1	0	4	1	8	22	
Border Plains.....	21	3	1	20	38	2	1	2	2	90	1	0	0	2	3	4	7	9	26	
Dubuque.....	8	11	0	3	15	15	5	8	19	84	4	9	0	1	8	12	8	6	48	
Fairfield.....	8	3	6	11	7	17	0	9	29	90	16	3	10	0	0	0	6	1	36	
Fort Madison.....	0	10	0	10	1	47	1	16	5	90	4	3	1	2	2	18	14	12	56	
Franklin.....	10	6	2	2	28	15	4	7	16	90										
Muscatine.....	1	10	0	35	0	30	2	12	0	90	0	5	0	5	1	19	0	7	37	
Pleasant Plain.....	0	4	0	10	19	21	2	15	3	83	0	7	1	0	3	20	11	9	51	
Sioux City.....	2	1	3	11	11	8	0	18	0	54	1	0	0	0	3	0	5	10	19	
MINNESOTA—																				
Burlington.....	0	0	3	3	12	2	9	1	0	30										
Hazlewood.....	4	4	0	8	31	4	5	34	0	90	3	2	0	3	10	1	4	5	28	
Princeton.....	9	10	2	9	19	9	8	5	21	90	10	6	3	2	8	4	10	6	49	
NEBRASKA—																				
Bellevue.....	28	0	3	1	35	1	0	0	5	73										
Omaha.....	3	3	0	17	21	16	3	18	9	90	2	1	1	5	11	21	12	16	69	
KANSAS—																				
Lawrence.....	11	2	0	4	53	1	7	12	0	90	3	0	0	0	0	3	3	0	15	
DACOTAH—																				
Fort Union.....	2	9	8	6	5	14	31	15	0	90	2	3	1	2	2	8	9	10	37	
UTAH—																				
Great Salt Lake City....	31	3	14	9	30	8	13	11	1	120	4	1	0	0	0	2	3	0	10	
CALIFORNIA—																				
Sacramento.....	14	3	1	20	20	17	2	13	0	90	0	0	0	0	3	13	1	3	20	
San Francisco.....	0	1	0	0	0	5	45	0	39	90	4	2	0	0	2	9	28	2	47	
SOUTH AMERICA—																				
Cathar'a Sophia, Surinam.	1	52	12	18	8	1	0	0	0	90	0	2	20	33	2	0	0	0	57	
AZORES—																				
Horta, Fayal.....	11	11	2	6	8	25	8	4	10	85	9	4	3	3	5	19	16	11	70	

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal.....	10	17	0	1	9	13	19	12	12	93	7	15	0	2	9	12	16	11	72
Red River Settlement.....	16	2	0	3	26	14	10	6	0	77	8	16	5	8	14	0	0	2	53
St. John's.....	6	28	5	9	5	18	12	10	0	93	—	—	—	—	—	—	—	—	—
St. Martin.....	0	31	3	14	2	27	4	12	0	93	—	—	—	—	—	—	—	—	—
Stanbridge.....	4	22	7	22	16	2	10	4	0	93	—	—	—	—	—	—	—	—	—
Toronto.....	3	24	2	11	2	7	4	28	12	93	—	—	—	—	—	—	—	—	—
Windsor.....	7	11	5	3	0	17	18	14	11	92	0	1	0	0	0	0	1	1	8
Wolfville.....	0	0	12	0	0	11	23	13	21	92	3	10	5	8	1	11	22	12	72
MAINE—																			
Cornish, [Guptill].....	10	8	7	2	4	17	11	34	0	93	0	0	0	0	0	1	0	2	0
Cornish, [West].....	8	19	8	3	4	27	12	12	0	93	0	0	0	0	0	5	1	10	16
Gardiner.....	2	23	1	8	3	10	7	18	20	93	3	7	0	3	2	12	1	7	35
Monson.....	12	3	1	2	9	2	7	48	9	93	—	—	—	—	—	—	—	—	—
Perry.....	5	9	0	7	13	17	4	38	0	93	7	10	0	1	0	11	4	9	48
Portland.....	15	26	8	2	17	0	8	15	0	92	1	2	0	0	3	5	5	7	23
Steuben.....	3	35	0	5	0	30	0	16	4	93	3	11	0	2	0	19	3	10	48
NEW HAMPSHIRE—																			
Claremont.....	5	10	16	5	1	0	14	17	0	74	5	1	5	0	0	3	3	0	23
Concord.....	1	21	3	12	0	8	1	33	13	92	0	0	0	0	0	1	0	2	3
Francetown, [Bixby].....	1	14	11	4	0	9	4	16	0	59	1	3	15	3	0	3	17	8	50
Francetown, [Root].....	9	21	4	4	0	17	5	25	7	92	5	13	5	2	1	10	3	18	57
Manchester.....	0	1	3	15	5	0	20	7	0	54	0	0	1	16	5	0	10	0	39
North Barnstead.....	10	26	0	2	0	4	13	38	0	93	5	29	1	0	0	6	24	11	76
Shelburne.....	0	0	18	0	0	0	63	2	10	93	1	0	6	8	1	11	25	20	72
VERMONT—																			
Brandon.....	30	0	6	13	16	7	2	14	5	93	4	0	0	0	2	5	0	15	32
Craftsbury.....	4	24	2	0	20	11	7	16	3	93	5	10	1	2	1	0	13	20	61
Rupert.....	—	—	—	—	—	—	—	—	—	—	1	46	3	12	10	0	5	3	89
St. Johnsbury.....	30	2	2	2	24	1	5	27	0	93	0	3	0	0	0	6	8	10	38
Shelburn.....	21	0	0	0	42	6	5	12	0	86	2	1	4	3	0	0	0	0	10
MASSACHUSETTS—																			
Amherst.....	0	7	2	21	3	10	0	36	0	88	1	5	0	4	0	0	8	10	43
Bridgewater.....	15	20	0	5	8	12	19	8	0	93	2	1	2	1	4	4	4	1	19
Cambridge.....	0	14	5	2	5	18	0	13	22	91	—	—	—	—	—	—	—	—	—
Florida.....	0	6	4	12	2	12	4	50	3	93	0	7	4	11	0	11	4	31	68
Lawrence.....	0	13	13	6	0	11	0	37	7	93	—	—	—	—	—	—	—	—	—
Mendon.....	0	31	3	0	1	31	2	25	0	93	0	26	3	0	1	22	1	0	62
Nantucket.....	5	28	4	15	10	13	5	13	0	93	—	—	—	—	—	—	—	—	—
New Bedford.....	6	24	4	11	4	17	3	24	0	93	3	1	1	2	2	6	7	4	26
Newburyport.....	8	13	8	0	16	2	20	11	0	78	—	—	—	—	—	—	—	—	—
Princeton.....	5	16	14	5	2	8	28	15	0	93	5	8	0	5	0	4	15	3	49
Westfield.....	5	10	6	14	3	4	17	33	0	92	0	0	0	0	0	1	2	1	4
Weymouth.....	5	4	6	5	6	14	9	13	0	62	—	—	—	—	—	—	—	—	—
Williamstown.....	2	2	8	11	7	8	11	28	16	93	12	0	0	2	9	5	9	5	42
Worcester.....	9	7	17	8	0	21	23	1	0	92	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia.....	6	18	4	4	0	12	2	18	29	93	3	8	2	3	0	7	3	17	43
New London.....	7	14	16	0	3	24	7	22	0	93	—	—	—	—	—	—	—	—	—
Norwich.....	3	23	2	8	4	14	1	12	26	93	—	—	—	—	—	—	—	—	—
Pomfret.....	6	26	3	3	13	10	0	31	0	92	1	15	3	2	4	17	1	15	58
Saybrook.....	12	20	7	9	3	13	8	3	6	81	3	7	3	1	4	15	5	1	39
Wallingford.....	21	17	3	6	8	8	6	24	0	93	1	10	1	2	0	11	11	6	42
NEW YORK—																			
Baldwinsville.....	6	8	10	0	5	11	38	7	0	85	5	4	1	1	0	2	39	5	57
Belport.....	8	24	2	23	3	8	9	16	0	93	—	—	—	—	—	—	—	—	—
Blackwell's Island.....	20	27	5	5	11	9	8	8	0	93	—	—	—	—	—	—	—	—	—
Canton.....	1	25	3	0	5	36	6	4	5	85	0	21	4	0	3	29	4	2	63
Cazenovia.....	10	2	5	4	12	8	12	35	3	91	6	1	3	2	1	13	17	32	75
Clinton.....	15	5	7	0	10	19	7	30	0	93	17	0	4	1	4	12	13	14	65
Eden.....	12	10	10	19	23	4	0	6	0	86	6	3	5	2	0	0	13	12	41
Flatbush.....	15	21	8	4	6	7	10	22	0	93	5	6	6	5	4	9	6	5	46
Madrid.....	0	28	0	0	1	22	2	0	17	73	0	22	0	0	0	17	2	3	44



## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1857.

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NEW YORK—Continued.																			
Morrisania .....	17	7	9	5	11	5	24	15	0	93	—	—	—	—	—	—	—	—	—
New York city .....	3	24	0	13	1	5	32	15	0	93	0	2	15	10	0	28	6	70	
Nichols .....	15	0	0	0	9	2	3	0	2	31	—	—	—	—	—	—	—	—	
Ogdensburg .....	6	5	0	0	2	12	2	3	0	30	—	—	—	—	—	—	—	—	
Oswego .....	4	21	13	9	11	10	20	4	1	93	—	—	—	—	—	—	—	—	
Ovid .....	16	5	2	3	18	16	14	19	0	93	10	0	0	0	3	17	17	62	
Penn Yan .....	0	4	0	0	11	19	39	20	0	93	—	—	—	—	—	—	—	—	
Pompey .....	11	9	0	0	19	12	12	24	0	93	0	0	1	1	0	0	0	4	
Rochester, [Harkness] ..	23	1	0	0	14	2	16	1	36	93	—	—	—	—	—	—	—	—	
Rochester, [Palmer] ..	15	20	7	0	18	7	12	8	0	93	8	12	6	10	7	7	11	71	
Sag Harbor .....	15	14	9	10	15	5	17	8	0	93	4	4	0	2	5	13	7	36	
Saratoga .....	9	13	3	2	7	19	2	8	0	63	7	13	3	2	7	20	3	63	
Spencertown .....	28	4	2	5	27	2	2	21	0	91	1	0	0	0	2	0	0	10	
Townsendville .....	0	0	1	8	11	17	12	35	9	93	0	0	0	0	0	17	9	43	
Wampsville .....	2	1	11	2	22	0	54	1	0	93	1	0	10	2	18	0	47	79	
Waterford .....	20	18	0	1	21	4	14	0	9	93	3	0	1	0	3	0	5	13	
Wellsville .....	0	0	24	0	0	0	67	2	0	93	0	0	0	0	0	2	1	4	
NEW JERSEY—																			
Bloomfield .....	6	16	1	7	3	20	6	34	0	93	—	—	—	—	—	—	—	—	
Burlington .....	8	17	17	4	3	5	5	7	0	66	3	9	9	1	2	9	9	46	
Lambertville .....	0	25	1	6	3	5	6	25	0	77	—	—	—	—	—	—	—	—	
Newark .....	6	22	4	3	1	7	5	14	0	62	—	—	—	—	—	—	—	—	
Sergeantsville] .....	0	3	11	0	1	17	19	0	0	57	0	1	17	0	1	4	6	31	
PENNSYLVANIA—																			
Bedford .....	0	0	0	12	0	18	1	25	0	56	0	0	0	7	0	19	2	45	
Cannonsburg .....	0	2	27	2	1	13	31	13	4	93	—	—	—	—	—	—	—	—	
Chromedale .....	13	19	4	1	3	5	1	22	25	93	4	6	5	2	4	16	11	52	
Easton .....	11	10	7	6	3	2	18	23	9	89	5	8	2	3	1	11	11	53	
Fleming .....	5	6	12	14	3	15	11	18	0	93	10	3	12	3	2	9	11	66	
Gettysburg .....	13	13	9	1	16	8	12	10	11	93	6	5	4	1	0	4	5	31	
Harrisburg, [Heisely] ..	16	5	6	27	3	0	7	29	0	93	2	1	1	10	2	0	2	30	
Harrisburg, [Hickok] ..	11	14	15	4	0	3	19	18	0	93	—	—	—	—	—	—	—	—	
Lewisburg .....	13	5	1	6	5	9	4	16	23	92	4	2	0	2	2	5	5	27	
Meadville .....	13	0	1	3	8	3	7	14	36	85	0	3	1	0	0	8	6	39	
Morrisville .....	3	24	17	0	6	18	4	5	10	93	1	18	8	6	1	21	2	62	
Mount Joy .....	0	2	0	30	0	1	0	25	3	61	1	0	0	25	0	0	1	38	
Murrysville .....	1	0	3	9	0	25	9	14	23	93	2	1	2	1	0	22	0	53	
Nazareth .....	7	8	1	0	0	1	21	13	20	71	0	2	0	0	0	1	2	9	
Norristown .....	3	6	13	7	0	8	29	16	0	82	2	7	9	2	0	8	27	65	
North Whitehall .....	9	6	7	0	0	7	7	4	53	93	8	2	4	0	0	5	11	34	
Philadelphia .....	3	28	4	2	0	19	7	30	0	93	0	3	2	1	0	6	6	25	
Pittsburg, [Martin] .....	1	2	12	5	10	8	20	3	32	93	3	15	13	9	0	0	2	46	
Pocopson .....	14	13	4	3	7	14	21	11	6	93	4	7	2	0	1	12	4	36	
Shamokin .....	0	0	0	2	29	22	39	1	0	93	2	0	0	0	0	1	78	81	
Tarentum .....	4	2	0	3	3	15	9	20	37	93	9	0	0	5	1	13	19	70	
West Haverford .....	0	11	8	1	1	10	6	23	2	62	3	9	2	0	0	10	12	45	
Westtown .....	4	9	5	0	3	4	1	17	1	53	3	6	5	2	4	5	1	33	
DELAWARE—																			
Newark .....	11	18	11	0	2	12	2	36	0	92	2	9	2	0	0	4	0	23	
MARYLAND—																			
Annapolis .....	17	25	2	3	13	10	6	15	2	93	2	4	0	0	5	16	1	30	
Bladensburg .....	1	13	3	1	0	10	0	6	0	34	—	—	—	—	—	—	—	—	
Frederick .....	2	20	0	3	3	3	14	26	19	90	4	1	4	2	4	2	17	47	
Sykesville .....	9	15	4	7	9	7	28	14	0	93	0	2	16	0	0	6	39	76	
DISTRICT OF COLUMBIA—																			
Washington, [Smith Inst.]	5	25	0	0	1	14	3	41	4	93	0	0	0	0	0	0	0	1	
VIRGINIA—																			
Alexandria .....	17	25	2	2	20	2	3	22	0	93	—	—	—	—	—	—	—	—	
Ashville .....	8	2	0	10	3	8	0	11	49	91	3	2	0	1	0	13	15	38	
Berryville .....	12	11	10	6	7	11	10	25	0	92	11	3	6	5	6	5	16	59	
Crack Whip .....	8	6	11	2	15	0	3	4	5	54	8	1	4	1	1	3	7	29	
Crichton's Store .....	25	12	1	1	10	10	18	12	4	93	0	0	0	0	0	10	6	16	

## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Lewisburg .....	0	0	0	0	0	0	0	1	0	1	0	1	9	0	0	3	14	14	41	
Mossy Creek .....	3	0	0	3	3	22	2	0	0	51	2	6	0	0	0	13	1	7	31	
Portsmouth .....	0	24	6	6	0	14	0	25	0	93	0	0	0	0	0	0	2	1	3	
Rose Hill .....	13	14	8	4	2	6	7	6	10	70	0	0	0	0	0	0	2	1	3	
Rougemont .....	9	0	17	1	5	3	8	9	6	64	6	2	15	0	1	1	6	0	31	
Salem .....	0	7	18	11	0	10	24	23	0	93	1	2	18	2	1	3	26	7	60	
Smithfield .....	20	14	12	2	9	5	14	16	0	92	10	5	5	3	3	6	16	10	58	
Winchester .....	0	0	0	1	0	5	23	5	58	92	0	0	0	0	0	0	10	0	10	
Wirt Court-House .....	0	5	0	7	0	15	1	24	29	81	0	2	0	5	1	37	1	15	61	
NORTH CAROLINA—																				
Chapel Hill .....	15	23	1	0	4	7	20	21	0	91	1	14	2	1	4	16	6	7	51	
Murfreesborough .....	3	15	8	9	2	7	17	16	15	92	2	13	5	5	2	6	18	7	58	
Warrenton .....	8	37	0	3	1	12	4	28	0	93	0	0	0	0	0	0	0	0	0	
SOUTH CAROLINA—																				
All Saints .....	21	27	0	1	2	8	8	17	0	93	6	16	7	1	1	14	28	5	78	
Camden .....	4	28	3	5	1	9	2	31	10	93	1	20	5	1	1	14	8	18	68	
Charleston, [Dawson] .....	0	39	3	2	0	3	0	15	0	62	0	0	0	0	0	0	0	0	0	
Charleston, [Johnson] .....	4	20	0	0	0	0	0	7	0	31	0	0	0	0	0	0	0	0	0	
GEORGIA—																				
Augusta .....	21	32	3	5	0	2	16	2	0	81	0	0	0	0	0	0	0	0	0	
Hillsborough .....	4	28	14	2	2	8	10	25	0	93	4	1	8	2	0	2	0	1	18	
Savannah .....	13	28	10	2	1	2	11	13	0	80	0	0	0	1	0	2	2	1	8	
Sparta .....	2	42	11	5	0	3	9	20	0	92	1	13	6	2	3	3	16	13	57	
The Rock .....	14	12	22	0	1	3	6	29	0	93	0	0	0	0	0	0	0	0	0	
Whitemarsh Island .....	8	44	2	2	1	1	3	16	16	93	3	11	1	2	2	0	7	12	47	
Zebulon .....	4	22	32	2	0	1	6	26	0	93	0	9	2	3	3	4	1	13	37	
FLORIDA—																				
Alligator .....	16	26	16	1	0	2	5	19	8	93	3	4	0	0	10	9	8	4	54	
Atsena .....	19	39	2	1	1	2	6	18	4	92	13	22	5	0	0	1	2	10	53	
Belair .....	7	26	31	1	0	0	0	7	3	75	1	10	2	11	2	9	15	8	58	
Gainesville .....	24	17	21	3	3	2	10	13	0	93	0	13	2	0	0	12	1	19	47	
Jacksonville .....	3	32	0	2	1	5	1	41	0	85	0	0	0	0	0	0	0	0	0	
St. Augustine .....	10	50	1	1	0	1	0	30	0	93	6	48	1	1	0	1	1	20	78	
Salt Ponds .....	15	22	7	3	0	1	4	8	2	62	0	0	0	0	0	0	0	0	0	
Warrington .....	5	18	36	14	4	4	5	7	0	93	0	0	0	0	0	0	5	0	5	
ALABAMA—																				
Auburn .....	7	10	25	16	2	3	11	17	0	93	1	13	0	9	2	9	11	5	59	
Carlowville .....	12	20	5	4	14	10	15	10	0	93	0	0	0	0	3	5	12	0	20	
Greene Springs .....	7	4	20	11	0	1	8	11	19	81	0	0	2	3	0	2	7	10	24	
Greensborough .....	7	4	6	17	2	2	4	27	0	69	2	2	2	8	0	0	0	1	24	
MISSISSIPPI—																				
Columbus .....	0	3	33	4	8	1	12	23	0	93	2	1	11	6	0	3	17	16	56	
LOUISIANA—																				
Black River .....	49	0	7	7	14	1	1	4	1	93	11	5	0	4	8	12	5	14	59	
New Orleans .....	0	65	0	1	0	2	0	25	0	93	0	0	0	0	0	0	0	0	0	
TEXAS—																				
Austin .....	32	8	10	2	18	0	12	4	7	93	8	4	1	3	7	6	12	0	39	
New Braunfels .....	22	3	20	2	8	2	0	4	29	90	0	0	10	1	19	0	15	0	71	
Union Hill .....	27	8	30	14	4	0	3	4	3	93	26	0	0	0	1	0	2	0	5	
Washington .....	26	0	0	0	36	0	0	0	25	87	2	0	0	0	1	0	0	0	0	
TENNESSEE—																				
Glenwood .....	0	14	2	14	8	3	8	16	24	93	3	6	8	7	4	10	26	19	83	
KENTUCKY—																				
Millersburg .....	9	3	13	9	1	11	0	10	27	92	3	0	2	1	0	9	41	4	60	
Paris .....	4	7	12	12	10	26	3	19	0	93	4	0	0	0	17	4	23	0	48	
Springdale .....	5	11	0	2	5	19	9	7	26	93	0	0	0	0	0	0	0	0	0	
OHIO—																				
Belle Centre .....	3	11	13	4	3	17	15	14	10	90	4	0	1	0	3	13	33	0	72	
Bellefontaine .....	0	26	0	5	4	19	8	13	0	84	0	25	0	4	0	34	0	3	72	
Cincinnati, [Harper] .....	0	2	34	0	4	25	17	11	0	93	0	0	0	0	0	0	0	0	0	
Cincinnati, [Hurt] .....	6	2	2	7	3	12	40	9	12	93	1	0	0	0	1	4	41	7	54	
Cleveland .....	14	13	2	15	22	6	8	7	2	89	11	4	1	4	7	4	10	5	46	





## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
WISCONSIN—Continued.																				
Milwaukee, [Winkler]----	2	14	16	14	1	5	■	32	0	93	---	---	---	---	---	---	---	---	---	
New London .....	18	0	2	1	5	30	18	19	0	93	11	2	0	0	2	19	■	10	53	
Waukesha .....	14	3	3	1	7	6	7	■	0	50	2	0	3	2	2	1	7	0	17	
IOWA—																				
Bellevue .....	4	6	1	22	7	4	22	27	0	93	1	0	2	11	2	1	1	0	24	
Border Plains .....	13	3	7	24	18	9	0	19	0	93	---	---	---	---	---	---	---	---	---	
Dubuque .....	11	9	2	23	9	5	2	15	7	84	4	3	6	12	5	7	2	17	56	
Fairfield .....	0	5	2	17	3	7	1	21	37	93	0	2	8	2	0	0	4	6	22	
Fort Madison .....	1	9	3	19	9	22	3	23	4	93	1	3	5	6	4	14	22	10	65	
Franklin .....	14	3	8	6	20	12	10	8	11	92	1	0	0	0	0	0	0	0	1	
Muscatine .....	0	15	0	33	0	28	0	17	0	93	0	0	0	3	0	7	2	0	12	
Pleasant Plain .....	7	4	5	12	18	13	7	16	6	88	1	0	2	5	4	5	5	2	24	
MINNESOTA—																				
Burlington .....	1	0	0	2	10	9	5	4	0	31	---	---	---	---	---	---	---	---	---	
Hazlewood .....	7	4	5	12	18	13	7	16	6	88	0	0	1	5	14	1	12	0	34	
Princeton .....	3	2	10	15	12	10	8	13	20	93	2	2	5	11	10	8	7	12	57	
NEBRASKA—																				
Bellevue .....	37	4	20	2	21	1	1	0	7	93	17	2	24	0	15	0	0	0	58	
Omaha .....	■	■	2	26	■	8	3	21	10	93	6	5	3	14	7	7	8	10	60	
KANSAS—																				
Lawrence .....	18	6	■	5	34	2	5	14	0	93	3	0	2	0	7	3	2	0	17	
DACOTAH—																				
Fort Union .....	2	1	3	0	15	14	40	12	0	93	0	0	0	0	2	3	14	1	20	
UTAH—																				
Great Salt Lake City .....	35	0	15	12	26	5	16	9	0	124	3	0	1	0	0	0	1	0	5	
CALIFORNIA—																				
Sacramento .....	23	6	3	16	9	9	4	23	0	93	0	3	1	0	0	18	0	1	28	
San Francisco .....	2	1	0	0	3	3	28	1	55	93	2	2	1	2	8	9	18	1	43	
SOUTH AMERICA—																				
Catharina Sophia, Surinam	4	44	16	18	10	1	0	0	0	93	9	17	13	1	9	14	0	3	72	
AZORES—																				
Horta, Fayal .....	16	24	16	3	8	11	4	2	9	93	0	3	22	23	3	0	0	0	51	





## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Canton	0	11	0	0	7	46	8	4	3	82	0	8	1	1	6	38	0	2	65
Cazenovia	0	0	0	2	17	27	25	16	2	89	2	0	0	1	7	22	31	14	77
Clinton	3	4	5	2	10	43	13	10	0	90	2	1	0	0	7	26	19	8	63
Eden	7	1	1	3	48	19	6	2	0	87	0	0	0	0	2	15	15	2	34
Fishkill Landing	0	10	1	22	2	30	10	12	0	87	0	0	0	1	2	1	23	0	27
Flatbush	5	3	5	7	13	9	24	24	0	90	0	0	1	2	2	7	14	12	38
Fort Edward	4	3	1	0	10	44	16	4	2	84	0	1	0	1	2	7	21	2	34
Madrid	0	13	0	0	0	27	36	0	9	85	0	4	0	0	0	32	24	1	61
Morrisania	1	7	2	13	11	23	28	5	0	90									
New York city	0	4	3	12	2	15	30	24	0	90	0	0	1	2	0	5	46	4	61
Nichols	18	0	3	13	42	7	1	0	0	90	19	1	0	1	28	10	1	11	71
Oswego	0	3	5	18	15	10	38	1	0	90									
Ovid	1	0	0	11	31	12	29	6	0	90	0	0	0	0	0	27	35	4	75
Penn Yan	1	2	0	0	38	21	28	0	0	90									
Pompey	0	0	0	6	25	34	17	8	0	90	0	2	2	0	0	0	0	0	4
Rochester, [Harkness]	2	0	2	0	16	5	37	1	21	90									
Rochester, [Palmer]	4	0	1	5	10	31	34	5	0	90	2	0	0	0	7	26	35	11	81
Sag Harbor	2	1	6	8	16	27	16	14	0	90	0	0	1	0	3	17	11	5	37
Saratoga	0	5	0	6	4	48	3	18	0	84	0	4	1	7	4	46	4	18	84
Spencertown	29	0	0	7	23	12	1	10	0	82	1	0	0	0	0	0	0	4	5
Townsendville	0	1	0	23	0	22	21	0	5	87	0	1	0	0	0	13	36	4	63
Wampsville	0	1	4	5	20	5	54	1	0	90	0	1	4	5	17	4	0	0	80
Waterford	9	2	1	4	39	14	12	3	5	89	0	0	0	0	2	7	0	4	22
Wellsville	0	0	35	5	6	1	43	0	0	90	0	0	1	0	2	4	2	1	10
NEW JERSEY—																			
Bloomfield	0	0	0	2	17	31	13	21	0	90									
Burlington	5	1	4	5	10	23	27	11	2	88	2	0	0	2	5	8	17	8	42
Lumbertville	0	2	2	11	7	19	8	28	0	77									
Newark	2	4	0	7	6	18	9	14	0	60									
Sergeantsville	14	4	0	3	12	13	29	11	0	90	6	3	7	1	0	11	8	4	49
PENNSYLVANIA—																			
Bedford	0	0	0	3	0	35	4	24	0	66	0	0	0	0	0	27	4	14	45
Cannonsburg	0	1	18	2	1	11	36	19	2	90	0	0	1	0	0	0	2	0	0
Chromedale	5	0	4	14	0	5	4	24	26	90	0	0	0	0	2	11	25	2	40
Easton	6	2	5	14	7	4	19	19	12	88	1	0	0	4	6	7	22	2	42
Fleming	2	3	8	2	1	14	23	30	7	90	1	0	1	0	1	7	23	20	53
Gettysburg	0	4	0	0	18	30	10	18	9	89	0	0	0	0	2	21	32	4	59
Harrisburg, [Heisely]	0	1	2	13	8	3	12	50	0	89	0	1	0	6	2	3	8	14	34
Harrisburg, [Hickok]	7	7	16	6	13	13	23	5	0	90	0	0	1	0	4	3	1	0	0
Lewisburg	0	0	0	0	1	1	1	0	0	3	0	0	0	0	2	12	10	5	29
Meadville	0	0	0	5	20	16	5	7	24	77	2	0	0	0	4	22	8	5	41
Morrisville	1	4	2	8	6	25	14	24	0	90	2	3	1	4	2	19	13	0	53
Mount Joy	2	2	0	19	5	0	0	12	48	88	0	0	0	3	2	0	0	3	8
Murrysville	2	5	0	2	2	32	13	5	21	90	1	0	0	0	1	30	15	1	48
Nazareth	1	1	0	0	8	11	35	9	21	86	1	0	0	0	4	5	17	0	27
Norristown	0	0	2	8	0	13	42	4	0	75	0	0	3	2	4	11	29	0	49
North Whitehall	3	0	2	0	5	7	18	7	48	90	2	0	2	0	8	0	28	3	49
Philadelphia	1	1	3	14	5	29	11	26	0	90	0	0	0	1	1	7	9	0	18
Pittsburg, [Martin]	2	0	0	0	3	11	41	2	19	90	4	14	13	5	0	1	3	0	40
Pocopson	5	2	0	2	0	31	24	12	0	85	1	0	0	0	2	22	13	1	39
Shamokin	0	0	1	3	23	17	45	1	0	90	0	0	0	0	0	5	65	0	70
Tarentum	2	0	1	3	9	25	6	14	27	87	0	0	0	0	2	26	22	7	57
West Haverford	1	0	1	5	5	13	14	17	4	60	1	0	0	0	0	11	20	11	43
Westtown	3	2	3	13	7	13	9	34	1	85	0	0	0	0	3	7	9	14	33
DELAWARE—																			
Newark	1	2	2	3	11	14	15	29	0	77	0	0	0	1	5	6	2	6	20
MARYLAND—																			
Annapolis	12	3	2	6	28	22	5	7	5	90	0	0	0	0	2	19	2	0	23
Baltimore	2	3	1	4	3	5	7	4	0	29	0	0	0	0	0	1	3	0	4
Frederick	1	3	1	2	7	6	22	16	29	87	2	0	0	0	3	4	29	1	39
Sykesville	0	4	4	18	0	19	31	8	0	90	0	0	8	1	1	10	48	1	69



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
DISTRICT OF COLUMBIA—																				
Washington, [Smith, Inst.]	0	3	1	3	2	22	0	23	3	57										
VIRGINIA—																				
Alexandria	8	4	2	3	46	5	6	16	0	90										
Ashland	3	0	0	7	4	19	1	5	51	90	0	0	0	0	0	27	8	1	36	
Berryville	4	3	3	6	13	9	37	12	1	88	3	0	0	0	2	8	32	3	48	
Crichton's Store	14	2	3	0	19	24	9	7	3	81	0	0	0	0	0	9	3	0	12	
Lewisburg	0	0	0	0	0	2	2	0	0	4	0	0	0	0	4	5	29	2	40	
Montross	3	1	2	0	7	15	9	7	46	90										
Mossy Creek	0	3	0	18	8	46	5	10	0	90	0	0	0	3	5	36	6	9	59	
Portsmouth	12	12	1	4	6	25	10	20	0	90										
Rose Hill	2	10	1	6	5	15	7	3	6	59										
Rougemon	2	0	5	4	9	17	34	9	3	83	0	0	1	1	11	8	21	0	42	
Falem	2	10	8	8	2	10	27	23	0	90	0	0	6	1	0	9	40	1	57	
Sistersville	23	12	1	1	8	0	0	0	30	75										
Smithfield	15	5	2	6	21	12	14	6	0	81	4	0	0	0	4	7	24	4	43	
Winchester	0	0	0	2	5	3	19	11	50	90	0	0	0	2	5	0	9	0	16	
Wirt Court-House	2	0	0	10	2	43	2	9	22	90	0	0	0	0	0	62	1	7	70	
NORTH CAROLINA—																				
Chapel Hill	8	9	4	5	13	15	22	14	0	90	2	0	0	0	8	30	5	0	45	
Davidson College	5	8	1	1	8	15	5	2	2	54	0	0	0	1	4	14	12	1	32	
Murfreesborough	2	15	2	16	1	11	15	6	21	89	0	1	0	0	1	7	10	2	21	
Warrenton	3	17	0	5	2	18	6	35	0	90	1	49	1	1	1	2	0	3	58	
SOUTH CAROLINA—																				
All Saints	16	12	4	2	25	11	10	9	0	89	1	1	3	2	5	13	14	1	40	
Camden	4	19	0	3	2	24	10	21	7	90	0	1	2	1	4	19	17	8	52	
Charleston, [Dawson]	0	19	6	7	1	16	0	10	0	59										
Charleston, [Johnson]	5	5	2	0	3	4	1	10	0	30										
GEORGIA—																				
Augusta	0	11	2	0	0	10	0	25	0	54										
Hillsborough	1	20	5	11	4	14	15	20	0	90	1	5	10	0	0	0	0			

## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—																				
Belle Centre.....	3	3	2	18	4	20	31	7	1	89	0	2	0	0	4	16	28	5	55	
Cincinnati, [Harper].....	3	0	2	0	11	24	32	18	0	90	0	2	1	4	4	4	37	4	56	
Cincinnati, [Hurtt].....	7	4	2	11	5	5	28	16	9	90	0	2	1	4	4	4	37	4	56	
Cleveland.....	3	0	0	12	30	26	16	3	0	90	3	0	0	0	3	15	22	1	44	
Edinburg.....	2	42	6	12	0	1	0	5	18	86	1	0	0	3	1	25	29	5	67	
Hillsborough.....	1	14	0	20	7	30	2	16	0	90	0	0	0	1	2	14	0	3	20	
Hiram.....	5	0	0	5	38	26	7	4	3	88	1	0	0	1	5	10	2	2	25	
Jackson.....	4	1	1	0	0	8	19	10	38	90	1	1	0	0	6	14	40	0	70	
Jefferson.....	0	0	0	0	0	42	0	48	0	0	0	0	0	0	42	0	48	0	90	
Lancaster.....	0	0	6	2	5	15	3	8	30	69	1	0	1	1	4	8	4	4	23	
Madison, [Atkins].....	2	1	0	10	26	15	17	0	19	90	0	0	3	0	5	2	8	0	19	
Madison, [Cunningham].....	0	1	2	13	7	29	16	1	0	78	1	0	0	3	5	34	21	4	66	
Medina.....	1	0	4	6	12	38	10	19	0	90	0	0	1	5	5	34	25	20	90	
Oberlin.....	1	1	0	4	18	27	15	7	14	87	0	1	0	0	2	10	14	2	29	
Ripley.....	5	0	2	17	2	10	2	13	16	67	0	0	0	0	0	0	1	7	8	
Savannah.....	0	0	0	28	2	17	13	30	0	90	0	0	0	15	1	19	15	20	70	
Sidney.....	2	10	0	0	5	29	18	10	0	89	1	1	0	0	1	50	18	3	74	
Urbana.....	0	0	2	11	9	20	8	10	29	89	0	0	0	1	5	19	33	2	60	
Welchfield.....	1	2	1	23	0	44	7	3	0	90	0	0	0	0	1	8	3	0	12	
MICHIGAN—																				
Battle Creek.....	2	1	4	6	13	29	22	4	0	90	0	0	0	0	0	17	52	7	76	
Cooper.....	0	0	0	0	4	0	58	1	27	90	0	0	0	0	0	0	24	26	50	
Grand Rapids, [Currier].....	0	7	2	0	4	45	7	8	7	88	0	1	0	3	4	14	0	0	28	
Grand Rapids, [Streng].....	1	2	1	11	10	38	20	7	0	00	1	0	4	1	4	16	47	13	86	
Marquette.....	0	2	1	7	5	35	11	28	0	89	13	0	0	0	0	12	1	44	76	
Monroe.....	13	0	0	6	0	16	1	53	1	90	0	1	4	2	3	8	44	14	76	
New Buffalo.....	0	2	1	0	10	48	17	0	0	90	0	1	1	1	6	26	20	4	59	
Port Huron.....	0	2	1	0	10	48	17	0	0	90	0	1	1	1	6	26	20	4	59	
INDIANA—																				
Evansville.....	6	10	7	18	13	10	8	18	0	90	5	10	0	1	6	18	11	5	56	
Logansport.....	3	4	4	7	3	14	34	21	0	90	0	0	0	0	0	0	0	0	0	
Michigan City.....	0	0	1	11	26	13	16	6	3	89	5	2	1	1	13	11	17	5	55	
New Albany.....	13	4	1	3	18	10	8	6	0	63	3	0	0	2	17	6	11	7	48	
New Harmony.....	3	1	1	13	12	11	13	15	0	69	0	0	0	0	0	0	0	0	0	
Richmond.....	0	1	3	5	7	26	13	0	27	88	0	0	0	0	0	0	0	0	0	
ILLINOIS—																				
Athens.....	0	8	1	29	1	25	5	21	0	90	0	0	0	1	0	16	7	10	34	
Augusta.....	0	5	3	13	7	20	27	14	1	90	0	2	2	5	4	8	16	8	45	
Aurora.....	0	3	9	7	15	14	31	11	0	90	0	0	3	1	2	17	32	19	74	
Batavia.....	0	8	0	1	1	58	1	21	0	90	0	0	0	1	1	50	2	12	72	
Brighton.....	0	0	3	8	5	24	10	33	0	90	0	3	0	1	3	15	3	0	34	
Chicago.....	0	6	0	3	12	60	3	9	0	93	0	0	0	0	3	14	23	0	40	
Edgington.....	0	10	0	4	16	20	13	25	0	90	0	0	2	3	7	28	12	22	80	
Fremont Centre.....	0	5	0	3	13	47	17	5	0	90	0	0	0	0	0	0	0	0	0	
Manchester.....	3	4	4	1	20	18	34	0	0	90	1	4	4	0	15	18	19	7	68	
Marengo.....	0	1	2	14	8	46	19	0	0	90	0	0	0	0	1	6	5	5	17	
Ottawa.....	0	5	1	11	5	23	18	16	1	80	0	0	0	0	1	6	5	5	17	
Peoria.....	3	1	7	2	17	0	48	4	0	90	0	0	0	0	0	0	0	0	0	
Pekin.....	6	7	2	1	20	10	8	23	3	90	1	2	0	1	0	7	0	19	45	
Riley.....	0	3	3	4	9	11	15	24	11	82	0	0	0	0	3	14	23	0	40	
West Salem.....	2	4	3	10	18	13	14	11	15	90	0	0	0	0	3	14	23	0	40	
West Urbana.....	4	2	2	13	5	29	17	18	0	00	0	0	0	0	1	0	0	0	1	
Winnebago.....	2	6	3	10	5	29	17	18	0	90	0	0	0	0	1	2	12	8	23	
MISSOURI—																				
Cape Girardeau.....	10	14	2	15	14	23	18	23	1	120	4	0	0	2	13	25	33	18	95	
St. Joseph.....	0	14	0	21	0	27	0	34	21	117	0	0	0	0	0	0	0	0	0	
St. Louis.....	2	4	11	16	6	20	25	0	0	90	0	0	0	0	0	0	0	0	0	
Springfield.....	7	4	0	8	15	6	16	12	0	71	0	0	0	0	0	0	0	0	0	
WISCONSIN—																				
Appleton.....	4	7	0	3	0	58	3	15	0	90	5	0	0	0	0	40	1	13	73	
Bay City.....	2	17	0	0	4	41	14	11	0	89	1	0	0	0	1	31	13	1	47	
Beloit.....	10	1	2	1	27	26	11	11	0	89	0	0	0	0	0	4	3	0	13	



## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
WISCONSIN—Continued.																				
Janesville.....	1	5	1	11	10	26	26	7	3	90	—	—	—	—	—	—	—	—	—	
Kenosha.....	5	0	4	0	11	23	18	7	19	87	—	—	—	—	—	—	—	—	—	
Lind.....	1	2	5	6	13	20	28	9	0	84	2	2	2	2	12	3	28	3	54	
Madison, [Sterling].....	5	1	0	2	13	45	4	17	2	89	2	0	0	0	1	0	0	0	3	
Manitowoc.....	4	3	0	2	11	24	22	24	0	90	0	0	0	0	4	4	9	1	18	
Menasha.....	5	3	5	4	6	17	29	6	15	90	3	3	2	4	1	21	21	4	59	
Milwaukee, [Pomeroy].....	2	3	4	9	7	21	15	29	0	90	—	—	—	—	—	—	—	—	—	
Milwaukee, [Winkler].....	1	4	1	12	1	14	35	22	0	90	—	—	—	—	—	—	—	—	—	
New London.....	4	0	1	1	4	21	36	17	0	87	4	0	0	0	6	10	32	13	65	
Platteville.....	0	3	1	19	3	23	19	22	0	90	0	3	0	14	2	22	15	13	69	
Waukesha.....	10	0	1	5	33	7	0	8	17	90	0	0	1	0	1	2	6	3	13	
IOWA—																				
Bellevue.....	1	3	1	16	5	19	18	27	0	90	0	0	0	2	2	2	7	0	22	
Border Plains.....	11	2	1	8	28	4	8	26	2	90	0	0	0	0	0	8	2	4	14	
Dubuque.....	10	2	0	2	19	9	11	33	4	90	3	2	0	2	4	8	14	21	54	
Fairfield.....	1	5	0	10	3	22	0	24	16	90	3	2	14	5	1	0	0	1	26	
Fort Madison.....	0	7	0	12	1	36	5	28	1	90	0	1	1	4	0	16	27	0	58	
Franklin.....	4	3	0	5	17	8	27	17	9	90	—	—	—	—	—	—	—	—	—	
Iowa City.....	1	2	3	19	2	16	20	16	5	87	0	0	0	0	0	3	1	0	4	
Muscatine.....	2	10	1	12	8	24	7	26	0	90	0	0	0	2	0	4	2	4	12	
Pleasant Plain.....	0	11	1	10	10	21	12	25	0	90	0	0	0	0	3	6	8	8	25	
Sioux City.....	5	3	0	7	14	7	0	51	0	87	1	3	0	0	7	0	0	27	38	
Rossville.....	2	3	1	9	7	13	16	34	5	90	1	5	4	7	0	0	0	1	19	
MINNESOTA—																				
Burlington.....	10	0	0	0	4	3	7	6	0	30	—	—	—	—	—	—	—	—	—	
Hazlewood.....	6	1	2	5	19	1	10	46	0	90	11	1	1	2	4	0	5	7	31	
Princeton.....	7	3	7	8	7	13	25	12	8	90	7	3	2	6	7	5	24	10	64	
NEBRASKA—																				
Bellevue.....	27	10	2	1	27	7	12	3	1	90	17	6	1	0	0	0	9	4	46	
Omaha.....	5	3	0	12	11	12	10	28	0	90	5	2	0	0	7	7	12	19	58	
KANSAS—																				
Lawrence.....	13	3	4	13	8	10	21	17	0	90	0	0	0	0	2	1	1	0	4	
Leavenworth City.....	11	13	1	2	11	13	8	16	1	76	4	4	0	1	2	11	5	11	38	
DACOTA—																				
Fort Union.....	0	0	1	2	2	10	36	39	0	90	0	0	0	1	1	3	24	19	48	
CALIFORNIA—																				
Sacramento.....	15	6	11	21	6	7	2	22	0	90	0	0	0	11	1	16	5	5	38	
San Francisco.....	19	3	0	0	17	0	4	4	43	90	5	0	1	1	3	15	11	10	46	
WEST INDIES—																				
St. George's, Bermuda. . .	2	9	1	8	0	8	0	2	0	30	—	—	—	—	—	—	—	—	—	
SOUTH AMERICA—																				
Cathar'a Sophia, Surinam..	5	43	13	17	8	1	0	3	0	90	2	8	18	26	3	2	0	2	61	

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	5	27	1	0	17	21	18	3	93	5	20	1	0	7	18	14	12	77	
Red River Settlement.....	16	4	2	0	36	6	8	5	10	87	5	2	0	1	8	4	0	3	23
Rigolet .....	4	3	2	0	0	4	11	22	16	62									
St. John's .....	17	0	0	0	16	3	9	48	0	93									
St. Martin .....	0	26	1	11	0	25	10	20	0	93									
Stanbridge .....	6	4	14	17	21	5	11	6	0	93									
Toronto .....	4	15	3	4	1	27	2	24	13	93									
Windsor .....	7	0	4	5	3	20	23	14	8	92	0	0	0	0	0	0	2	0	2
Wolfville .....	4	1	4	5	2	18	28	21	0	92	1	2	2	2	2	23	28	18	78
MAINE—																			
Cornish, [Guptill] .....	1	2	0	7	10	15	17	38	0	93									
Cornish, [West] .....	5	15	10	2	7	26	19	9	0	93	0	0	0	0	0	1	4	3	8
Gardiner .....	1	13	1	7	1	14	4	30	20	91	3	0	0	0	0	13	3	17	36
Monson .....	4	11	8	6	8	7	14	26	0	93									
Perry .....	14	4	3	8	1	14	7	42	0	93	11	4	1	5	1	8	9	24	63
Portland .....	20	16	3	5	4	11	24	10	0	93	0	0	1	1	4	2	21	4	33
Steuben .....	7	23	1	0	1	16	9	26	4	93	1	1	0	1	0	17	19	10	49
NEW HAMPSHIRE—																			
Claremont .....	2	4	2	6	4	7	4	64	0	93	1	1	0	1	0	1	5	11	20
Concord .....	0	16	0	8	0	9	1	38	0	72	1	0	0	0	0	0	1	5	7
Francestown, [Bixby] .....	3	7	1	10	0	7	13	24	0	65	2	0	3	7	0	2	25	7	52
Manchester .....	0	4	0	11	5	5	14	29	0	71	0	0	1	15	0	0	14	8	44
North Barnstead .....	7	30	0	15	0	1	14	26	0	93	3	14	0	13	0	1	15	14	60
Shelburne .....	0	0	26	0	0	0	64	0	0	93	0	0	3	3	0	1	33	23	63
West Enfield .....	0	0	1	10	22	11	11	0	2	93	1	0	1	10	17	6	8	25	68
VERMONT—																			
Brandon .....	17	0	2	5	32	10	8	11	0	93	0	0	0	0	2	8	6	24	40
Burlington .....	8	3	0	0	26	17	7	26	0	93									
Craftsbury .....	0	7	0	6	28	13	11	19	1	93	6	0	0	1	11	6	20	24	68
Rupert .....											10	45	15	0	0	0	0	5	78
St. Johnsbury .....	17	0	3	3	22	1	0	32	4	93	0	0	0	0	1	4	19	4	28
Shelburn .....	21	0	0	0	51	2	1	12	0	87	0	0	0	6	0	0	0	0	15
MASSACHUSETTS—																			
Amherst .....	0	0	3	17	5	9	0	48	0	88	1	0	1	1	2	1	6	16	28
Bridgewater .....	9	6	0	1	2	23	32	11	0	0	0	1	3	2	0	7	8	2	23
Cambridge .....	0	7	5	3	4	27	15	17	9	93									
Canton .....	10	2	6	5	6	8	20	15	15	93	0	0	1	2	1	1	13	0	18
Florida .....	0	5	0	13	8	8	18	41	0	93	0	3	0	17	9	0	16	26	80
Lawrence .....	2	21	2	7	0	14	1	46	0	93									
Mendon .....	0	17	3	4	2	39	2	26	0	93	0	15	3	4	2	33	2	15	74
Nantucket .....	2	10	7	5	3	22	10	31	0	0									
New Bedford .....	7	11	2	7	3	15	11	35	2	93	1	0	1	0	0	1	6	5	14
Newburyport .....	4	0	4	3	8	5	20	17	0	61									
Princeton .....	1	9	16	1	0	11	41	14	0	93	0	0	0	1	0	7	20	10	52
Richmond .....	0	9	0	25	0	17	0	42	0	93	0	10	0	23	0	17	0	20	72
Westfield .....	16	3	4	11	1	10	20	28	0	93	0	0	0	1	0	0	0	1	4
Weymouth .....	2	3	3	9	7	5	2	31	0	62									
Williamstown .....	0	3	5	5	7	11	25	23	0	79	0	0	0	1	0	1	0	0	2
Worcester .....	1	5	19	4	2	13	28	16	0	88									
CONNECTICUT—																			
Columbia .....	1	13	3	2	3	6	6	38	21	93	0	3	0	1	2	5	4	21	50
New London .....	2	15	2	7	0	27	13	27	0	93									
Norwich .....	0	30	1	2	2	39	4	4	11	0									
Pomfret .....	6	14	3	6	4	16	7	35	0	91	3	14	0	4	4	9	5	15	57
Saybrook .....	5	12	6	9	3	6	18	22	12	0	0	0	0	1	3	3	15	14	39
Wallingford .....	27	4	4	5	7	10	16	20	0	93	0	2	1	4	0	0	20	10	43
NEW YORK—																			
Baldwinsville .....	0	3	16	5	1	9	28	28	0	90	0	1	0	1	0	0	43	21	69
Bellport .....	11	0	10	10	1	11	13	28	0	93									
Beverly .....	10	10	0	0	12	28	1	13	1	84	0	7	2	8	4	19	11	8	59
Canton .....	4	18	0	0	0	51	2	10	7	0	2	13	0	0	0	34	3	7	59
Cazenovia .....	2	0	1	15	12	14	18	30	1	93	2	0	1	4	8	15	23	20	73



## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Clinton.....	5	9	3	10	3	25	14	24	0	93	3	3	0	4	4	7	24	17	62	
Eden.....	2	3	3	6	29	21	16	4	0	84	4	1	1	0	6	10	24	4	50	
Fishkill Landing.....	5	28	1	7	3	25	4	20	0	93	0	0	0	0	1	0	6	0	7	
Flatbush.....	12	11	9	4	2	8	27	20	0	93	1	1	2	2	3	5	9	10	33	
Fort Edward.....	18	12	1	0	8	19	20	13	2	93	1	0	0	0	0	3	9	10	23	
Morrisania.....	9	9	10	2	4	22	30	7	0	93	0	0	0	0	0	0	0	0	0	
New York city.....	2	18	4	8	1	8	36	16	0	93	0	0	7	9	0	9	33	4	62	
Nichols.....	9	0	4	11	34	5	14	16	0	93	0	0	0	0	0	0	0	0	0	
Oswego.....	4	6	5	18	19	5	27	6	1	92	0	0	0	0	0	0	0	0	0	
Ovid.....	8	5	2	5	21	17	25	10	0	93	0	0	3	1	2	21	31	13	71	
Penn Yan.....	1	3	0	0	26	28	26	6	0	90	0	0	0	0	0	0	0	0	0	
Pompey.....	1	0	9	2	17	22	30	12	0	93	1	0	3	1	0	0	1	1	7	
Rochester, [Harkness].....	2	1	4	2	9	0	33	3	39	93	0	0	0	0	0	0	0	0	0	
Rochester, [Palmer].....	8	4	2	5	18	13	28	15	0	93	3	4	2	3	13	0	25	15	74	
Sag Harbor.....	7	9	9	5	8	7	10	14	1	70	0	0	1	0	0	6	9	3	19	
Saratoga.....	0	25	0	2	1	49	1	15	0	93	0	22	0	4	1	48	1	17	93	
Spencertown.....	14	0	2	0	23	0	0	2	0	41	0	0	0	0	0	0	0	0	0	
Townsendville.....	7	0	0	28	4	8	22	14	10	93	0	0	0	3	1	5	24	10	43	
Wampsville.....	0	0	16	4	9	4	59	1	0	93	0	0	14	3	6	5	48	1	77	
Waterford.....	17	5	0	1	21	13	20	14	2	93	1	0	0	0	1	0	11	1	14	
Wellsville.....	0	0	43	3	0	0	46	1	0	93	0	0	0	0	0	1	1	1	5	
NEW JERSEY—																				
Bloomfield.....	0	7	2	1	6	23	14	16	0	69	0	0	0	0	0	0	0	0	0	
Burlington.....	9	11	14	1	1	10	20	21	0	87	0	1	1	1	2	9	8	10	32	
Lambertville.....	2	17	1	4	1	12	10	29	0	76	0	0	0	0	0	0	0	0	0	
Newark.....	7	10	0	1	0	15	8	21	0	62	0	0	0	0	0	0	0	0	0	
Sergeantsville.....	1	0	13	1	0	2	22	6	0	45	0	0	15	0	0	2	9	1	27	
PENNSYLVANIA—																				
Bedford.....	0	0	0	4	0	41	3	30	0	78	0	0	0	4	0	33	2	20	59	
Berwick.....	5	3	27	3	1	7	43	4	0	93	0	0	0	0	0	0	0	0	0	
Cannonsburg.....	0	0	30	1	0	6	52	3	1	93	0	0	0	0	0	0	0	0	0	
Chromedale.....	1	15	6	3	3	4	14	20	27	93	0	1	1	0	0	8	20	8	36	
Easton.....	4	8	8	7	4	3	31	13	11	89	1	1	1	1	1	3	15	17	40	
Fleming.....	2	7	7	6	1	8	22	35	5	93	0	1	0	1	5	2	28	26	63	
Gettysburg.....	7	9	5	1	16	22	19	8	6	93	1	0	1	0	2	10	28	14	56	
Harrisburg, [Heisely].....	8	4	3	24	5	0	10	39	0	93	3	1	0	1	2	0	5	10	22	
Harrisburg, [Hickok].....	14	10	18	7	7	8	25	4	0	93	0	0	4	0	2	6	10	0	23	
Lewisburg.....	1	2	2	10	3	11	13	22	26	90	1	0	0	0	3	3	10	11	28	
Meadville.....	2	1	0	3	23	10	12	12	27	90	0	0	0	2	3	10	25	5	45	
Morrisville.....	0	14	12	2	23	22	16	1	92	1	9	7	0	1	18	11	13	60	0	
Mount Joy.....	0	1	0	29	1	3	5	2	49	90	0	0	0	0	0	0	1	3	4	
Murrysville.....	0	9	12	5	1	39	10	4	13	93	0	1	0	2	0	17	8	12	40	
Nazareth.....	11	10	1	0	1	4	32	1	30	90	1	0	0	0	0	4	11	2	18	
Norristown.....	0	2	18	6	2	7	41	5	0	81	0	0	9	0	2	6	41	2	60	
North Whitehall.....	4	3	7	0	5	2	17	7	48	93	0	0	0	1	1	1	21	7	31	
Philadelphia.....	3	22	5	2	0	24	16	21	0	93	1	1	2	0	0	4	11	3	22	
Pittsburg, [Martin].....	5	8	13	4	5	12	24	4	17	93	5	11	28	1	1	1	6	0	53	
Pocopson.....	8	15	5	3	2	13	31	12	0	89	2	0	0	0	0	3	12	5	22	
Shamokin.....	0	0	2	6	27	17	37	4	0	93	0	0	0	0	0	1	64	5	70	
Tarentum.....	4	1	0	2	7	19	5	5	50	93	0	0	0	3	3	8	40	10	64	
West Haverford.....	2	2	7	3	4	8	17	14	5	62	0	0	1	0	1	7	18	11	38	
Westtown.....	7	10	6	14	1	9	7	37	1	92	2	3	1	0	0	3	7	14	30	
DELAWARE—																				
Milford.....	5	13	2	4	4	19	11	14	0	73	2	0	3	0	3	5	17	3	33	
Newark.....	7	14	7	1	0	7	11	30	0	77	0	0	0	0	0	0	3	6	9	
MARYLAND—																				
Annapolis.....	8	20	2	6	5	17	8	14	13	93	0	0	0	0	0	15	1	0	16	
Baltimore.....	16	11	7	9	8	10	14	18	0	93	0	0	0	0	0	0	0	0	0	
Frederick.....	7	14	1	2	8	13	15	10	23	93	1	0	0	0	1	2	21	5	30	
Sykesville.....	2	15	6	8	6	20	26	10	0	93	0	1	13	4	1	8	45	0	72	

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—																				
Alexandria .....	14	19	0	2	25	4	8	21	0	93	0	0	0	0	0	12	22	0	34	
Ashland .....	0	0	0	7	1	19	1	5	60	93	0	0	0	0	0	12	22	0	34	
Berryville .....	5	7	10	0	11	6	24	21	2	92	2	0	0	0	2	6	24	0	40	
Crichton's Store .....	31	1	0	1	30	12	7	1	1	84	0	0	0	0	1	4	4	0	9	
Lewisburg .....	0	0	0	0	0	0	1	0	0	1	0	0	2	0	0	10	21	3	38	
Montross .....	2	2	10	5	4	0	9	6	49	93	0	2	13	2	1	0	1	0	19	
Mossy Creek .....	0	15	1	4	0	33	7	29	1	93	0	3	0	0	0	19	7	12	47	
Poplar Grove .....	0	0	4	0	0	1	15	0	67	93	0	1	0	0	2	19	22	0	50	
Portsmouth .....	9	25	0	5	4	23	6	18	0	93	0	0	0	0	0	0	1	1	2	
Rose Hill .....	3	12	4	5	4	11	7	5	8	59	0	0	0	0	0	0	1	1	2	
Rougemon .....	10	5	7	1	0	17	40	6	4	93	2	0	0	0	2	11	26	0	41	
Salem .....	1	16	0	6	0	8	34	19	0	93	0	1	9	0	0	15	32	0	57	
Sistersville .....	12	12	1	0	15	0	0	0	47	87	0	0	0	0	0	1	1	1	2	
Smithfield .....	10	12	1	4	13	12	13	0	0	73	3	0	1	2	1	4	23	9	43	
Winchester .....	0	0	0	0	0	4	22	3	54	93	0	0	0	0	0	0	1	0	1	
Wirt Court-House .....	1	3	0	11	2	17	3	34	22	93	0	0	0	4	0	33	4	28	69	
NORTH CAROLINA—																				
Chapel Hill .....	5	14	1	1	8	14	26	8	0	77	1	0	3	0	4	21	12	1	42	
Davidson College .....	1	16	0	5	0	11	5	28	13	88	1	9	0	1	7	21	8	3	50	
Murfreesborough .....	0	12	3	8	0	19	19	6	19	86	2	5	2	2	0	5	28	3	47	
SOUTH CAROLINA—																				
All Saints .....	0	19	3	4	13	33	8	7	0	93	0	7	4	0	7	30	14	2	64	
Camden .....	8	20	1	9	2	13	10	18	12	93	1	2	0	4	0	16	24	7	54	
Charleston, [Dawson] .....	0	24	2	6	2	15	7	6	0	62	0	0	0	0	0	0	0	0	0	
Charleston, [Johnson] .....	6	7	1	0	2	7	0	6	0	31	0	0	0	0	0	0	0	0	0	
GEORGIA—																				
Athens .....	5	18	4	2	0	0	0	17	28	89	0	0	0	0	0	2	1	1	5	
Hillsborough .....	2	20	5	1	4	14	14	13	0	73	0	3	5	0	0	1	0	0	9	
Savannah .....	7	28	4	5	12	8	14	15	0	93	1	0	0	0	1	3	0	0	8	
Sparta .....	5	23	10	6	9	12	10	17	0	92	0	2	1	2	4	16	17	0	51	
The Rock .....	8	6	13	4	18	0	13	23	0	93	0	0	0	0	0	0	0	0	0	
Whitemarsh Island .....	3	27	2	3	10	10	4	15	19	93	0	2	0	2	1	16	14	10	45	
Zebulon .....	0	11	25	14	3	8	27	5	0	93	1	0	1	0	0	12	0	3	20	
FLORIDA—																				
Alligator .....	1	31	2	4	3	11	7	19	15	93	3	7	2	0	0	16	6	2	45	
Atsena .....	15	25	11	14	0	2	8	10	5	93	6	15	6	7	0	1	7	8	50	
Belair .....	9	18	5	7	0	0	2	6	11	61	0	3	3	0	5	10	11	8	49	
Jacksonville .....	4	34	1	0	3	21	2	23	3	93	0	18	0	4	1	24	10	7	64	
St. Augustine .....	5	41	1	3	0	10	1	32	0	93	5	41	0	2	0	10	1	25	84	
Salt Ponds .....	14	17	12	0	2	0	4	0	1	62	0	0	0	0	0	0	0	0	0	
Warrington .....	5	35	2	11	1	9	3	26	1	93	0	1	0	0	0	0	0	0	1	
ALABAMA—																				
Auburn .....	0	6	11	21	20	2	16	9	0	93	0	0	3	15	8	14	0	0	52	
Carlsville .....	20	7	4	0	11	7	22	14	0	91	0	0	0	2	3	1	6	0	12	
Greene Springs .....	0	3	2	11	3	8	3	4	12	48	0	0	0	0	0	11	1	18	18	
Greensborough .....	12	0	2	24	5	5	5	22	0	93	0	0	3	3	5	8	32	0	59	
MISSISSIPPI—																				
Columbus .....	3	21	10	13	10	7	14	15	0	93	0	3	2	0	0	17	15	0	51	
LOUISIANA—																				
Black River .....	37	4	2	11	18	10	2	9	0	93	0	0	0	0	10	28	4	0	48	
New Orleans .....	0	57	0	3	0	3	0	30	0	93	0	0	0	0	0	0	0	0	0	
TEXAS—																				
Austin, [Jennings] .....	25	2	15	0	18	3	19	7	4	93	2	3	1	1	0	13	4	1	35	
Austin, [Palm] .....	12	4	9	3	17	12	27	9	0	93	4	1	0	1	7	4	9	2	28	
Goliad .....	25	12	20	13	5	3	4	11	0	93	1	2	0	3	20	16	0	3	54	
New Braunfels .....	7	0	36	5	0	0	0	1	19	79	0	0	0	0	0	0	0	0	0	
Union Hill .....	15	4	15	8	26	1	4	6	14	93	16	1	5	8	20	1	7	2	60	
Washington .....	22	1	0	1	21	0	2	0	37	84	0	2	1	0	2	0	1	0	0	
TENNESSEE—																				
Glenwood .....	6	12	4	17	11	11	11	12	9	93	0	1	0	3	0	16	27	0	56	



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
<b>KENTUCKY—</b>																				
Danville .....	5	0	6	8	15	26	24	0	0	93	0	0	1	2	1	33	22	4	63	
Millersburg .....	0	0	16	3	1	0	11	10	48	89	0	1	10	1	0	3	13	0	28	
Paris .....	2	2	0	15	5	54	11	3	0	92	0	0	2	0	13	4	28	0	47	
Springdale .....	0	6	6	0	12	26	5	11	27	93										
<b>OHIO—</b>																				
Belle Centre .....	7	7	7	7	4	26	13	21	0	92	4	0	2	1	8	7	24	15	61	
Bellefontaine .....	1	18	10	8	0	24	10	18	0	89	0	12	0	9	0	37	11	9	78	
Cincinnati, [Harper] .....	3	0	0	4	0	36	31	19	0	93										
Cincinnati, [Hurt] .....	2	8	5	5	20	31	4	13	91		0	1	0	3	2	13	27	0	52	
Cleveland .....	4	5	2	20	24	8	19	11	0	93	2	0	0	2	4	8	24	4	44	
Edinburg .....	3	41	10	9	0	3	8	5	10	89	0	1	4	4	2	21	36	8	76	
Hillsborough .....	1	16	2	18	5	33	6	12	0	93	0	1	0	0	1	9	2	1	14	
Hiram .....	10	7	0	11	22	10	11	7	4	91	1	1	0	0	2	4	16	3	27	
Jackson .....	5	0	2	2	7	3	21	4	49	93	3	1	2	4	7	3	47	4	71	
Jefferson .....	4	1	0	6	1	67	4	10	0	93	3	1	0	5	2	54	3	11	79	
Lancaster .....	0	1	7	12	2	16	4	2	24	68	0	0	1	7	0	18	3	4	33	
Lancaster, [Atkins] .....	1	1	0	22	8	17	19	6	19	93	4	1	0	0	0	2	15	0	22	
Madison, [Cunningham] .....	0	3	5	13	8	26	10	15	13	93	2	1	1	5	6	40	24	4	83	
Medina .....	7	3	4	18	18	19	16	8	0	93	3	2	3	17	12	9	32	15	93	
New Lisbon .....	2	1	1	10	7	45	11	16	0	93	0	0	2	5	0	14	38	13	72	
Ripley .....	3	0	0	6	2	5	2	26	21	65	0	0	0	0	0	0	1	8		
Savannah .....	0	1	1	30	1	15	17	28	0	93	0	1	0	22	0	17	15	26	81	
Sidney .....	1	18	10	8	0	24	10	18	0	89	0	12	0	6	1	37	11	9	76	
Urbana .....	0	3	4	14	6	11	11	3	28	80	0	3	3	1	3	8	30	5	53	
Welchfield .....	2	7	0	21	9	38	8	8	0	93	1	0	0	0	0	5	4	1	11	
<b>MICHIGAN—</b>																				
Battle Creek .....	0	3	4	11	12	14	20	6	17	93	2	1	0	0	1	19	46	6	75	
Cooper .....	7	0	1	0	1	4	18	0	61	92	0	0	0	0	0	8	13	1	22	
Grand Rapids, [Currier] .....	0	18	2	11	2	31	6	12	9	91	0	0	0	0	0	7	7	3	17	
Grand Rapids, [Streng] .....	5	4	6	11	8	41	10	8	0	93	4	0	0	3	5	18	42	9	81	
Marquette .....	4	6	0	6	6	22	16	33	0	93										

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
WISCONSIN —																			
Appleton .....	9	18	0	2	4	38	9	13	0	93	8	20	0	3	3	35	5	12	86
Bay City .....	2	18	0	4	6	22	36	5	0	93	1	1	3	0	1	5	13	2	26
Beloit .....	14	2	2	3	38	14	9	11	0	93	0	1	0	0	1	3	2	4	11
Janesville .....	8	12	0	8	19	18	13	7	5	90									
Kenosha .....	11	5	1	2	11	19	5	4	31	89									
Madison, [Sterling] .....	2	6	1	7	12	33	3	11	2	77	0	0	0	0	0	1	3	0	4
Manitowoc .....	5	4	0	5	13	28	18	20	0	93	0	0	0	0	0	4	13	4	21
Menasha .....	2	7	5	0	4	11	17	13	34	93	0	5	6	2	2	8	17	10	50
Milwaukee, [Pomeroy] .....	3	3	2	16	8	25	21	15	0	93									
Milwaukee, [Winkler] .....	0	7	2	7	2	28	17	24	0	93									
New London .....	15	4	0	1	0	42	20	11	0	93	0	5	0	0	0	25	26	25	81
Piatteville .....	7	4	4	26	12	17	12	11	0	93	7	2	3	15	13	15	9	7	71
Racine, [Durham] .....	6	7	0	4	26	21	18	3	3	88	5	3	0	0	0	0	11	1	20
St Croix .....	16	7	0	11	5	42	1	8	0	90	0	0	1	0	1	0	0	0	2
Waukesha .....	18	1	1	2	13	10	19	4	22	90	1	0	0	0	0	1	1	0	3
IOWA —																			
Bellevue .....	8	2	2	17	12	6	19	27	0	93	0	2	0	0	2	0	7	8	21
Boiler Plains .....	26	1	2	18	23	5	3	10	5	93	0	0	0	0	0	3	8	5	16
Camanche .....	0	2	1	8	11	13	3	3	1	42	8	5	1	4	1	0	0	2	21
Dubuque .....	8	10	0	10	16	12	8	21	7	92	5	3	1	3	2	11	9	15	49
Fairfield .....	4	4	0	8	6	18	5	15	33	93	7	3	2	2	0	1	0	0	15
Fort Madison .....	1	16	0	14	2	37	0	22	1	93	1	6	0	1	5	14	21	8	56
Franklin .....	5	3	2	7	12	15	20	17	12	93									
Iowa City .....	3	5	11	18	5	15	15	11	6	89	0	0	0	0	1	0	0	1	2
Muscatine .....	3	6	4	6	29	17	19	9	0	93	0	0	0	1	0	3	1	1	6
Pleasant Plain .....	3	13	1	15	8	25	13	14	0	92	0	0	0	0	0	6	5	11	22
Rossville .....	4	9	4	9	17	12	18	6	14	93									
Sioux City .....	3	0	4	7	31	3	3	20	0	71	2	0	0	3	1	0	1	8	15
MINNESOTA —																			
Burlington .....	5	0	0	0	4	9	10	3	0	31									
Hazlewood .....	0	2	1	5	16	11	6	46	0	93	1	3	0	1	0	1	2	3	11
Lapham .....	0	0	0	4	2	5	17	3	0	31									
Princeton .....	10	2	2	4	4	6	14	5	16	63	0	2	2	4	0	5	14	5	32
Wabashaw .....	2	11	1	15	5	15	8	14	22	93	0	0	0	0	2	7	3	15	27
NEBRASKA —																			
Bellevue .....	27	5	2	0	35	5	8	0	0	90	15	0	0	0	17	0	10	3	51
Omaha .....	10	1	0	6	6	18	3	21	28	93	9	0	1	6	7	12	8	8	51
KANSAS —																			
Lawrence .....	10	4	9	16	16	10	22	6	0	93									
Leavenworth City .....	16	8	7	2	12	26	7	12	3	93	7	0	1	0	1	8	22	10	49
Mapleton .....	4	8	5	2	2	23	20	20	6	90	0	0	0	0	0	4	0	0	10
CALIFORNIA —																			
Sacramento .....	22	5	11	21	2	4	0	28	0	93	0	0	0	12	1	1	8	6	28
San Francisco .....	25	2	0	0	16	0	0	0	50	93	19	0	2	0	6	12	6	9	54
WEST INDIES —																			
St. George's, Bermuda .....	1	9	1	4	1	10	1	4	0	31									
Shelby Bay, Bermuda .....	3	15	6	10	2	19	15	14	6	90	4	7	2	3	1	14	19	8	58
SOUTH AMERICA —																			
Catharina Sophia, Surinam .....	1	26	29	29	7	1	0	0	0	93	0	0	27	37	0	0	0	0	70



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1857.\*

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>BRITISH AMERICA—</b>													
Montreal . . . . .		6.390	3.990	3.850	2.301	3.080	2.1610	2.845	2.942	4.660	2.913	8.124	58.070
St. John's . . . . .	6.850	3.740	2.730	3.680	4.000	7.950	2.050	4.290	7.340	5.550		5.985	46.217
St. Martin . . . . .	2.1913	3.581	2.180	7.022		6.212	4.757	3.594	4.171	6.825	2.5772	4.030	40.669
Toronto . . . . .	2.210	4.220	1.515	3.045	4.146	5.060	3.475	5.265	2.640	1.063	3.995	4.105	
Windsor . . . . .					1.710	1.750			1.000	4.590	3.160		
Wolfeville . . . . .	4.860	3.650	3.310	2.890		3.512	2.950	4.780	1.500	6.680	2.680	1.700	
<b>MAINE—</b>													
Cornish, [Guptill] . . . . .	4.500	5.110	1.730	8.260	4.750	3.530	4.670	6.170	0.910	9.700	3.690	5.650	58.070
Gardiner . . . . .	4.220	2.464	4.032	5.301	4.740	3.588	2.334	5.508	1.244	4.970	3.629	4.184	46.217
Monson . . . . .	3.162	2.437				2.750	4.375	5.125			3.462		
Perry . . . . .	4.900	6.110		7.200	3.500	4.700	3.700	6.400	3.200	7.100	3.600	4.200	
Portland . . . . .	6.456	1.676	4.775	5.847	3.417	2.999	5.379	4.935	0.435	6.598	2.394	4.153	49.664
Steuben . . . . .			4.400			4.900	1.454		1.820	5.100			
<b>NEW HAMPSHIRE—</b>													
Claremont . . . . .									1.290				
Concord . . . . .	2.750							3.900	0.520		1.640	3.970	
Francestown, [Root] . . . . .						2.370	5.284			1.484			
Laconia . . . . .	2.020	3.560	2.630	6.260	6.550	3.420	3.380	7.110	1.880	5.290	2.750	4.230	49.080
Lake Village . . . . .	4.080	2.300	1.590	5.860	5.830	3.350	2.460	6.690	1.420	7.390	2.600	4.180	48.170
Londonderry . . . . .		1.800											
Manchester . . . . .	3.575		1.132	4.567	5.750	2.181	4.540	6.730	1.497	5.920	1.659	4.900	
West Enfield . . . . .	4.250	2.400	2.560	8.200		5.100	5.870	4.875	1.200		1.375		
<b>VERMONT—</b>													
Brandon . . . . .	2.660	2.950	2.290	3.510	5.640	5.495	3.930	5.190	1.750	5.600	2.140	2.520	43.675
Craftsbury . . . . .	2.900	3.310	2.530	4.750	4.000	5.680	5.160	5.950	2.230	4.540	2.250	3.830	47.100
St. Johnsbury . . . . .										4.251		3.810	
Shelburne . . . . .	1.900	4.400	1.610	7.875	3.040	5.170	6.420	6.510	1.540	5.050	2.000	2.620	48.165
Woodstock . . . . .	2.830	1.500	2.530	3.670	6.460	3.450	4.400	6.120	1.530	6.320	2.550	4.000	45.450
<b>MASSACHUSETTS—</b>													
Amherst . . . . .	3.547	2.407	2.121	7.683	6.818	2.664	4.982	3.140	3.039	3.878	2.069	5.313	47.661
Boston . . . . .									2.560				
Bridgewater . . . . .	4.650	2.340	2.488	5.981	2.889					3.618	1.170	5.572	
Cambridge . . . . .	7.866	3.724	3.496	8.949	5.168	1.710	6.327	6.669	2.935	3.686	2.565	6.004	59.099
Canton . . . . .	5.010	2.780									2.600	4.900	
Florida . . . . .	3.425												
Lawrence . . . . .	6.520	2.070	3.460	9.850	4.821	2.860	4.882	6.290	2.650	5.980	2.352	4.840	56.595
Mendon . . . . .				7.300	4.800	2.350	4.800	6.091	3.300	4.100	2.300		
Nantucket . . . . .	6.752	2.909	3.965	5.965	4.875	2.896	3.073	7.025	2.512	3.246	2.221	5.135	49.874
New Bedford . . . . .	5.510	1.640	2.240	5.350	3.285	2.050	4.100	3.500	2.060	2.340	1.640	4.880	36.595
Newburyport . . . . .						2.450	2.405	4.223	1.005	3.190			
North Attleborough . . . . .	3.730	1.450	1.350										
Plainfield . . . . .			2.750										
Princeton . . . . .							6.220	5.050	2.280	5.190	2.130	3.955	
Southwick . . . . .		3.130	2.860	5.980	8.070								
Springfield . . . . .						2.270	6.240	3.490					
Westfield . . . . .	3.630	2.480	2.470	6.260	6.910	3.240	6.690	4.120	3.530	5.350	2.070	6.580	53.330
Weymouth . . . . .			1.300	7.670	4.320	2.220	2.910	6.160	4.910	3.790	1.710	4.710	
Williamstown . . . . .		3.680					4.052	5.187	3.325	4.870	1.755	3.858	
Worcester . . . . .		2.240	2.800	8.770		2.526						6.314	
<b>RHODE ISLAND—</b>													
Providence . . . . .	5.500	2.360	3.350	6.290	4.330	1.900	3.450	4.800	2.270	2.900	2.400	5.200	44.750
<b>CONNECTICUT—</b>													
New London . . . . .			2.600	6.250	4.610	3.430	6.130	4.660		4.180	2.201	4.510	
Pomfret . . . . .	3.420		3.090	6.700	4.710	2.350	5.520	5.480	3.610	3.400	2.940	7.055	
Saybrook . . . . .	5.140	1.450	2.490	6.550	3.870	3.530	7.370	4.930	2.260	3.880	2.420	6.080	49.970
Wallingford . . . . .	4.590		2.470	7.110	7.760	3.230	8.290	5.620	3.170	5.880	2.660	4.380	
<b>NEW YORK—</b>													
Angelica . . . . .	2.850	1.770		4.400		12.500							
Bellport . . . . .								4.560		3.210		0.950	
Beverly . . . . .			2.400	7.290	7.510	6.295	3.645	3.870			1.765	5.940	
Blackwell's Island . . . . .	6.736	1.740	3.165	7.232	6.450	4.615	6.601	4.530	3.803	3.935	1.912		
Canton . . . . .										4.795		5.372	
Cazenovia . . . . .	1.970		5.180	6.750	3.461	9.850	3.820	4.880		7.770	3.920	3.470	
Covert . . . . .												2.187	
Clinton . . . . .		2.960	3.630	9.180	4.960	8.510	4.740	7.150	4.400	6.410	3.910	4.780	
Fishkill Landing . . . . .	3.250	0.950											
Platbush . . . . .	3.450	1.560	2.140	7.498	6.130	4.570	6.370	3.810	3.480	3.880			49.728
Port Edward . . . . .											3.940	7.230	
Houseville . . . . .		4.480						5.450					
Lake . . . . .	3.100		1.970	5.350	5.290	5.430	5.450	5.080	1.770	5.650	2.590	4.320	
Lowville . . . . .	1.610	4.809	3.148	5.743	3.651	4.315	4.115	4.960	2.751	5.041	5.153	4.691	47.317
McGrawville . . . . .	3.912	0.680	3.500	2.290	4.220	10.890	2.510	2.880	3.200				
Madrid . . . . .										1.131			
Mexico . . . . .	3.699												
New York city . . . . .		1.690	2.320	9.050	6.720	5.430	6.130	3.900	3.840		1.390	6.420	
Ogdensburg . . . . .	1.620	4.140	2.940	4.320	2.060	5.400	4.370	3.830	2.230	2.500			
Oswego . . . . .					4.600		1.570	5.280	1.980	4.600	5.610	5.540	
Ovid . . . . .	1.400	2.370	2.010	5.210	3.660	10.000	1.510	3.100	2.280	7.260			
Penn Yan . . . . .	0.790	1.130	1.090	4.790	3.570	11.530	2.810	4.870	1.630	6.560	4.210	2.120	44.900
Plainville . . . . .	4.570	4.740	2.080	5.320	4.770	7.260							
Pompey . . . . .										8.020	3.400	3.460	
Rochester, [Harkness] . . . . .	1.970	3.602	2.600	6.125	3.893	5.517	3.797	2.832	2.411	4.072	4.338	3.983	45.250
Rochester, [Palmer] . . . . .	1.924	3.517	1.991	5.069	3.718		3.680	2.740	1.907	4.215	3.964	4.372	
Sag Harbor . . . . .	4.360	1.325	2.750	4.970	3.050	1.940	4.410	4.170	1.653	3.800	2.700	2.050	37.203
Seneca . . . . .											4.090	1.440	
Spencertown . . . . .	4.000	2.370	0.865	7.090	5.773	3.605	4.836	3.502	2.565	4.665	2.081		
Townsendville . . . . .	1.750	1.250	1.437	3.500			3.625	2.750	2.500	5.750	2.562		
Troy . . . . .	2.310	1.315											
Wampsville . . . . .					6.270		6.080	14.310			2.850		
Waterford . . . . .						4.780	4.530	5.190	2.930	4.650	1.400	3.790	
Wellsville . . . . .					2.500		3.590	3.687	5.500			2.645	

\* In cases where the observer recorded only the depth of snow as it fell, without melting, it is estimated in this table as equal to one-tenth of that depth in water; and whenever, from this cause or any other, there is reason to doubt the accuracy of the record, it is indicated by affixing a mark of interrogation.



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1857.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>NEW JERSEY—</b>													
Bloomfield .....	4.133	0.935	2.527	.....	11.576	10.623	12.185	8.106	4.408	.....	.....	5.730	.....
Burlington .....	4.254	2.969	1.923	6.035	5.700	6.550	5.885	6.760	1.600	3.245	1.505	5.100	51.806
Lumberville .....	4.101	1.262	1.501	6.805	5.997	4.402	4.016	7.986	2.405	3.175	2.022	4.979	48.657
Newark .....	3.639	1.500	1.990	7.155	6.030	5.345	5.080	4.015	3.810	3.955	0.670	5.785	49.365
Sergeantsville .....	5.819	2.182	7.660	7.750	10.990	5.840	3.550	6.150	1.050	.....	.....	.....	.....
<b>PENNSYLVANIA—</b>													
Bedford .....	.....	.....	.....	1.540	5.560	7.051	1.775	2.042	1.040	.....	.....	2.614	.....
Cannonsburg .....	1.558	1.910	1.293	2.165	5.735	5.485	4.454	4.488	2.910	3.610	3.730	3.500	40.839
Carlisle .....	3.018	0.856	1.207	2.744	7.751	10.881	.....	.....	.....	.....	.....	.....	.....
Chromdale .....	2.669	1.380	1.550	5.650	5.330	6.390	1.970	8.260	1.030	3.720	1.510	5.090	45.140
Easton .....	3.320	1.700	1.040	5.749	7.349	5.760	3.940	3.460	1.070	3.150	1.480	5.280	43.260
Gottsburg .....	3.030	0.975	1.608	3.125	6.235	7.443	5.032	1.975	1.390	1.120	2.342	3.948	38.223
Harrisburg, [Heisely] .....	1.250	.....	.....	2.795	8.033	11.201	3.225	2.925	2.088	1.176	1.062	5.669	.....
Harrisburg, [Hickok] .....	.....	.....	1.325	2.610	7.870	11.480	2.840	3.100	1.950	1.170	1.380	6.270	.....
Lewisburg .....	1.351	1.114	1.205	2.378	6.700	7.284	4.185	3.016	2.005	1.818	2.223	4.730	.....
Meadville .....	2.315	2.154	1.915	3.704	3.404	8.571	4.394	3.888	1.852	5.339	0.959	4.751	41.319
Morrisville .....	2.600	1.000	1.200	6.600	5.800	7.800	4.100	8.000	1.400	2.900	1.200	5.200	47.800
Mass Grove .....	1.780	2.692	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Joy .....	.....	.....	.....	.....	.....	.....	.....	3.741	1.750	1.652	2.220	.....	.....
Morrisville .....	.....	.....	.....	2.830	7.630	4.660	3.520	4.500	3.280	2.900	3.520	3.960	.....
Nazareth .....	.....	.....	.....	4.670	7.810	.....	8.290	.....	.....	.....	.....	.....	.....
Norristown .....	3.360	0.890	1.461	6.840	6.770	6.000	2.520	6.770	1.710	3.340	1.690	1.000	47.550
Philadelphia .....	9.980	0.921	1.773	6.932	6.043	7.426	3.373	8.039	1.132	2.742	1.575	5.503	38.448
Pittsburg, [Wilson] .....	3.001	2.100	1.100	2.440	6.422	4.518	1.432	4.594	2.170	3.735	2.810	1.950	36.071
Pompton .....	3.870	0.940	2.180	5.280	6.560	5.750	2.510	7.170	1.280	4.140	1.420	5.620	41.720
Shamokin .....	2.961	1.899	2.700	6.243	10.690	7.758	6.053	4.080	1.907	2.688	2.413	5.913	57.011
Summit .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.527	.....
West Haverford .....	3.980	1.290	3.340	.....	3.850	6.902	.....	.....	1.420	4.260	1.380	6.000	.....
Westtown .....	.....	.....	.....	.....	.....	.....	1.852	6.058	1.592	4.601	1.927	5.546	.....
<b>DELAWARE—</b>													
Georgetown .....	.....	.....	.....	.....	.....	.....	3.950	6.430	2.540	3.790	2.390	4.700	.....
<b>MARYLAND—</b>													
Annapolis .....	2.970	0.770	1.670	3.620	6.330	8.890	6.190	7.980	1.530	3.430	1.770	6.440	51.640
Baltimore .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.510	6.110	.....
Bridgetown .....	.....	0.470	0.910	.....	5.110	5.180	3.920	6.900	1.400	2.430	.....	5.430	.....
Chesapeake .....	.....	.....	.....	.....	.....	.....	4.220	.....	.....	.....	.....	.....	.....
Fredrick .....	2.785	0.790	2.290	2.565	7.510	10.728	3.125	2.965	1.270	1.355	1.131	5.763	42.277
<b>DISTRICT OF COLUMBIA—</b>													
Washington, [Smithsonian Inst.] .....	0.890	0.653	1.910	2.400	5.665	6.531	5.385	10.205	.....	2.072	1.790	.....	.....
Washington, near [Wiessner] .....	.....	.....	.....	.....	.....	.....	.....	.....	1.620	1.700	0.890	5.540	.....
<b>VIRGINIA—</b>													
Alexandria .....	3.055	0.491	0.680	2.424	4.454	4.861	4.544	5.000	2.260	2.305	1.939	5.448	37.664
Astland .....	1.153	0.903	0.821	2.183	.....	.....	6.418	4.036	8.270	1.710	4.773	3.791	.....
Berkeley .....	2.950	0.990	1.720	3.020	5.880	6.200	3.980	3.010	1.840	1.030	1.730	5.700	35.010
Crack Whip .....	.....	.....	.....	2.720	4.745	6.055	4.640	3.383	1.170	.....	.....	.....	.....
Cummins Store .....	0.900	0.310	1.550	2.300	4.050	3.090	11.460	1.060	3.642	1.500	1.220	2.970	34.092
Kanawha .....	2.450	1.240	1.390	4.010	5.040	5.220	.....	0.193	.....	.....	.....	.....	.....
Kanawha Shales .....	.....	.....	.....	2.121	3.785	5.358	6.108	3.552	0.171	2.967	3.844	5.768	.....
Lewisburg .....	.....	1.020	.....	2.500	5.000	3.580	6.760	3.080	4.300	.....	3.660	2.720	.....
Portsmouth .....	5.800	1.190	4.150	4.860	4.010	3.080	8.120	4.200	8.960	3.870	1.810	4.330	54.110
Rose Hill .....	.....	.....	.....	2.530	4.470	7.700	7.600	2.811	1.380	2.330	1.400	3.950	.....
Rougemo .....	.....	.....	.....	6.494	6.382	3.395	7.494	2.971	4.096	2.621	7.205	.....	.....
Rutledge .....	3.340	0.420	2.180	3.020	6.920	3.470	2.780	4.730	1.750	1.810	4.070	37.120	.....
Salem .....	.....	.....	.....	.....	.....	.....	3.717	4.300	1.586	3.597	3.559	7.860	.....
Smithfield .....	4.105	0.775	3.250	4.318	4.398	3.742	7.053	3.522	6.742	2.900	1.796	4.369	47.205
Winchester .....	2.750	1.700	1.820	3.030	6.200	6.320	6.750	3.000	2.100	1.360	2.000	5.700	42.910
Wirt Court House .....	2.845	1.135	1.835	2.730	4.400	2.220	5.765	2.660	1.090	2.190	2.250	5.680	34.980
<b>NORTH CAROLINA—</b>													
Ashville .....	.....	.....	.....	.....	.....	.....	2.600	3.600	1.250	.....	.....	3.830	.....
Chapel Hill .....	2.811	0.199	2.304	2.792	4.381	2.535	4.403	3.655	.....	.....	2.766	4.931	.....
Gaston .....	1.530	0.810	1.675	3.130	4.710	0.970	6.680	1.880	5.530	2.300	1.870	5.130	36.315
Murfreesborough .....	2.750	0.580	1.670	3.585	3.450	2.490	4.200	0.720	3.400	2.190	1.310	2.900	29.225
Whitcomb .....	.....	.....	.....	2.100	.....	2.650	5.230	2.025	3.723	2.560	1.510	.....	.....
<b>SOUTH CAROLINA—</b>													
Aiken .....	3.995	0.700	3.185	2.235	4.117	2.925	5.155	6.955	0.170	0.810	1.970	4.340	35.857
All Saints .....	3.300	0.710	2.200	2.980	1.310	2.660	9.570	3.930	3.650	1.080	4.340	4.360	40.120
Candler .....	4.070	1.230	3.180	2.630	3.830	2.670	6.900	8.900	0.940	1.300	1.080	4.830	41.680
Charleston, [Dawson] .....	1.220	1.020	2.410	2.840	0.560	2.420	8.280	2.450	0.970	2.080	2.170	4.680	31.120
Charleston, [Johnson] .....	1.603	1.350	2.500	3.950	2.257	2.869	9.575	2.250	1.212	2.325	2.670	5.362	32.126
Edisto Island .....	1.237	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Pleasant .....	.....	0.920	2.230	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>GEORGIA—</b>													
Athens .....	.....	.....	2.479	3.225	4.171	.....	6.889	.....	.....	.....	.....	6.958	.....
Factory Mills .....	4.450	0.491	0.920	2.010	5.640	2.940	.....	.....	.....	.....	.....	.....	.....
Hatsborough .....	.....	.....	.....	.....	.....	.....	.....	0.118	0.554	5.345	4.290	.....	.....
Savannah .....	1.848	0.951	2.801	2.661	1.250	0.846	10.000	4.739	1.053	3.124	1.029	2.910	33.511
Sparta .....	5.130	1.830	2.690	3.360	5.800	2.140	4.910	1.490	0.080	0.480	5.840	5.830	39.550
The Rock .....	2.450	0.410	2.100	3.020	5.370	0.900	5.100	4.640	0.510	0.670	5.870	5.790	36.830
Whitemarsh Island .....	1.220	0.540	2.720	2.480	1.435	4.025	6.335	3.770	.....	3.430	0.670	3.100	.....
<b>FLORIDA—</b>													
Alligator .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.600	.....
Atsena .....	1.770	0.662	3.250	.....	.....	4.312	6.812	.....	.....	.....	.....	1.812	.....
Gainesville .....	2.330	0.100	2.190	2.430	2.950	11.130	7.520	4.300	0.750	0.520	1.220	1.900	37.940
Jack-sonville .....	1.175	0.600	2.920	2.805	2.404	3.750	9.200	10.550	3.777	2.010	.....	6.300	.....
St. Augustine .....	0.575	0.525	5.135	2.350	2.895	5.775	6.625	6.630	1.350	3.000	1.600	4.550	40.850
Salt Ponds .....	0.480	0.740	2.370	1.440	0.535	2.900	9.630	3.433	9.110	4.289	1.070	0.720	36.697
Warrington .....	1.950	1.300	3.950	.....	15.210	1.580	6.390	14.200	1.670	2.900	6.100	.....	.....
<b>ALABAMA—</b>													
Auburn .....	5.390	1.100	3.680	.....	6.790	.....	4.340	3.730	1.070	.....	.....	5.760	.....



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1857.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>ALABAMA—Continued.</b>													
Carlsville .....	4.970	2.100	4.870	4.880	6.750	2.050	4.960	6.920	? 1.320	? 0.850	3.900	3.870	? 47.440
Greene Springs .....	4.120	3.640	2.740	3.450	5.640	2.290	4.980	5.560	1.080	1.370	6.390	8.950	50.190
Greensborough .....	5.807	2.461	3.254	3.581	9.228	1.741	4.070	4.161	.....	1.480	6.709	8.590	.....
<b>MISSISSIPPI—</b>													
Columbus .....	4.185	3.053	0.933	5.210	7.750	2.815	6.225	2.915	1.254	2.554	3.765	13.320	53.969
Port Gibson .....	6.960	1.342	3.310	5.310	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>LOUISIANA—</b>													
Black River .....	.....	.....	3.310	7.160	3.290	4.450	2.690	3.250	0.370	3.570	4.900	12.460	.....
New Orleans, [Barton] .....	.....	1.380	3.582	1.095	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Orleans, [Taylor] .....	3.125	2.350	6.900	.....	.....	.....	.....	5.520	.....	.....	.....	.....	.....
<b>TEXAS—</b>													
Austin .....	.....	2.822	0.298	1.589	1.676	3.365	0.457	0.681	4.382	3.352	6.140	6.120	.....
Helena .....	0.100	.....	0.050	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Braunfels .....	.....	? 3.500	? 0.060	? 1.300	? 2.400	? 1.300	? 2.600	? 3.000	.....	? 3.200	? 4.700	.....	.....
Washington .....	.....	1.520	0.020	.....	1.220	.....	0.984	2.850	2.190	4.420	.....	7.700	.....
<b>TENNESSEE—</b>													
Glenwood .....	1.988	2.760	0.560	2.707	5.997	4.234	4.614	5.077	0.258	3.018	6.591	5.644	43.448
Memphis, [Tuck] .....	.....	.....	.....	.....	.....	.....	.....	.....	2.500	1.470	4.820	4.910	.....
Memphis, [Wright] .....	.....	2.541	0.912	8.729	4.780	2.963	.....	.....	.....	.....	.....	.....	.....
Walnut Grove .....	2.330	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>KENTUCKY—</b>													
Danville .....	1.613	1.098	0.610	3.280	6.233	4.745	4.014	4.470	0.168	.....	5.007	6.084	.....
Millersburg .....	? 1.100	.....	.....	.....	4.960	.....	.....	.....	5.400	.....	.....	6.400	.....
Paris .....	1.505	1.574	.....	4.567	5.790	4.880	5.902	3.860	2.631	3.949	8.010	5.490	.....
Springdale .....	1.890	3.760	0.500	5.540	7.940	5.170	4.330	4.390	0.870	1.990	5.320	5.000	46.700
<b>OHIO—</b>													
Belle Centre .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.960	5.380	2.400	.....
Cincinnati, [Harper] .....	0.535	1.920	0.760	2.725	5.530	3.085	2.500	2.920	0.750	4.920	5.360	3.820	34.885
Cincinnati, [Hurt] .....	? 0.800	? 2.440	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cleveland .....	1.210	2.890	0.840	2.910	3.510	7.540	2.710	3.970	2.630	3.950	5.390	2.800	39.750
Collingwood .....	.....	.....	.....	.....	5.400	.....	.....	? 4.750	? 3.000	? 2.500	? 4.350	.....	.....
Edinburg .....	.....	.....	.....	4.100	4.900	? 5.687	5.370	3.930	0.680	3.850	8.370	? 4.970	.....
Farmers' College .....	1.385	2.145	.....	2.620	6.038	4.990	.....	.....	.....	.....	.....	.....	.....
Franklin .....	? 1.662	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gallipolis .....	1.360	1.290	0.765	2.060	4.380	2.115	6.020	4.455	0.440	.....	4.420	3.605	.....
Granville .....	1.280	2.070	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hillsborough, [Jones] .....	1.750	2.193	1.220	2.956	5.007	5.250	5.127	5.217	0.991	4.574	5.167	.....	.....
Hillsborough, [Matthews] .....	1.733	2.119	1.051	3.028	4.901	5.427	4.916	4.708	0.997	3.988	4.810	3.551	41.232
Hiram .....	.....	3.450	0.600	? 2.785	3.960	5.795	5.140	2.490	1.540	4.330	4.440	3.320	.....
Jefferson .....	.....	.....	3.520	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madison, [Cunningham] .....	? 1.925	? 4.437	? 0.800	? 4.781	? 5.000	? 7.252	? 6.070	? 3.263	.....	.....	8.396	? 2.781	.....
Medina .....	.....	.....	1.476	4.300	3.240	6.621	6.471	1.910	1.271	3.386	4.325	5.360	.....
Oberlin .....	.....	.....	0.800	1.900	3.720	7.230	5.040	.....	.....	.....	5.380	.....	.....
Portsmouth .....	1.400	1.280	0.750	2.170	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ripley .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.520	6.600	2.990	.....
Savannah .....	1.727	3.400	1.230	2.763	4.338	3.688	5.630	3.626	1.795	5.455	6.595	3.754	44.001
Sidney .....	? 0.833	.....	? 0.310	.....	? 8.900	? 1.440	.....	? 1.990	.....	8.020	.....	3.410	.....
Urbana .....	1.160	3.200	1.850	1.940	6.410	3.050	4.280	4.630	1.840	3.270	5.650	2.540	39.820
Welchfield .....	.....	.....	2.150	4.100	5.520	10.790	5.340	4.017	2.456	5.885	6.550	4.007	.....
West Bedford .....	1.360	2.010	1.100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zanesville .....	2.102	2.578	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>MICHIGAN—</b>													
Battle Creek .....	1.120	5.930	1.150	1.730	3.130	3.260	4.870	4.400	1.180	1.050	2.310	1.200	31.230
Copper Falls Mines .....	? 6.600	? 2.950	? 1.695	? 3.525	1.890	2.840	1.490	3.180	.....	.....	.....	.....	.....
Grand Rapids, [Streng] .....	.....	.....	.....	.....	.....	.....	.....	5.235	1.740	1.350	2.760	1.380	.....
Grand Rapids, [Currier] .....	? 2.100	? 5.050	? 2.183	3.620	4.840	4.920	1.250	5.400	1.760	1.471	2.590	? 1.550	.....
Marquette .....	.....	.....	.....	.....	.....	.....	.....	.....	5.365	.....	? 3.441	? 2.864	.....
New Buffalo .....	.....	.....	.....	.....	.....	.....	4.040	4.060	2.760	4.660	3.440	1.240	.....
Romeo .....	0.982	3.195	0.885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>INDIANA—</b>													
Cannelton .....	1.300	2.020	0.370	2.480	2.740	4.540	3.430	3.100	0.580	.....	.....	.....	.....
Logansport .....	? 1.025	? 9.012	? 2.450	? 0.850	? 4.500	? 4.500	? 2.750	? 4.375	? 2.663	? 2.500	? 3.237	? 2.000	? 39.862
Michigan City .....	.....	.....	2.530	2.300	4.980	3.890	2.230	4.160	2.570	3.460	.....	1.380	.....
New Albany .....	.....	.....	0.414	2.448	5.017	3.985	.....	.....	? 1.040	.....	.....	.....	.....
New Harmony .....	1.700	3.490	0.480	2.850	3.350	5.560	3.740	6.600	1.910	0.960	6.810	2.800	39.660
Richmond .....	0.609	3.880	1.245	1.960	5.985	5.880	1.975	3.477	0.900	3.505	7.375	2.750	39.541
<b>ILLINOIS—</b>													
Athens .....	0.440	7.660	2.760	1.860	2.600	3.870	1.550	2.980	2.380	1.760	3.180	.....	.....
Augusta .....	0.290	4.800	2.555	0.887	2.035	3.703	1.448	4.100	2.722	2.323	2.432	1.361	28.756
Aurora .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.400	2.570	1.000	.....
Batavia .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.001	.....
Brighton .....	1.230	? 2.400	? 1.700	? 1.400	? 1.400	? 2.400	? 1.000	? 1.501	? 0.701	? 0.400	2.301	1.300	? 17.733
Carthage .....	0.580	4.280	1.260	1.140	1.740	2.030	0.920	.....	.....	.....	.....	.....	.....
Chicago .....	1.090	5.430	2.550	2.190	6.332	4.140	.....	.....	.....	.....	.....	.....	.....
Manchester .....	0.852	6.913	2.620	0.770	2.730	3.840	2.280	4.520	2.391	1.670	3.685	1.350	33.761
Marango .....	1.090	4.910	.....	2.010	3.360	4.700	2.300	6.520	4.320	2.020	? 1.275	.....	.....
Ottawa .....	.....	? 4.450	? 3.062	? 1.416	3.647	3.949	3.970	6.104	0.891	2.684	? 2.956	? 1.124	.....
Pekin .....	0.405	6.310	2.800	2.207	2.967	3.633	2.197	5.759	1.987	1.390	1.480	1.446	32.581
Peoria .....	0.370	5.320	3.840	1.390	2.800	2.770	1.403	5.610	2.160	2.010	1.280	1.500	30.453
Riley .....	.....	.....	2.775	.....	2.600	3.000	2.630	4.570	.....	3.691	.....	1.252	.....
Upper Alton .....	.....	.....	.....	1.355	1.550	1.865	.....	.....	.....	.....	.....	.....	.....
Warsaw .....	? 0.817	5.140	1.080	1.080	1.280	3.360	0.850	3.450	1.820	2.110	2.570	0.830	.....
West Salem .....	.....	4.520	1.130	1.700	4.370	6.830	3.240	5.750	1.370	1.190	5.290	3.240	.....
West Urbana .....	0.631	.....	.....	.....	2.875	3.335	1.675	2.254	2.984	? 0.839	3.615	? 2.190	.....
Wheaton .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.923	.....
Winnebago .....	.....	.....	3.260	2.390	3.640	8.340	4.010	6.100	2.560	4.760	1.910	1.300	.....
<b>MISSOURI—</b>													
Cape Girardeau .....	.....	4.830	.....	.....	4.390	2.710	5.847	4.970	0.940	1.670	7.060	3.280	.....
Palmyra .....	.....	.....	.....	.....	1.870	2.436	0.320	1.790	.....	0.000	4.600	.....	.....
St. Joseph .....	.....	.....	.....	.....	1.200	1.940	2.890	2.950	.....	2.950	.....	.....	.....

## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1857.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>MISSOURI—Continued.</b>													
St. Louis .....	0.410	7.740	1.800	1.720	4.810	3.710	2.820	4.150	3.180	3.020	3.800	1.870	39.030
Springfield .....							4.480						
<b>WISCONSIN—</b>													
Appleton .....	0.649	3.222	0.387	2.191	1.924	7.391	2.561	3.580	1.712	2.031	0.759	9.290	35.697
Bay City .....					3.950	5.800	0.400	5.700	8.600				
Beloit .....			1.330	2.800	4.230	4.350	2.630	5.420	1.910	3.910	1.920	1.055	
Falls of St. Croix .....												0.750	
Janesville .....	1.240	2.500	1.070	1.200	4.300	4.240	1.550	3.400	2.800	3.200	1.100	0.810	27.410
Madison, [Schue] .....				2.700	5.343					2.000	0.720		
Madison, [Sterling] .....					5.280	2.670	3.000	2.000	2.930			0.750	
Menasha .....										5.125	2.560		
Milwaukee, [Winkler] .....		1.850	1.200	3.696	4.600	3.410	3.140	3.010	2.730	3.960	1.500	1.700	
New London .....	1.575	2.915		2.480	2.590	3.610	2.620	2.450	4.380	1.690	1.990	1.850	
Norway .....	0.830	3.550	0.760										
Platteville .....	1.300	2.454	1.479	2.108	4.399	3.971	3.462	3.566	5.083	2.492	2.520	1.990	34.824
<b>IOWA—</b>													
Bellevue .....	0.950	4.800	1.900	1.830	4.190	3.930	3.510	5.270	2.470	2.470	3.570	1.170	36.050
Dubuque .....					1.730	1.720	5.300	2.510	2.700	2.500	2.700	1.300	
Fairfield .....					1.039	1.060	2.300	7.620	3.501	2.310	3.540	0.830	
Port Madison .....	0.750	5.350	2.610	1.130	1.510	1.830	1.480	5.840	2.030	1.810	1.950	1.250	27.540
Iowa City .....						2.500	1.950	5.080			4.360	0.580	
Maquoketa .....											4.731		
Muscatine .....	0.610	5.700	2.440	1.903	2.750	0.900	4.670	6.600	1.820	1.950	3.770	1.880	35.053
Pleasant Plain .....			1.470	0.550	2.500	0.800	1.100	7.600	2.100			1.000	
Rossville .....											5.700	2.170	
Sioux City .....									2.120		1.470		
<b>MINNESOTA—</b>													
Hazlewood .....	0.850	0.500	0.810	1.580	3.470	4.110			2.975		1.460		
Lake Winnepigoshish .....	0.970	7.070	0.850		1.420								
Princeton .....		2.340	1.350	3.780	3.460		1.040	3.860	3.050	0.790	3.690		
Wabashaw .....												1.440	
<b>NEBRASKA—</b>													
Omaha .....						3.320	1.710	10.050	2.540	3.860	1.750	0.860	
<b>KANSAS—</b>													
Council City .....		3.600	2.600	0.330	2.690	1.550	3.210	3.860					
Leavenworth City .....											3.610	0.220	
<b>UTAH—</b>													
Great Salt Lake City .....		0.850	0.972	0.193	0.823	1.004	0.643	0.850	0.580	1.000			
<b>OREGON—</b>													
Oregon City .....				0.790	2.540	1.800	0.350	0.490	0.720	1.260	6.830	8.630	
<b>CALIFORNIA—</b>													
Sacramento .....	1.677	4.821	0.677	0.001	0.000	0.350	0.012	0.001	0.000	0.655	2.405	1.633	12.232
San Francisco .....	1.301	4.935	0.808	0.000	0.000	0.142	0.000	0.001	0.000	0.235	2.221	3.335	12.970
<b>MEXICO—</b>													
Mirador .....									14.882	15.858	1.451	0.202	
Vera Cruz .....					0.820				9.170	13.320	0.320	1.155	
<b>GUATEMALA—</b>													
Guatemala .....	0.205	0.008	0.557	2.091	5.311	13.275	11.945	11.234	5.390	3.532	1.087	0.236	54.882
<b>WEST INDIES—</b>													
Port of Spain, Trinidad .....	2.140	4.290											
St. George's, Bermuda .....	2.930	8.050	4.210	2.700	4.660	2.700		4.160			4.720	4.000	
Shelby Bay, Bermuda .....												6.040	
<b>SOUTH AMERICA—</b>													
Catharina Sophia, Surinam .....	11.600	4.950	10.900	2.900	7.900	6.400	6.900		1.450	3.150	1.859	12.946	
<b>AZORES—</b>													
Horta, Fayal .....	1.562	2.844	4.406	1.281	5.940	3.187	2.562	2.187	3.187	3.719			



## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			Range for the year.			
			DATE.		HEIGHT.	DATE.		HEIGHT.				
			Day.	Hour.		Day.	Hour.					
		Inches.			Inches.			Inches.	Inches.			
British America	Hamilton (a)	29.64	Feb.	10	9 p. m.	30.30	Nov.	19	9 a. m.	28.48	1.82	
	Montreal	29.90	Feb.	11	9 p. m.	30.75	Dec.	31	2 p. m.	28.99	1.76	
	St John's	29.52	Jan.	27	7 a. m.	30.47	Dec.	17	7 a. m.	28.10	2.37	
	St. Martin	29.74	Feb.	12	7 a. m.	30.76	Dec.	31	2 p. m.	28.88	1.88	
	Toronto (a)	29.60	Feb.	10	10 p. m	30.35	Nov.	19	6 a. m.	28.55	1.50	
	Wolfville	29.70	Feb.	12	7 a. m.	30.94	Jan.	22	9 p. m.	28.99	1.95	
Maine	Gardiner	29.78	Feb.	12	2 p. m.	30.78	Dec.	31	2 p. m.	28.92	1.86	
	Portland	29.84	Feb.	12	7 a. m.	30.75	Dec.	31	2 p. m.	28.94	1.81	
	Steuben	29.84	Feb.	12	7 a. m.	30.90	Dec.	31	2 p. m.	28.83	2.07	
New Hampshire	Concord (a)	29.60	Feb.	12	7 a. m.	c 30.58	Dec.	31	2 p. m.	28.69	1.89	
Vermont	Norwich (a)	29.63	Feb.	12	7 a. m.	30.55	Nov.	19	9 p. m.	28.87	1.68	
	Shelburn	29.63	Feb.	12	7 a. m.	d 30.60	Dec.	31	2 p. m.	28.38	2.22	
Massachusetts	Amherst	29.75	Feb.	12	7 a. m.	30.69	Oct.	26	2 p. m	28.85	1.84	
	Cambridge	29.85	Feb.	12	7 a. m.	30.93	April	14	9 p. m.	29.08	1.85	
	Nantucket	29.98	Feb.	12	7 a. m.	30.94	Jan.	19	7 a. m.	28.98	1.96	
	New Bedford	29.90	Feb.	12	2 p. m.	30.87	Oct.	26	2 p. m	28.95	1.92	
	Newburyport (a)	29.95	Feb.	12	7 a. m.	31.00	Dec.	31	2 p. m.	29.06	1.94	
	Westfield	29.86	Feb.	12	7 a. m.	30.77	Oct.	26	2 p. m.	29.02	1.75	
	Worcester.	29.45	Nov.	26	2 p. m.	30.52	Sept.	23	7 a. m.	28.11	2.41	
Rhode Island	Providence (a)	29.77	Feb.	12	Sunrise	30.80	Oct.	26	1 p. m.	28.88	1.92	
Connecticut	Norwich	29.87	Feb.	12	7 a. m.	30.78	Apr.	14	2 p. m.	29.05	1.73	
	Pomfret	29.35	Feb.	12	7 a. m.	30.23	Oct.	26	2 p. m.	28.43	1.80	
	Wallingford	29.87	Feb.	12	7 a. m.	30.80	Nov.	19	9 p. m.	29.05	1.75	
New York	Cazenovia.	28.54	Feb.	12	7 a. m.	29.24	Nov.	19	2 p. m.	27.61	1.63	
	Flatbush	29.84	Feb.	12	7 a. m.	30.75	Oct.	26	7 a. m.	28.96	1.79	
	Lowville		Feb.	12	7 a. m.	29.78	Nov.	19	2 p. m.	28.23	1.55	
	New York city	29.98	Feb.	12	7 a. m.	30.87	Oct.	26	7 a. m.	29.08	1.79	
	Oswego	29.28	Feb.	12	7 a. m.	30.05	Nov.	19	2 p. m.	28.30	1.75	
	Ovid	29.87	Feb.	12	7 a. m.	29.55	Nov.	19	7 a. m.	28.05	1.50	
	Penn Yann (a)	29.32	Dec.	12	Sunset	29.94	Nov.	19	2 p. m.	28.44	1.50	
	Rochester	29.46	Feb.	12	7 a. m.	30.50	Nov.	20	2 p. m.	28.33	2.17	
	Sag Harbor	29.69	Feb.	12	2 p. m.	30.67	Oct.	26	2 p. m.	28.75	1.92	
	Saratoga (a)	29.56	Jan.	26	7 a. m.	30.50	Dec.	31	2 p. m.	28.70	1.80	
	Spencertown	29.31	Feb.	12	7 a. m.	b 30.17	Nov.	19	9 p. m.	28.52	1.65	
	New Jersey	Bloomfield (a)	29.86	Feb.	12	7 a. m.	30.71	Oct.	26	7 a. m.	28.98	1.73
		Burlington	29.86	Feb.	12	2 p. m.	30.79	Oct.	26	2 p. m.	29.03	1.76
		Newark (a)	29.94	Feb.	12	7 a. m.	30.82	Nov.	19	6 p. m.	29.07	1.75
	Pennsylvania	Caunonsburg	29.79	Dec.	20	9 p. m.	29.73	June	7	2 p. m.	28.03	1.70
Chromdale		29.85	Feb.	12	7 a. m.	30.76	Nov.	19	2 p. m.	28.97	1.79	
Easton		29.59	Feb.	12	7 a. m.	30.52	Nov.	19	2 p. m.	28.66	1.86	
Gettysburg		29.46	Feb.	12	7 a. m.	30.21	Nov.	19	2 p. m.	28.58	1.63	
Harrisburg. [Heisely]		29.75	Feb.	12	7 a. m.	30.52	Nov.	19	2 p. m.	28.86	1.66	
Lewisburg		29.54	Feb.	12	7 a. m.	30.28	Nov.	19	2 p. m.	28.59	1.69	
Morrisville		30.05	Feb.	12	7 a. m.	30.92	Oct.	26	7 a. m.	29.24	1.68	
Nazareth		29.41	Feb.	12	7 a. m.	30.29	Nov.	19	2 p. m.	28.53	1.76	
Norristown		29.89	Feb.	12	7 a. m.	30.76	Nov.	19	2 p. m.	e 29.02	1.74	
Philadelphia.		29.86	Feb.	12	7 a. m.	30.64	Oct.	26	7 a. m.	29.01	1.63	
Pittsburg. [Wilson]		28.91	Feb.	10	9 p. m.	29.59	Nov.	19	2 p. m.	27.85	1.74	
Delaware		Newark (a)	29.80	Feb.	12	7 a. m.	30.61	Oct.	26	7 a. m.	28.98	1.63
Maryland	Annapolis	30.02	Feb.	12	7 a. m.	30.78	Oct.	26	7 a. m.	29.30	1.48	
	Frederick	29.74	Feb.	12	7 a. m.	30.50	Nov.	19	2 p. m.	28.88	1.62	
Virginia	Alexandria	30.00	Feb.	12	7 a. m.	30.80	Nov.	19	2 p. m.	29.11	1.69	
	Portsmouth	30.01	Feb.	12	7 a. m.	30.77	Nov.	19	2 p. m.	29.19	1.58	
	Rose Hill	29.96	Feb.	12	7 a. m.	30.75	Nov.	19	2 p. m.	29.05	1.70	
North Carolina	Chapel Hill	29.51	Nov.	26	2 p. m.	30.29	Nov.	19	2 p. m.	28.71	1.58	
	Murfreesborough	29.28	Feb.	12	7 a. m.	30.16	Nov.	19	2 p. m.	28.60	1.56	
South Carolina	All Saints	29.99	Feb.	11	2 p. m.	b 30.61	April	21	2 p. m.	f 29.44	1.17	
	Camden	29.90	Feb.	12	7 a. m.	d 30.53	Nov.	19	2 p. m.	29.18	1.35	

a For variations from the usual hours, instruments or mode of observation, or for imperfections in the registers, see monthly tables.

b Same height at 9 p. m. February 11.

c Same height at 2 p. m. January 13, and at 7 a. m. January 18.

d Same height at 2 p. m. February 12.

e Same height at 7 a. m. January 26.

f Same height at 2 p. m. January 8.

## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.			Range for the year.
		DATE.		HEIGHT.	DATE.		HEIGHT.	
		Day.	Hour.		Day.	Hour.		
	Inches.			Inches.			Inches.	Inches.
South Carolina.....		Feb.	—	30.70	Nov.	—	29.57	1.13

*a* For eleven months only, June wanting.*b* For variations from the usual hours, instruments or mode of observations, or for imperfections in the registers, see monthly tables.*c* Same height at 7 a. m. February 11.*d* Same height at 9 p. m. February 10.*e* For eleven months only, July wanting.*f* For eleven months only, September wanting.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
BRITISH AMERICA—	°	°	°	°		°		°		°		°		
Hamilton (a) .....	45.88	.....	48.86	45.87	?	96	Aug. 13	84.00	?	-18	Jan. 22	-5.00	114	.....
Montreal .....	40.14	47.59	42.07	43.27	July 14	92	July 13	84.33	Jan. 23	-27	Jan. 8	-9.50	.....	6.52
St. John's .....	40.76	46.37	41.72	42.95	July 7	b 78	July 7	73.33	Jan. 16	-9	Feb. 12	-0.67	.....	.....
St. Martin .....	35.38	49.42	39.29	41.26	July 14	98	July 15	81.90	Jan. 23	-30c	Jan. 23	-25.30	128	5.04
Stanbridge .....	38.88	47.48	40.67	42.34	July 13	d 90	July 13	81.67	Jan. 18	-42	Jan. 23	-29.33	132	6.06
Toronto (a) .....	38.86	47.59	41.19	42.55	July 13	e 85	Aug. 13	76.38	Jan. 18	-18	Jan. 23	-9.18	103	6.03
Wolfville .....	42.52	51.32	43.84	45.89	July 27	88	July 21	79.83	Jan. 18	-10	Jan. 18	-4.67	98	5.22
MAINE—														
Cornish, [Guptill] .....	39.26	49.16	39.26	43.33	July 27	88	July 27	81.00	Jan. 23	-26c	Jan. 23	-21.00	114	5.37
Cornish, [West] .....	37.75	47.85	39.61	41.74	July 13	87	July 27	79.33	Jan. 23	-28c	Jan. 23	-23.33	115	5.14
Gardiner .....	40.58	31.38	42.36	44.77	June 25	f 90	July 11	78.17	Jan. 23	-32	Jan. 23	-14.33	126	6.10
Perry .....	38.14	47.14	40.69	41.79	July 27	g 82	Sept. 3	72.33	Jan. 24	-19	Jan. 23	-9.00	101	5.16
Portland .....	40.92	50.30	43.05	44.76	Aug. 14	h 87	July 12	76.26	Jan. 24	-25	Jan. 23	-17.16	112	5.71
Steuben .....	38.68	47.39	40.64	42.27	July 11	i 85	Sept. 4	72.67	Jan. 24	-29	Jan. 24	-16.33	114	6.16
NEW HAMPSHIRE—														
Concord (j) .....	38.58	51.36	42.62	44.19	July 15	92	July 15	79.67	Jan. 24	-28	Jan. 23	-14.67	120	5.06
Manchester .....	40.33	53.48	45.08	46.30	July 12	k 98	July 12	84.00	Jan. 23	-22	Jan. 23	-17.67	120	5.37
VERMONT—														
Brandon .....	38.62	48.90	41.36	42.96	July 15	88	July 15	80.33	Jan. 23	-27	Jan. 23	-19.33	115	5.98
Craftsbury .....	35.50	45.98	38.40	39.96	July 15	87	July 14	76.00	Jan. 23	-34	Jan. 23	-28.00	121	5.98
Rupert .....	41.04	53.21	47.52	47.26	July 14	100m	July 12	86.00	Jan. 23	-28	Jan. 23	-18.00	128	6.56
Shelburn .....	39.99	48.42	41.04	43.15	July 15	91	July 15	82.33	Jan. 23	-30	Jan. 23	-21.33	121	5.90
West Fairlee .....	38.81	50.45	42.03	43.76	July 14	k 90	July 15	79.00	Jan. 24	-26	Jan. 23	-18.00	116	.....
MASSACHUSETTS—														
Amherst .....	41.53	52.76	44.27	46.19	July 12	d 90	Aug. 14	81.33	Jan. 24	-18	Jan. 23	-11.30	108	5.42
Cambridge .....	43.01	53.78	45.67	47.49	July 19	92	Aug. 14	82.00	Jan. 23	-16c	Jan. 23	-10.67	108	5.47
Lawrence .....	41.90	.....	.....	45.94	Aug. 14	n 91	July 15	80.00	Jan. 24	-25	Jan. 23	-11.50	116	4.85
Mendon .....	42.85	52.49	44.77	46.70	Aug. 14	92	Aug. 14	82.33	Jan. 24	-18	Jan. 23	-10.67	110	5.22
Nantucket .....	48.02	54.32	47.24	49.86	July 12	d 84	Aug. 14	77.50	Jan. 23	-6.5	Jan. 23	-0.00	90	4.95
New Bedford .....	44.57	52.96	45.40	47.64	Aug. 14	88	Aug. 14	79.67	Jan. 23	-11	Jan. 23	-6.67	99	6.08
Newburyport (a) .....	43.39	52.69	45.94	47.34	Aug. 14	93	July 28	81.60	Jan. 22	-20	Jan. 23	-8.70	112	7.33
Westfield .....	40.46	52.47	44.12	45.68	Aug. 14	91	Aug. 14	79.67	Jan. 24	-24	Jan. 23	-12.00	115	5.71
Weymouth .....	44.44	.....	46.07	45.25	Aug. 14	82	July 28	75.00	Jan. 24	-15	Jan. 23	-10.00	97	.....
Worcester .....	42.93	52.67	45.64	47.08	Aug. 14	90	Aug. 14	82.67	Jan. 24	-13	Jan. 23	-8.00	103	6.02
RHODE ISLAND—														
Providence (a) .....	42.26	53.58	44.26	46.70	July 12	88	Aug. 14	79.00	Jan. 23	-14c	Jan. 23	-9.70	102	5.05
CONNECTICUT—														
Columbia .....	43.08	53.78	43.90	46.69	July 12	94	July 12	80.67	Jan. 24	-22	Jan. 18	-10.00	116	5.57
New London .....	44.43	54.31	45.87	48.20	Aug. 14	90	Aug. 15	82.00	Jan. 23	-16	Jan. 23	-5.33	106	5.10
Norwich .....	43.30	55.07	46.75	48.37	July 12	d 92	Aug. 14	83.00	Jan. 24	-24	Jan. 23	-8.60	116	4.40
Pomfret .....	41.10	50.98	43.03	45.04	Aug. 14	85	July 12	76.90	Jan. 23	-15	Jan. 23	-10.00	100	5.56
Saybrook .....	44.54	51.74	46.04	47.44	July 18	84	Aug. 14	78.00	Jan. 23	-12	Jan. 23	-2.67	96	5.14
Wallingford .....	41.75	53.49	44.12	46.45	July 12	d 90	Aug. 14	81.00	Jan. 24	-21	Jan. 23	-9.33	111	4.59
NEW YORK—														
Baldwinsville .....	40.94	49.10	43.94	44.66	July 19	87	July 27	80.00	Jan. 18	-19	Jan. 18	-10.33	166	6.03
Cazenovia .....	39.41	46.27	40.19	41.96	July 14	n 87	July 18	79.00	Jan. 18	-29	Jan. 18	-18.67	116	6.77
Clinton .....	42.44	53.02	42.43	45.96	July 13	o 96	July 17	84.00	Jan. 18	-24	Jan. 23	-16.33	120	6.57
Flatbush .....	45.50	54.91	45.50	49.09	Aug. 14	90	Aug. 14	82.90	Jan. 24	-5	Jan. 18	0.70	95	5.55
Lowville .....	.....	.....	.....	41.66	July 14	90	Aug. 25	74.25	Jan. 18	-34	Jan. 23	25.00	124	.....
Morrisania (a) .....	45.84	59.45	47.31	50.87	Sept. 4	103	Aug. 14	85.67	Jan. 23	-8	Jan. 23	-1.67	111	4.87
New York city .....	48.75	56.61	50.68	52.01	Aug. 14	90	Aug. 14	85.20	Jan. 18	0	Jan. 18	2.53	90	5.09
Nichols (a) .....	36.95	52.88	40.07	43.30	July 14	96	Aug. 14	79.33	Jan. 24	-26	Jan. 18	-8.00	122	.....
Oswego .....	42.84	49.93	43.90	45.56	July 19	93	July 19	83.33	Jan. 18	-18	Jan. 18	-8.33	111	6.35
Ovid .....	44.04	50.15	44.19	45.84	Aug. 14	94	Aug. 4	83.00	Jan. 18	-17	Jan. 18	-12.67	.....	6.18
Penn Yan (a) .....	39.65	52.45	45.06	45.72	July 19	92	Aug. 14	80.67	Jan. 18	-18	Jan. 18	-9.00	110	.....
Rochester, [Harkness] .....	45.72	51.00	45.48	47.40	July .....	91	.....	.....	January	-13	.....	.....	104	.....
Sag Harbor (a) .....	46.30	57.57	47.30	50.39	July 12	d 90	Aug. 14	83.00	Jan. 23	-6	Jan. 23	0.67	96	5.01
Saratoga (a) .....	39.66	52.98	44.97	45.87	May 26	90	July 14	81.00	Jan. 23	-40	Jan. 23	-20.67	130	4.01
Spencertown .....	41.30	50.18	44.09	45.19	Aug. 14	92	Aug. 14	82.00	Jan. 23	-23	Jan. 23	-19.00	.....	5.10
Wampsville .....	42.59	52.37	43.68	46.21	July 14	91	July 14	84.00	Jan. 18	-23	Jan. 18	-12.33	117	6.38
Waterford (a) .....	42.40	52.88	44.72	46.66	July 19	93	July 19	85.50	Jan. 24	-27	Jan. 23	-11.75	120	.....
NEW JERSEY—														
Bloomfield (a) .....	45.41	57.55	47.26	50.07	Aug. 14	93	Aug. 14	85.67	Jan. 24	-16	Jan. 18	-2.33	109	4.51
Burlington .....	45.66	57.45	49.12	50.74	Aug. 14	91	Aug. 14	83.00	Jan. 23	-15	Jan. 23	0.67	106	5.25
Newark (a) .....	.....	.....	.....	48.39	Aug. 14	89	July 27	79.75	Jan. 24	-12	Jan. 18	-1.75	101	.....
Sergeant'sville (a) .....	45.08	62.61	50.00	52.56	July 26	97	Aug. 15	86.67	Jan. 24	-12	Jan. 18	-1.00	109	4.43
PENNSYLVANIA—														
Bedford (a) .....	43.06	58.11	47.41	49.53	July 9	92	Aug. 14	82.67	Feb. 3	-11	Jan. 22	-1.00	103	5.02
Cannonsburg .....	44.20	54.09	48.01	48.77	July 17	p 86	July 17	78.67	Jan. 23	-6	Jan. 26	-1.33	92	6.21
Chromedale .....	45.93	56.75	47.61	50.10	July 20	d 89	Aug. 14	81.50	Jan. 24	-17	Jan. 23	-2.10	106	5.22
Easton .....	43.01	55.06	46.14	48.07	July 13	n 89	July 13	80.33	Jan. 24	-14s	Jan. 23	-0.67	50s	5.63
Fleming .....	42.36	55.35	45.51	47.74	July 13	92	July 13	83.00	Jan. 26	-18	Jan. 23	-1.00	110	5.21
Gettysburg .....	43.69	57.95	47.56	49.73	Aug. 14	92	Aug. 14	83.33	Jan. 24	-20	Jan. 23	-2.33	112	4.87
Harri-burg, [Heisely] .....	48.33	57.48	52.98	52.93	June 28	q 91	Aug. 14	86.67	Jan. 24	-12	Jan. 24	3.00	103	4.10
Lewisburg .....	42.61	55.03	46.40	48.01	Aug. 14	91	Aug. 14	83.23	Jan. 21	-18	Jan. 18	1.63	.....	6.38
Meadville .....	41.64	51.16	43.28	45.36	July 10	94	July 19	82.33	Jan. 16	-12	Jan. 22	-1.00	106	6.16

a For variations from the usual hours of observation, or for imperfections in the registers, see monthly tables.

b Same temperature September 3d.

c Same temperature January 24th.

d Same temperature August 14th.

e Same temperature August 13th.

f Same temperature July 10th and 27th.

g Same temperature July 30th.

h Same temperature September 11th.

i Same temperature September 4th.

j For eleven months only; June wanting. For variations from the usual hours of observation, or for imperfections in the registers, see monthly tables.

k Same temperature July 15th.

l Same temperature July 19th and 28th.

m Same temperature August 4th.

n Same temperature July 19th.

o Same temperature July 17th.

p Same temperature August 7th.

q Same temperature July 13th and August 14th.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
PENNSYLVANIA—Cont'd.														
Morrisville .....	44.51	57.10	47.23	49.61	Aug. 14	88	Aug. 14	81.00	Jan. 24	-17	Jan. 23	0.33	107	4.01
Nazareth .....	43.30	55.07	43.50	47.22	July 13	95	July 19	82.00	Jan. 24	-11	Jan. 23	2.00	106	5.79
Norristown .....	45.24	55.41	48.00	49.57	Aug. 14	88	Aug. 14	81.70	Jan. 24	-16	Jan. 23	0.00	104	5.22
North Whitehall (a) ..	41.91	55.27	50.01	47.06	Aug. 14	92	Aug. 14	84.00	Jan. 24	-8	Jan. 24	1.00	109	6.22
Paradise .....				51.08										
Philadelphia .....	49.11	58.19	52.08	53.46	Aug. 14	94	Aug. 14	87.00	Jan. 23	-5 c	Jan. 18	1.00	107	5.52
Pocapon .....	45.74	58.42	47.91	50.69	Aug. 14	91	Aug. 14	86.00	Jan. 24	-19	Jan. 23	2.00	114	5.44
Shamokin .....	43.77	57.02	47.68	46.70	July 13	95	Aug. 14	80.67	Jan. 24	-30	Jan. 23	4.33	103	5.71
Trenton .....	43.77	57.72	46.75	43.77	June 28	d 94	Aug. 14	81.67	Jan. 23	-10	Jan. 18	3.67	104	5.64
DELAWARE—														
Newark (a) .....	45.06	59.20	50.03	52.67	Aug. 14	94	Aug. 14	86.17	Jan. 24	-11	Jan. 23	1.67	105	4.98
MARYLAND—														
Annapolis .....	47.83	58.48	52.81	52.43	Aug. 14	93	Aug. 14	83.33	Jan. 23	-7	Jan. 23	4.00	100	4.31
Frederick .....	47.23	57.02	49.45	51.23	Sept. 17	88	Aug. 15	83.20	Jan. 24	-5	Jan. 18	4.67	104	4.91
Sikesville .....	45.21	57.85	48.89	50.65	July 27	c 86	Aug. 14	81.33	Jan. 24	-21	Jan. 18	0.33	107	4.47
VIRGINIA—														
Alexandria .....	49.83	61.15	52.78	54.59	Aug. 14	91	Aug. 14	86.33	Jan. 24	-6	Jan. 23	0.33	97	4.59
Berryville .....	45.71	58.20	50.21	51.34	Aug. 15	91	Aug. 14	81.90	Jan. 23	0 b	Jan. 18	3.33	103	5.00
Crichton's Store (a) ..	53.29	64.39	62.77	60.12	June 27	88	Aug. 15	82.00	Jan. 23	8	Jan. 23	12.67	107	4.72
Lewistown .....	41.99	56.39	45.33	47.94	Aug. 15	88	Aug. 16	78.33	Jan. 19	-12	Jan. 21	3.00	100	5.10
Meadow Dale .....	49.06	59.79	47.63	46.82	July 17	83	Aug. 14	75.33	Jan. 23	-16	Jan. 22	5.33	109	.....
Portsmouth .....	52.32	65.71	53.61	57.28	July 19	98	Aug. 15	80.67	Jan. 23	-5	Jan. 23	6.33	103	3.74
Rougemont (a) .....	50.15	62.89	55.79	55.34	Aug. 14	f 94	Aug. 14	80.33	Jan. 23	-13	Jan. 18	1.40	107	4.89
Ruthven (a) .....	48.30	60.01	54.32	54.70	June 28	g 96	June 28	80.00	Jan. 23	-12	Jan. 23	?	108	2.90
Smithfield .....				50.19	Aug. 14	92	Aug. 15	85.10	Jan. 23	-11	Jan. 23	0.33	103	.....
Wirt Court House (a) ..	43.23	57.19	47.81	49.43	Aug. 17	94	Aug. 14	82.00	Jan. 23	-26.5	Jan. 23	7.58	120	5.57
NORTH CAROLINA—														
Chapel Hill .....	52.06	68.40	55.58	58.03	Aug. 17	98	Aug. 15	87.67	Jan. 23	1	Jan. 23	10.60	100	5.31
Gaston (a) .....	49.58	61.39	54.09	54.99	Aug. 16	100	Aug. 16	85.00	Jan. 23	-24	Jan. 23	1.33	124	.....
Murfreesborough (a) ..	51.21	63.81	54.00	56.00	Aug. 15	96	Aug. 15	87.67	Jan. 23	-4	Jan. 23	7.00	100	3.76
SOUTH CAROLINA—														
Aiken (a) .....	56.41	68.00	61.12	62.11	June 9	i 92	Aug. 16	85.00	Jan. 19	4	Jan. 23	21.00	88	.....
All Saints .....	58.08	67.37	61.54	61.33	Aug. 28	88	Aug. 28	83.33	Jan. 23	15	Jan. 23	20.67	73	4.40
Camden .....	53.72	68.67	57.46	59.95	June 9	j 95	Aug. 16	87.00	Jan. 20	0	Jan. 19	14.33	95	5.04
Charleston, [Dawson].	59.46	68.02	63.39	64.28		92				11			78	.....
Charleston, [Johnson].	60.31	69.34	65.30	64.53	Aug. 16	k 92	Aug. 16	85.00	Jan. 19	14	Jan. 19	22.33	78	.....
GEORGIA—														
Savannah .....	58.75	71.39	62.71	64.28	June 9	97	June 9	85.33	Jan. 19	13	Jan. 19	22.67	84	4.95
Sparta .....				61.72	Sept. 19	96	Sept. 17	89.67	Jan. 19	8	Jan. 22	22.00	88	4.62
The Rock .....	63.91	82.44	61.41	61.41	June 9	l 93	June 9	84.00	Jan. 19	3	Jan. 19	11.67	100	.....
Zebulon .....	58.10	67.49	62.22	62.94	June 9	g 91	June 14	84.00	Jan. 19	6	Jan. 19	16.33	85	4.87
FLORIDA—														
Astoria (a) .....	65.18	79.09	68.69	68.65	Aug. 17	99	Aug. 16	85.67	Jan. 19	20	Jan. 19	28.67	70	3.66
Belair .....	60.03	74.96	64.08	66.00	June 8	l 93	Sept. 15	89.00	Jan. 19	13	Nov. 21	35.67	.....	4.11
Gainesville (a) .....	60.42	74.94	66.30	66.35	Aug. 16	l 90	Aug. 16	84.00	Jan. 19	17	Jan. 19	20.67	77	3.31
St. Augustine (a) .....	67.30	72.95	67.64	68.40	Aug. 28	m 93	Aug. 29	85.33	Jan. 19	19	Jan. 19	27.33	74	3.95
Salt Ponds (a) .....	73.25	78.13		75.69	Aug. 26	n 89	Aug. 26	86.00	Jan. 20	42	Jan. 20	48.00	47	3.67
ALABAMA—														
Ashville (a) .....				56.45			Sept. 12	78.00			Jan. 19	5.00	.....	.....
Auburn .....	57.14	68.06	61.60	62.37	June 9	o 92	Oct. 7	89.00	Jan. 19	5	Jan. 19	15.00	.....	4.19
Calowville .....	57.75	71.32	60.34	63.30	June 26	p 96	June 11	86.67	Jan. 19	8	Jan. 18	15.00	88	3.83
Greene Springs .....	54.87	70.81	57.95	61.21	June 8	q 92	July 18	88.33	Jan. 19	4	Jan. 18	10.00	88	4.30
MISSISSIPPI—														
Columbus .....	53.87	68.25	58.64	60.25	July 19	94	July 18	84.28	Jan. 19	8	Jan. 18	12.63	88	4.31
LOUISIANA—														
Black River .....	58.45	73.03	64.36	65.25	July 16	r 95	July 16	87.67	Jan. 19	13	Jan. 18	20.33	83	4.57
TEXAS—														
Austin .....	59.07	74.51	60.30	65.35	July 18	100	July 18	80.20	Jan. 18	12	Jan. 18	21.00	88	5.12
Washington .....	62.14	77.24	74.56	67.17	July 17	100	July 17	92.67	Jan. 18	10	Jan. 18	19.00	90	4.45
TENNESSEE—														
Glenwood .....	49.09	61.06	53.47	54.54	July 19	89	July 19	81.50	Jan. 19	-8	Jan. 22	2.67	97	5.47
KENTUCKY—														
Paris (a) .....	45.74	55.54	49.42	50.57	Aug. 17	89	Aug. 14	82.00	Jan. 19	-25	Jan. 22	-12.33	114	4.95
Springdale (a) .....	43.10	61.70	51.23	53.01	July 13	s 89	Aug. 14	84.00	Jan. 19	-24.5	Jan. 19	-3.00	120	5.32
OHIO—														
Cincinnati, [Harper] ..	45.30	60.82	52.00	54.07	July 25	95	Aug. 8	87.00	Jan. 21	-10	Jan. 21	-1.67	105	5.19
Cleveland .....	43.24	57.65	45.74	47.35	Aug. 13	91	Aug. 13	82.00	Jan. 19	-13	Jan. 18	-2.00	104	6.00
Collingwood .....	43.62	53.06	45.76	47.48	May 30	90	June 26	80.00	Jan. 18	-8	Jan. 22	-2.67	98	.....
Hillsborough .....	44.22	54.00	48.12	48.89	July 17	87	Aug. 14	79.00	Jan. 23	-11	Jan. 22	-5.00	98	4.63
Hiram .....	42.42	52.00	45.06	46.83	July 13	88	July 13	79.33	Jan. 22	-9	Jan. 22	-7.00	97	6.32
Madison, [Cunningham] ..	44.32	52.84	42.65	46.60	July 14	95	July 27	81.33	Jan. 22	-9 f	Jan. 22	-1.67	104	5.80
New Lisbon .....	46.83	60.30	48.21	51.81	June ....	u 95	June 16	86.67	January .	-9	Jan. 22	-3.00	.....	3.79

a For variations from the usual hours of observation, or for imperfections in the registers, see monthly tables.

b Same temperature January 26th.

c Same temperature January 24th.

d Same temperature July 15th and 19th.

e Same temperature July 28th.

f Same temperature August 15th.

g Same temperature August 15th.

h Same temperature August 15th and 16th.

i Same temperature June 15th and August 15th and 16th.

j Same temperature August 16th.

k Same temperature June 14th and 16th.

l Same temperature September 15th.

m Same temperature September 14th.

n Same temperature August 27th and September 15th and 17th.

o Same temperature July 11th and September 18th.

p Same temperature June 27th.

q Same temperature June 12th and 13th, and August 14th, 15th, and 18th.

r Same temperature July 17th.

s Same temperature August 14th.

t Same temperature January 25th.

u Same temperature in August.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range.	Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
	"	"	"	"										
OHIO—Continued.														
Perrysburg (a).....	45.76	56.44	47.50	49.90	July 12	b 92	July 13	83.67	Jan. 19	—13	Jan. 22	— 0.33	105	.....
Savannah.....	43.68	56.57	44.45	48.23	July 26	c 98	Aug. 13	86.33	Jan. 8	—20 d	Jan. 22	— 8.33	118	6.29
Urbana (a).....	42.50	57.42	45.59	48.53	Aug. 14	93	June 8	82.00	Jan. 23	—19	Jan. 22	— 7.00	112	5.62
MICHIGAN—														
Battle Creek.....	41.31	53.95	43.70	46.32	July 12	b 92	Aug. 14	84.00	Jan. 18	—26	Jan. 18	—10.00	108	4.91
Cooper.....	42.40	50.59	41.91	44.97	July 11	94	June 26	83.33	Jan. 18	—12	Jan. 18	— 4.00	106	3.85
Grand Rapids, [Currier].....	38.94	51.34	42.58	44.29	July 11	94	Aug. 13	81.33	Jan. 18	—28	Jan. 18	— 9.33	.....	5.05
Grand Rapids, [Streng].....	40.15	54.30	43.39	45.95	July 13	97	June 27	e 83.00	Jan. 18	—28	Jan. 18	— 9.33	125	5.94
INDIANA—														
Logansport (a).....	42.00	55.00	48.00	48.00	.....	99	.....	.....	.....	—19	.....	.....	118	.....
Michigan City (a).....	42.95	52.31	43.38	46.21	July 12	100	July 26	85.67	Jan. 23	—24	Jan. 23	— 7.75	124	.....
New Harmony.....	48.17	60.01	51.60	53.26	July 17	92	Aug. 14	f 84.67	Jan. 19	—13	Jan. 22	0.67	105	5.18
Richmond.....	43.21	55.06	47.16	48.48	July 17	90	July 17	80.90	Jan. 23	—14	Jan. 22	— 4.10	104	5.44
ILLINOIS—														
Augusta.....	42.06	55.16	47.00	48.07	July 16	g 98	July 18	87.67	Jan. 18	—23	Jan. 18	—11.67	121	4.26
Brighton.....	45.77	57.46	52.32	51.85	July 16	h 96	July 16	97.33	Jan. 18	—20	Jan. 18	— 3.33	.....	3.80
Fremont Centre.....	42.49	52.46	41.67	45.54	July 9	a 92	July 18	c 85.33	Jan. 17	—16 i	Jan. 17	—11.33	108	5.13
Manchester (a).....	43.09	57.50	45.83	48.81	July 17	93	July 17	85.67	Jan. 18	—22	Jan. 18	— 8.00	115	4.62
Marengo.....	41.56	53.80	41.57	45.64	July 17	100	July 17	86.67	Jan. 18	—18 j	Jan. 22	—11.33	118	5.22
Ottawa.....	40.93	51.95	44.76	45.88	July 17	k 93	July 17	85.00	Jan. 19	—16	Jan. 27	— 9.67	109	5.03
Pekin (a).....	41.89	54.69	.....	.....	July 17	97	July 17	87.33	Jan. 18	—19	Jan. 18	— 8.50	116	5.33
Peoria.....	43.66	57.66	47.83	49.72	July 17	99	July 17	89.37	Jan. 18	—16	Jan. 18	— 6.60	115	4.90
Riley.....	38.76	51.01	44.00	43.14	July 19	94	July 19	82.33	Jan. 19	—24 j	Jan. 22	—17.00	118	4.35
Warsaw.....	44.48	56.79	47.51	49.59	July 16	102	July 18	89.00	Jan. 18	—22	Jan. 18	— 6.67	.....	4.98
West Salem.....	47.55	61.44	50.87	53.29	July 17	96	July 17	85.00	Jan. 19	—10	Jan. 22	3.33	106	4.98
MISSOURI—														
St. Louis.....	48.32	60.00	51.95	53.42	July 17	101	July 17	91.67	Jan. 18	—12.5	Jan. 18	— 2.17	113	4.85
WISCONSIN—														
Appleton.....	37.52	50.06	40.17	42.58	July 9	93	July 18	82.33	Jan. 18	—26	Jan. 18	—14.33	119	4.77
Beloit.....	38.63	52.39	41.30	44.11	Aug. 13	98	July 17	c 81.67	Jan. 18	—25	Jan. 22	—14.67	123	4.04
Madison, [Sterling] (a).....	39.86	48.93	42.09	43.63	July 15	95	July 15	86.00	Jan. 18	—25	Jan. 22	—12.67	120	5.00
Manitowoc (a).....	33.97	49.80	41.48	43.42	Aug. 13	94	Aug. 13	83.00	Jan. 22	—16	Jan. 22	— 8.33	110	5.49
Milwaukee, [Pomeroy].....	39.53	48.54	39.57	42.55	Aug. 13	93	Aug. 13	82.33	Jan. 23	—19	Jan. 22	—13.33	112	4.58
Milwaukee, [Winkler].....	39.53	48.54	39.57	42.55	Aug. 13	93	Aug. 13	82.33	Jan. 28	—19	Jan. 22	—13.33	112	4.58
New London.....	34.75	49.37	39.17	41.10	July 9	98	July 8	82.00	Jan. 18	—28 l	Jan. 18	—16.33	126	4.43
Platteville.....	39.56	53.34	42.82	45.24	July 17	102	July 17	91.67	Jan. 18	—29	Jan. 21	—18.00	131	4.76
IOWA—														
Bellevue.....	39.08	52.91	41.71	44.57	July 8	97	July 12	82.33	Jan. 18	—32	Jan. 18	—19.00	129	.....
Border Plains.....	39.62	52.25	42.30	44.72	June 25	c 97	July 15	84.67	Jan. 18	—30	Jan. 17	—15.00	.....	5.09
Fairfield.....	.....	.....	.....	47.63	July 18	99	July 18	88.33	Jan. 18	—24	Jan. 17	—12.50	123	.....
Fort Madison (a).....	41.40	54.30	47.81	47.84	July 16	104 m	July 15	86.00	Jan. 18	—27	Jan. 18	—12.33	131	4.67
Franklin.....	38.98	50.59	40.90	43.49	July 9	n 93	July 17	82.67	Jan. 18	—36	Jan. 18	—20.33	129	4.70
Muscatine.....	37.90	52.61	43.05	44.52	July 18	97	Aug. 13	82.00	Jan. 18	—30	Jan. 18	—18.00	127	4.24
Pleasant Plain.....	41.94	55.47	42.16	46.52	July 16	102	July 18	90.67	Jan. 18	—27	Jan. 21	—10.33	129	4.30
MINNESOTA—														
Princeton (a).....	34.34	47.71	36.79	39.61	July 9	o 96	July 10	86.67	Feb. 10	—40	Feb. 10	—20.67	136	4.13
CALIFORNIA—														
Sacramento.....	56.04	65.61	58.39	60.01	June 17	98	June 17	87.00	Jan. 9	31	Jan. 9	36.33	67	2.98
San Francisco.....	54.37	63.42	54.49	57.43	June 16	98	June 16	79.00	Jan. 8	30	Jan. 8	40.33	82	3.88
CENTRAL AMERICA—														
Guatemala.....	.....	.....	.....	64.99	April ..	89	.....	.....	January ..	40½	.....	.....	.....	.....
MEXICO—														
Mirador (a).....	71.16	82.22	71.76	75.07	.....	.....	May ....	91.09	.....	.....	January ..	53.73	.....	.....

a For variations from the usual hours of observation, or for imperfections in the registers, see monthly tables.

b Same temperature July 13th.

c Same temperature August 13th.

d Same temperature January 12th.

e Same temperature July 13th and 17th, and August 13th.

f Same temperature August 16th.

g Same temperature July 18th.

h Same temperature August 4th and 14th.

i Same temperature January 22d and 23d.

j Same temperature January 23d.

k Same temperature January 18th.

l Same temperature January 19th and 23d.

m Same temperature July 17th.

n Same temperature July 13th and 16th.

o Same temperature July 10th and 16th.

## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches.</i>						
St. Martin (a).....	.234	.324	.261	Aug. 14	1.165	Jan. 23	.007	85	75	85	23	32	29
St. Martin (b).....	.248	.342	.280	July 15	1.136	Jan. 23	.008	84	76	85	29	38	61
Wolfville.....	.290	.319	.281	July 7	.975	Feb. 28	.016	84	70	81	40	09	36
<b>MASSACHUSETTS—</b>													
Amherst.....	.290	.319	.304	July 14	.899	Jan. 24	.019	80	67	85	54	23	36
Cambridge.....								83	73	78	66	53	55
Lawrence.....	.299	.349	.329	July 19	1.019	Feb. 11	.012	85	66	80	19	18	29
Nantucket.....	.296	.303	.300	July 20	.856	Jan. 24	c .000	75	62	79	26	00	00
New Bedford.....	.310	.330	.316	July 15	.914	Jan. 23	.021	87	70	88	48	22	14
Newburyport.....	.309	.330	.322	July 28	.928	Jan. 8	.010	87	70	86	26	22	45
Westfield.....	.253	.277	.296	July 25	.851	Feb. 2	.001	80	57	82	35	15	40
Worcester.....	.269	.299	.285	July 18	1.092	Jan. 15	d .000	77	64	75	00	03	00
<b>CONNECTICUT—</b>													
Pomfret.....	.299	.344	.306	Aug. 14	.895	Jan. 23	.023	81	77	88	57	35	50
Wallingford.....	.282	.310	.295	Aug. 11	.918	Nov. 20	.000	86	62	81	45	16	00
<b>NEW YORK—</b>													
New York city.....	.298	.324	.306	July 13	1.050	Jan. 18	.000	71	60	68	00	00	03
<b>NEW JERSEY—</b>													
Bloomfield.....	.318	.391	.338	July 14	1.042	Jan. 17	.011	82	66	83	29	09	42
<b>PENNSYLVANIA—</b>													
Chromedale.....	.316	.338	.319	Aug. 14	.901	April 2	.001	85	63	82	15	21	29
Easton.....	.285	.295	.298	Aug. 14	.875	Jan. 24	.020	81	57	78	40	20	41
Norristown.....	.298	.318	.310	Aug. 15	.850	Jan. 22	.000	81	65	76	39	00	31
Philadelphia.....	.316	.334	.335	Aug. 14	.908	Jan. 22	.023	75	57	72	41	26	37
<b>MARYLAND—</b>													
Annapolis.....	.346	.368	.368	Aug. 18	.976	Jan. 23	.017	82	63	76	45	29	34
Frederick.....	.318	.352	.341	Aug. 4	.942	April 6	.000	79	63	78	00	14	17
<b>NORTH CAROLINA—</b>													
Murfreesborough.....	.441	.352	.478	June 9	1.187e	Jan. 23	.036	89	75	87	18	38	44
<b>SOUTH CAROLINA—</b>													
All Saints.....	.468	.508	.505	Aug. 16	1.016	Jan. 23	.040	84	68	82	33	28	29
Camden.....	.406	.426	.424	Aug. 15	.983	Jan. 20	.044	84	56	78	34	14	23
Charleston, [Dawson] (f).....													
<b>GEORGIA—</b>													
Savannah.....	.454	.469	.483	Aug. 15	.930	Jan. 19	.046	80	56	76	31	07	22
<b>ALABAMA—</b>													
Carlowville.....	.417	.605	.450	June 27	1.698	Jan. 12	.012	76	70	75	11	21	22
Greensborough (g).....	.367	.371	.389	July 27	.875	Jan. 17	.040	78	54	73	25	16	13
<b>MISSISSIPPI—</b>													
Columbus.....	.410	.435	.437	Sept. 14	.956	Jan. 18	.053	84	56	78	31	20	31
<b>TEXAS—</b>													
Austin.....	.436	.411	.432	Sept. 28	.877	Jan. 12	h .000	80	87	65	30	00	22
<b>TENNESSEE—</b>													
Glenwood.....	.355	.380	.385	Aug. 12	1.065	Jan. 19	.025	84	60	89	22	13	35
<b>KENTUCKY—</b>													
Springdale.....	.291	.400	.381	July 15	1.283	Jan. 13	i .000	83	64	77	00	00	00
<b>OHIO—</b>													
Cincinnati, [Harper].....	.338	.400	.361	Aug. 14	1.241	Nov. 23	.000	78	64	71	47	22	27
Hillsborough.....	.333	.356	.345	Aug. 17	.914	Jan. 23	.026	93	71	87	29	29	39
Perrysburg.....	.310	.369	.321	Sept. 15	.983	Feb. 10	j .000	83	71	81	00	00	00
<b>INDIANA—</b>													
New Harmony.....	.357	.401	.408	Aug. 10	1.016	Jan. 19	.025	81	65	85	40	18	37
<b>ILLINOIS—</b>													
Manchester.....	.328	.420	.356	Aug. 14	1.160	Jan. 18	.017	94	77	94	48	35	25

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a According to the Smithsonian tables.

b According to tables used by the observer.

c Same amount February 2d and 11th.

d Same amount January 19th.

e Same amount June 14th and 16th.

f Mean force of vapor .511; obtained approximately from the mean dew point.

g For 11 months only; August wanting.

h Same amount April 23d.

i Same amount January 20th, 22d, and 23d, and February 14th.

j Same amount January 19th and 31st.



## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
ILLINOIS—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Peoria.....	.304	.324	.324	July 26	.952	Jan. 21	<i>a</i> .021	84	58	79	33	22	33
MISSOURI—													
St. Louis.....	.323	.349	.341	Aug. 8	1.090	Jan. 7	.007	79	60	75	05	01	04
WISCONSIN—													
Appleton.....	.241	.306	.259	July 5	1.124	Nov. 22	<i>b</i> .000	71	64	74	00	00	00
Madison, [Sterling].....	.244	.248	.255	July 15	.915	Feb. 10	<i>c</i> .000	64	58	70	00	00	00
IOWA—													
Muscatine.....	.357	.403	.398	July 16	1.111	Jan. 19	.010	81	78	82	29	34	53
CALIFORNIA—													
San Francisco.....	.354	.396	.378	Aug. 8	.597	Nov. 11	.139	87	68	88	37	22	48

*a* Same amount January 22d.*b* Same amount January 17th, 18th, 19th, 21st, 23d, 24th, and 25th, and February 2d.*c* Same amount January 22d and 23d.

## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal.....	71	176	9	25	114	246	255	159	42	1097	57	151	8	28	110	222	197	127	900
St. John's.....	109	157	37	52	128	106	185	321	0	1095	—	—	—	—	—	—	—	—	—
St. Martin.....	3	231	15	178	33	381	59	195	0	1095	—	—	—	—	—	—	—	—	—
Stanbridge.....	55	93	63	222	296	51	174	67	73	1094	—	—	—	—	—	—	—	—	—
Toronto.....	32	160	30	116	25	292	31	315	94	1095	—	—	—	—	—	—	—	—	—
Wolfville.....	21	71	82	0	45	170	267	162	198	1076	24	63	47	58	36	190	256	125	799
MAINE—																			
Cornish, [Guptill].....	59	0	36	125	130	127	136	408	0	1090	—	—	—	—	—	—	—	—	—
Cornish, [West] (a).....	0	139	90	64	74	297	222	143	0	1095	14	7	2	2	7	51	55	62	200
Gardiner (b).....	21	173	26	135	27	166	38	229	181	1096	13	34	2	24	19	139	20	115	366
Monson.....	69	77	56	78	194	62	114	406	0	1095	—	—	—	—	—	—	—	—	—
Perry.....	63	75	19	143	0	226	0	399	1	1093	67	36	13	38	47	120	95	138	554
Portland.....	143	148	78	75	181	133	174	161	0	1093	27	9	5	8	37	63	124	65	338
Steuben.....	26	264	9	64	2	405	40	241	38	1095	27	80	9	14	3	202	103	0	537
NEW HAMPSHIRE—																			
Concord.....	14	186	14	154	12	207	13	378	60	1038	—	—	—	—	—	—	—	—	—
Francetown, [Bixby] (b).....	51	86	37	118	17	142	170	335	13	969	31	57	0	71	7	95	291	215	836
Manchester.....	36	44	64	103	85	144	185	199	0	863	20	37	50	112	40	132	183	51	625
North Barnstead.....	35	175	2	69	7	150	167	480	0	1085	23	95	17	72	21	103	157	219	707
VERMONT—																			
Brandon.....	216	8	22	85	375	0	83	137	55	1080	43	0	7	14	31	109	121	208	541
Craftsbury.....	56	112	36	64	348	145	132	177	21	1091	50	29	6	17	73	117	235	183	710
Rupert (c).....	—	—	—	—	—	—	—	—	—	—	99	497	65	73	65	35	17	55	0
Shelburn.....	280	9	5	3	589	37	12	101	0	1036	13	65	0	102	4	1	1	0	272
MASSACHUSETTS—																			
Amherst.....	35	60	29	259	52	151	54	386	0	1026	11	25	17	28	8	100	73	136	398
Cambridge.....	42	108	67	44	37	292	147	189	164	1090	—	—	—	—	—	—	—	—	—
Florida.....	2	83	15	104	38	221	128	497	7	1095	3	83	15	100	35	215	126	353	930
Lawrence.....	14	132	52	128	23	291	55	310	0	1013	—	—	—	—	—	—	—	—	—
Mendon.....	4	195	26	24	40	469	19	318	0	1095	0	171	28	28	45	359	25	193	855
Nantucket.....	40	156	44	117	77	295	81	222	59	1091	—	—	—	—	—	—	—	—	—
New Bedford (d).....	43	140	21	88	54	315	61	276	5	1003	16	13	0	7	6	45	69	67	231
Newburyport.....	63	77	80	49	161	79	233	146	0	888	—	—	—	—	—	—	—	—	—
Westfield.....	90	73	81	175	70	114	216	254	0	1073	—	—	—	—	—	—	—	—	—
Weymouth.....	21	66	23	91	35	212	44	238	0	730	—	—	—	—	—	—	—	—	—
Worcester.....	94	81	96	52	76	203	311	143	0	1056	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia.....	20	115	51	58	101	167	72	261	249	1094	7	76	22	17	64	109	59	197	551
New London.....	57	135	50	111	78	339	106	219	0	1095	—	—	—	—	—	—	—	—	—
Norwich.....	18	199	17	100	66	217	65	139	270	1091	—	—	—	—	—	—	—	—	—
Pomfret.....	48	172	26	64	130	226	44	362	0	1072	21	124	16	44	82	158	30	172	647
Saybrook.....	80	121	71	101	72	195	129	146	78	993	17	26	31	10	25	86	107	70	372
Wallingford.....	128	115	23	86	158	152	77	244	105	1088	18	56	13	20	12	144	177	92	532
NEW YORK—																			
Baldwinsville.....	36	25	121	33	29	157	357	285	0	1043	11	18	17	7	0	40	429	209	740
Cazenovia.....	37	19	33	87	140	187	184	350	39	1076	19	10	16	61	74	156	281	252	869
Clinton.....	125	305	191	220	71	57	58	64	2	1093	52	12	27	23	68	154	214	125	675
Flatbush.....	88	129	79	79	176	123	207	214	0	1095	25	32	33	24	29	85	153	111	492
Morrisania.....	91	76	90	196	181	154	201	89	0	1078	—	—	—	—	—	—	—	—	—
New York city.....	22	165	38	160	17	172	304	217	0	1095	11	36	61	68	10	214	336	49	785
Nichols.....	146	4	9	35	176	23	43	31	20	487	—	—	—	—	—	—	—	—	—
Oswego.....	66	80	64	127	233	97	320	70	37	1094	—	—	—	—	—	—	—	—	—
Ovid.....	75	36	27	112	220	199	221	205	0	1095	32	15	19	26	92	241	234	193	852
Rochester, [Harkness].....	33	145	25	117	82	178	58	334	0	972	—	—	—	—	—	—	—	—	—
Rochester, [Palmer].....	128	74	38	66	160	214	270	141	0	1091	54	48	27	31	80	121	255	177	793
Sag Harbor.....	67	112	92	82	216	158	163	154	7	1051	15	30	0	5	29	131	119	58	396
Saratoga.....	22	160	15	93	55	397	88	229	0	1059	34	155	16	94	60	388	97	215	1059
Spencertown (e).....	201	40	16	83	249	139	63	241	0	1032	75	17	17	21	0	100	113	243	661
Wampsville.....	6	8	103	43	272	49	587	26	0	1094	7	0	102	41	215	50	505	25	951

a Motion of clouds for 11 months only; November wanting.

b For 11 months only; July wanting.

c For 11 months only; February wanting.

d For 11 months only; April wanting.

e Motion of clouds for 11 months only; December wanting.



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW JERSEY—																			
Bloomfield.....	15	153	3	59	41	430	64	292	1	1058	30	32	30	15	50	116	159	91	523
Burlington.....	89	130	146	75	62	160	227	139	14	1042	30	32	30	15	50	116	159	91	523
Lambertville.....	107	30	58	20	189	44	287	41	319	1095	30	32	30	15	50	116	159	91	523
Newark.....	38	143	27	73	30	183	49	186	3	732	30	32	30	15	50	116	159	91	523
Sergeantsville.....	51	77	116	101	84	155	308	102	1	995	32	69	96	68	50	131	115	52	613
PENNSYLVANIA—																			
Bedford.....	3	12	0	115	4	286	54	393	0	867	5	13	0	69	4	224	57	242	614
Cannonsburg.....	4	30	193	18	8	101	597	90	46	1087	5	13	0	69	4	224	57	242	614
Chromedale.....	69	165	47	93	68	67	50	259	277	1095	17	27	27	21	20	141	173	128	554
Easton.....	67	62	58	117	82	40	240	224	165	1055	27	22	24	31	39	102	175	145	565
Fleming.....	40	30	89	161	56	125	141	402	48	1092	38	6	42	18	29	72	270	206	681
Gettysburg.....	98	90	46	19	182	232	159	154	95	1075	30	39	18	14	66	175	244	129	715
Harrisburg, [Heisely].....	67	24	54	220	118	23	159	402	0	1067	18	3	6	46	45	17	92	165	392
Lewisburg.....	76	42	27	78	93	168	136	149	229	998	29	6	26	17	35	96	100	84	393
Meadville (a).....	25	4	7	32	176	73	92	168	390	967	24	5	7	11	26	137	190	122	522
Morrisville.....	29	138	79	82	94	246	124	163	126	1091	17	99	40	44	32	232	142	105	711
Nazareth.....	104	100	22	48	74	110	219	102	141	920	32	8	6	9	38	65	94	49	301
Norristown.....	0	29	102	116	64	165	358	100	0	940	3	23	92	37	15	135	337	53	695
North Whitehall (b).....	52	54	76	18	58	80	100	141	511	1090	28	20	27	5	39	66	124	74	383
Philadelphia.....	24	153	45	101	56	310	140	266	0	1095	2	18	12	9	11	87	67	50	256
Pocopson.....	87	101	38	43	118	283	274	92	10	1046	18	25	8	6	32	117	134	37	377
Shamokin.....	37	13	92	47	143	153	537	73	0	1095	13	8	3	1	4	46	667	47	789
Tarentum.....	85	18	26	26	71	216	105	132	410	1089	43	14	3	14	30	170	354	162	790
West Haverford (c).....	21	48	45	39	46	173	72	181	45	670	22	18	17	5	10	94	151	119	436
DELAWARE—																			
Newark.....	39	147	59	90	42	164	97	316	0	954	10	66	29	43	22	68	45	95	378
MARYLAND—																			
Annapolis.....	148	204	14	104	201	174	62	135	53	1095	32	19	1	6	44	248	20	13	383
Frederick.....	40	109	13	37	70	154	184	224	241	1022	21	7	9	12	40	43	330	60	522
Sykesville.....	53	80	49	151	108	210	295	149	0	1095	6	24	77	61	23	91	483	23	788
VIRGINIA—																			
Alexandria.....	113	169	33	71	235	99	72	271	2	1065	60	18	17	17	37	141	198	38	571
Berryville.....	86	88	56	101	130	169	195	205	33	1063	60	18	17	17	37	141	198	38	571
Crichton's Store (d).....	251	55	34	29	163	325	117	77	20	1071	1	0	0	2	11	169	68	1	252
Lewisburg.....	131	192	56	95	81	228	100	207	1	1091	8	9	19	8	16	62	232	33	387
Portsmouth.....	89	134	54	77	84	182	66	76	158	920	49	7	30	6	72	88	277	33	562
Rougemont (e).....	84	44	80	14	267	118	223	70	45	945	49	7	30	6	72	88	277	33	562
Smithfield (f).....	101	118	95	62	184	160	112	112	0	944	42	41	33	25	37	89	214	105	586
Wirt Court-House.....	13	42	2	98	25	375	9	260	202	1026	2	25	3	42	11	582	14	156	835
NORTH CAROLINA—																			
Chapel Hill.....	125	142	52	19	103	182	311	143	0	1077	19	57	19	11	70	291	92	36	595
Murfreesborough.....	39	147	47	109	62	239	136	115	138	1032	27	78	20	25	31	130	241	44	596
SOUTH CAROLINA—																			
All Saints.....	142	170	67	76	173	239	139	85	2	1093	41	96	30	25	63	248	274	40	817
Camden.....	74	233	20	80	32	268	100	213	75	1095	21	80	19	32	15	198	193	114	672
Charleston, [Dawson].....	8	238	43	95	16	174	15	140	0	729	41	96	30	25	63	248	274	40	817
Charleston, [Johnson].....	29	113	12	36	15	89	12	71	16	393	41	96	30	25	63	248	274	40	817
GEORGIA—																			
Savannah (g).....	106	156	91	136	188	159	71	172	0	1079	2	0	1	5	6	17	31	2	64
Sparta.....	41	223	68	133	68	232	82	232	0	1079	16	48	22	46	44	163	147	87	573
The Rock.....	101	110	115	148	62	99	141	315	0	1091	16	48	22	46	44	163	147	87	573
Zebulon.....	38	128	266	92	23	80	304	164	0	1095	42	33	35	25	51	64	84	74	408
FLORIDA—																			
Atsena (h).....	116	186	95	67	52	103	125	101	48	893	36	72	49	45	26	86	64	53	431
Belair.....	88	174	180	124	61	43	48	78	172	968	8	28	31	69	19	167	190	97	609
St. Augustine.....	59	430	59	157	5	98	11	276	0	1095	33	307	36	137	3	117	24	181	838
Salt Ponds.....	133	145	129	169	20	14	26	79	15	730	33	307	36	137	3	117	24	181	838

a For 11 months only; July wanting.

b Motion of clouds for 11 months only; January wanting.

c For 11 months only; April wanting.

d Motion of clouds for 11 months only; April wanting.

e For 11 months only; January wanting.

f For 11 months only; February wanting.

g Motion of clouds for 11 months only; July wanting.

h For 11 months only; September wanting.



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
ALABAMA—																			
Auburn.....	89	46	107	145	183	112	185	108	0	1075	26	49	35	91	141	158	71	51	622
Carlowville.....	172	107	73	78	195	137	170	153	0	1085	9	2	8	32	61	111	91	5	254
Greene Springs.....	45	189	88	73	23	240	53	102	41	859	3	5	9	19	31	110	40	27	244
Greensborough.....	139	31	24	212	101	65	63	266	0	901	19	3	11	47	44	36	266	46	467
MISSISSIPPI—																			
Columbus.....	156	87	160	135	163	107	100	176	4	1094	39	21	28	39	60	128	164	117	596
LOUISIANA—																			
Black River.....	344	85	39	144	319	45	19	83	14	1092	55	27	14	26	103	174	59	75	533
TEXAS—																			
Austin.....	299	62	49	109	421	18	54	64	15	1091	128	55	20	94	253	75	81	113	819
Washington.....	616	2	1	2	287	7	13	12	118	1058	134	80	27	32	78	18	11	15	390
TENNESSEE—																			
Glenwood.....	106	111	36	159	153	119	67	140	204	1095	37	44	19	32	42	176	331	114	795
KENTUCKY—																			
Paris.....	55	102	30	106	102	308	104	219	0	1086	24	4	18	0	103	49	304	11	507
Springdale.....	36	98	73	22	102	262	106	116	280	1095	---	---	---	---	---	---	---	---	---
OHIO—																			
Cincinnati, [Harper]....	82	24	76	37	80	310	310	176	0	1095	---	---	---	---	---	---	---	---	---
Cleveland.....	114	65	24	132	244	131	150	150	50	1060	41	16	11	9	35	119	180	64	470
Hillsborough.....	14	193	10	122	42	379	20	271	4	1055	6	25	0	12	11	152	20	98	321
Hiram.....	104	54	41	110	188	277	139	137	81	1081	41	17	11	17	36	121	190	91	524
Jefferson.....	16	40	1	76	26	515	50	368	0	1092	---	---	---	---	---	---	---	---	---
Madison, [Atkins] (a)...	32	73	21	107	127	120	208	76	147	911	13	10	11	12	19	49	76	26	137
Madison, [Cunningham]...	18	115	30	101	93	262	152	119	173	1063	34	59	6	21	27	345	230	126	848
Savannah.....	29	46	4	127	13	371	187	318	0	1095	26	39	1	87	11	304	149	219	836
Urbana.....	17	52	32	113	82	180	121	98	375	1070	25	39	11	7	45	158	326	107	715
MICHIGAN—																			
Battle Creek.....	66	56	79	71	140	191	232	111	148	1094	41	33	7	4	17	185	419	135	841
Cooper.....	25	4	36	11	10	29	518	19	449	1091	1	4	29	10	4	45	347	45	485
Grand Rapids, [Currier]...	20	191	42	104	25	318	82	97	201	1080	12	28	2	14	12	113	64	40	285
Grand Rapids, [Streng]..	4	109	86	89	102	254	226	125	0	1095	81	66	41	34	46	181	389	114	952
Monroe (a).....	76	39	44	127	32	277	62	285	7	949	57	43	35	112	29	263	41	260	840
INDIANA—																			
Logansport.....	152	61	63	59	58	185	280	232	0	1095	---	---	---	---	---	---	---	---	---
Michigan City.....	193	119	26	96	200	215	109	155	40	1153	---	---	---	---	---	---	---	---	---
New Harmony.....	120	15	67	124	129	116	164	140	11	875	---	---	---	---	---	---	---	---	---
Richmond (b).....	18	50	36	34	48	204	134	72	275	871	---	---	---	---	---	---	---	---	---
ILLINOIS—																			
Augusta.....	41	97	100	133	100	192	199	167	66	1095	26	36	30	31	47	85	149	86	490
Brighton.....	40	116	39	107	152	310	108	215	1	1088	7	28	10	27	52	160	55	88	427
Fremont Centre.....	48	111	75	113	177	214	253	104	11	1095	---	---	---	---	---	---	---	---	---
Manchester.....	67	61	41	25	264	223	264	146	3	1094	42	31	25	12	145	169	187	87	698
Marengo.....	8	59	83	201	115	456	136	34	0	1092	---	---	---	---	---	---	---	---	---
Ottawa.....	74	117	71	94	89	186	182	159	30	1002	14	11	11	5	10	64	47	41	200
Pekin.....	124	86	48	52	260	112	71	185	84	1022	---	---	---	---	---	---	---	---	---
Peoria.....	115	108	145	39	231	73	329	55	0	1095	21	7	16	4	14	21	96	19	198
Riley.....	63	60	69	85	109	122	185	180	164	1037	---	---	---	---	---	---	---	---	---
West Salem.....	75	74	50	77	224	87	93	156	259	1095	20	7	3	2	22	151	343	54	390
MISSOURI—																			
St. Louis.....	82	98	132	168	130	131	236	118	0	1095	---	---	---	---	---	---	---	---	---
WISCONSIN—																			
Appleton.....	73	238	13	36	58	388	106	158	16	1086	68	227	24	33	62	343	89	171	1017
Beloit.....	220	61	33	75	278	180	120	127	0	1094	18	11	3	1	23	27	35	14	127
Madison, [Sterling] (c)...	87	45	22	68	188	229	90	162	34	925	---	---	---	---	---	---	---	---	---
Manitowoc.....	133	67	53	118	130	186	174	234	0	1095	---	---	---	---	---	---	---	---	---
Milwaukee, [Pomeroy]....	70	133	171	167	41	139	132	162	0	915	---	---	---	---	---	---	---	---	---
Milwaukee, [Winkler]....	58	158	108	164	33	155	191	228	0	1095	---	---	---	---	---	---	---	---	---
New London.....	179	33	26	17	62	300	279	196	0	1092	127	39	11	0	38	161	247	193	822

a For 11 months only; June wanting.

b For 11 months only; September wanting.

c For 11 months only; January wanting.



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1857.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
Iowa—																			
Fort Madison.....	26	132	11	166	43	369	42	288	15	1092	29	35	14	23	33	163	281	119	697
Franklin .....	108	45	49	86	223	100	159	186	138	1094	0	34	1	20	1	168	14	64	302
Muscatine .....	31	148	15	247	66	293	61	234	0	1095	0	34	1	20	1	168	14	64	302
Pleasant Plain.....	70	95	73	122	148	202	103	219	32	1064	12	10	3	8	11	98	134	154	430
MINNESOTA—																			
Hazlewood (a) .....	59	40	23	82	217	63	60	417	6	967	31	17	18	25	41	9	46	39	226
Princeton .....	133	53	69	82	123	83	169	107	244	1063	55	21	36	28	67	40	164	55	465
CALIFORNIA—																			
Sacramento .....	176	29	51	245	219	168	23	184	0	1095	9	10	3	65	49	139	20	41	336
San Francisco .....	83	7	0	13	82	17	352	11	517	1092	47	11	5	7	75	107	303	45	600
SOUTH AMERICA—																			
Catharina Sop'a, Sur. (b)	59	374	196	213	84	23	4	12	1	966	6	118	297	295	10	7	7	7	741

a For 11 months only ; July wanting.

b For 11 months only ; March wanting.

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REDUCTIONS  
OF  
METEOROLOGICAL OBSERVATIONS  
FOR THE YEAR 1858.

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# NO. 1.—LIST OF STATIONS AND OBSERVERS, 1858.\*

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Ft.		
Aiken, S. C. ....	33 32	81 34	565	12	John H. Cornish.
Alachua County, Fla. (a) .....	29 30	82 26	184	12	James B. Bailey.
Alexandria, Va. ....	38 48	77 01	56	11	Benjamin Halliwell.
Alligator, Fla. ....	30 12	82 37	174	12	E. R. Ives.
All Saints, S. C. (b) .....	33 40	79 17	20	12	Rev. A. Glennie.
Amherst, Mass. ....	42 22	72 34	267	12	Prof. E. S. Snell.
Angelica, N. Y. ....	42 15	78 01	1,500	2	Dr. E. M. Alba.
Annapolis, Md. ....	38 58	76 29	20	12	Wm. R. Goodman.
Appleton, Wis. ....	44 10	88 35	800	12	Prof. R. Z. Mason.
Asheville, N. C. ....	35 37	82 29	2,250	10	W. W. McDowell.
Ashland, Va. (c) .....	38 38	81 57	?	1	Samuel Couch.
Athens, Ga. ....	33 58	83 30	850	10	Prof. J. D. Easter.
Athens, Ill. ....	39 52	89 56	?	12	Joel Hall.
Atsena, Fla. ....	29 07	83 02	12	12	Hon. Augustus Steele.
Auburn, Ala. ....	32 37	85 34	821	1	Prof. John Darby.
Augusta, Ga. ....	33 28	81 54	1,470	2	William H. Doughty.
Augusta, Ill. ....	40 12	90 58	203 d	12	Dr. S. B. Mead.
Aurora, Ill. ....	41 40	88 16	600	12	A. J. Babcock.
Austin, Texas. ....	30 20	97 46	650	12	J. Van Nostrand.
Austin, Texas. ....	30 15	97 47	?	12	Swante Palm.
Avon, Ohio. ....	41 27	82 04	840	3	Rev. L. F. Ward.
Baldwinsville, N. Y. ....	43 04	76 41	?	12	John Bowman.
Baltimore, Md. ....	39 18	76 37	?	12	Prof. Alfred M. Mayer.
Bardstown, Ky. ....	37 52	85 18	?	12	John H. Lunemann.
Batavia, Ill. ....	41 52	88 20	?	12	Thompson Mead.
Batavia, Ill. ....	41 52	88 26	636	7	E. Capou.
Battle Creek, Mich. ....	42 20	85 10	750	12	Dr. W. M. Campbell.
Bay City, Wisconsin. ....	46 33	91 00	658	12	Dr. Edwin Ellis.
Bayfield, Wis. ....	46 18 ?	90 50 ?	?	4	J. Harvey Nourse.
Beaver Bay, Minn. ....	47 12	91 19	657	2	Thomas Clarke.
Bedford, Pa. ....	40 01	78 30	?	10	Samuel Brown.
Belair, Fa. ....	30 24	84 20	70	12	Benjamin F. Whitner.
Bellefontaine, Ohio. ....	40 21	83 40	1,031	12	Joseph Shaw.
Bellefonte, Pa. ....	40 50	77 49	?	2	J. R. Burrell.
Bellevue, Iowa. ....	42 15	90 25	?	12	John C. Fory.
Bellevue, Neb. ....	41 08	95 50	?	12	William Hamilton.
Beloit, Wis. ....	42 30	89 04	750	12	Prof. William Porter.
Bellport, N. Y. ....	40 44	72 54	?	12	Henry W. Titus.
Berryville, Va. ....	39 11	78 09	575	12	Dr. R. Kownslar.
Berwick, Pa. ....	41 05	76 15	588	12	John Eggert.
Beverly, N. Y. (e) .....	41 22	74 00	180	12	Thomas B. Arden.
Black River, La. ....	31 30	91 46	108	11	Dr. Andrew R. Kirkpatrick.
Bladensburg, Md. ....	38 57	76 58	?	12	B. O. Lowndes.
Bloomfield, N. J. ....	40 49	74 11	120	9	Robert L. Cooke.
Border Plains, Iowa. ....	42 36	94 05	?	12	Wm. K. Goss.
Bowling Green, Ohio. ....	41 27	83 45	700	12	Dr. W. R. Peck
Bradford, Vt. ....	44 11 ?	72 25 ?	?	3	L. W. Bliss.
Brandon, Vt. ....	43 45	73 00	?	12	David Buckland.
Bridgewater, Mass. ....	42 00	71 00	142	11	Charles W. Felt.
Brighton, Ill. (f) .....	39 00	90 13	?	12	Wm. V. Eldredge.
Brownville, Neb. ....	40 30	96 00	?	8	Charles B. Smith.
Buchanan, Minn. ....	47 33	92 00	?	5	Stephen Walsh.
Buffalo, N. Y. ....	42 50	78 56	600	12	William Ives.
Buffalo, Va. ....	38 40	82 11	?	4	W. R. Boyers.
Burlingame, Kansas. ....	38 42	95 50	?	12	Edmund Fish.

\* For the different names by which in some cases the same place is designated by the observers, see General List of Stations in the introduction.

a Gainesville.

b Waccamaw.

c Near Buffalo.

d Above low water at Quincy, Ill.

e Philliptown.

f Piassa Farms.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1858.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Burlington, Vt.....	44 27	73 10	367	12	McK. Petty.
Burlington, N. J.....	40 00	75 12	26	2	Dr. E. R. Schmidt.
Burlington, Minn.....	47 01	92 30	645	11	A. A. Hibberd.
Byberry, Pa.....	40 06	74 58	?	2	John Comly.
Camanche, Iowa.....	41 48	90 15	?	4	Nathan H. Parker.
Cambridge, Mass.....	42 22	71 07	71	12	Prof. W. C. Boud.
Cannelton, Ind.....	37 58	86 40	450	9	Hamilton Smith.
Cannonsburg, Pa.....	40 25	80 07	936	12	Prof. Wm. Smith.
Canton, Mass.....	42 12	71 08	90	1	D. H. Ellis.
Cape Girardeau, Mo.....	37 20	89 34	?	1	Rev. James Knoud.
Carlisle, Pa.....	40 12	77 11	500	4	Prof. W. C. Wilson.
Carlownville, Ala.....	32 10	87 15	300	9	Dr. H. L. Alison.
Caraccas, Venezuela, S. A.....	10 31 S.	67 05	?	2	Augustus Fendler.
Carthage, Ill.....	40 23	91 17	?	5	Mrs. E. M. Bell.
Catharina Sophia, Surinam, S. A.....	5 48	56 47	?	12	C. T. Hering.
Cayuga, Kansas.....	39 25 ?	94 58 ?	?	1	William H. Gilman.
Cazenovia, N. Y.....	42 55	75 46	1,260	12	Aaron White.
Centre Signal Station, Bermuda, W. I.....	?	?	?	4	James Crawford.
Chambersburg, Pa.....	39 58	77 45	?	6	William Heyser.
Chanarcillo, Chile, S. A.....	27 28 S.	70 28	3,860	2	Edward B. Dorsey.
Chapel Hill, N. C.....	35 54	79 17	?	12	Prof. James Phillips, D. D.
Charleston, S. C.....	32 46	80 00	30	12	Dr. Joseph Johnson.
Charleston, S. C.....	32 46	80 00	?	12	Dr. J. L. Dawson.
Chestertown, Md.....	39 14	76 02	?	11	Prof. A. W. Clarke.
Chromedale, Pa. (a).....	39 55	75 25	196	7	Joseph Edwards.
Cincinnati, Ohio.....	39 06	84 27	?	12	G. W. Harper.
Cincinnati, Ohio.....	39 06	84 27	575	6	F. W. Hurtt.
Claremont, N. H.....	43 29	72 22	536	1	F. N. Freeman.
Cleveland, (near,) Ohio.....	41 30 ?	72 22 ?	665 ?	12	Edward Colburn.
Cleveland, Ohio.....	41 30	81 40	665	12	Gustavus A. Hyde.
Clinton, N. Y.....	43 00	75 20	500	12	Dr. H. M. Paine.
College Hill, Ohio (b).....	39 19	84 25	800	1	Prof. J. H. Wilson.
Collingwood, Ohio.....	41 49	83 34	?	12	Henry Bennett.
Columbia, Ct.....	41 42	72 16	?	12	Wm. H. Yeomans.
Columbia, S. C.....	34 00	81 07	295	8	C. C. Tew.
Columbus, Miss.....	33 30	88 29	227	12	James S. Lull.
Concord, N. H.....	43 12	71 29	378	9	Henry E. Sawyer.
Concord, N. H.....	43 12	71 29	374	1	E. P. Colby.
Cooper, Mich.....	42 40	85 31	?	12	Mrs. Octavia C. Walker.
Cordova, Mexico.....	19 26	97 51	860	12	J. A. Hieto.
Cornish, Maine.....	43 40	70 44	800	12	G. W. Guptill.
Cornish, Maine.....	43 40	70 44	?	12	Silas West.
Covert, N. Y. (c).....	42 40	76 50	700	10	John Leferts.
Craftsbury, Vt.....	44 40	72 30	1,100	12	James A. Paddock.
Crichton's Store, Va (d).....	36 40	77 46	500	12	R. F. Astrop.
Cross Creek, Va.....	40 19 ?	80 31 ?	?	2	B. D. Sanders.
Danvers, Mass.....	42 35	71 03	?	1	A. W. Mack.
Danville, Ky.....	37 40	84 30	950	8	O. Beatty.
Davidson College, N. C.....	35 30	80 54	850	12	W. C. Kerr.
Dayton, Ohio.....	39 44	84 10	?	7	S. Groneweg.
Detroit, Mich.....	42 24	82 58	597	9	L. S. Horton.
Dexter, Maine.....	44 55	69 32	?	8	Benjamin F. Wilbur.
Dubuque, Iowa.....	42 30	90 52	1,258	12	Dr. Asa Horr.
East Exeter, Maine.....	45 00	69 00	190	2	Stephen Gilman.
Easton, Pa.....	40 43	75 16	320	12	G. R. Houghton.
Eden, N. Y. (e).....	42 30	79 07	700	11	Anna S. Landon.
Edgar Co., Illinois.....	39 30	88 36 ?	?	5	J. W. Brown.
Edgington, Ill.....	41 25	90 46	?	12	Dr. E. H. Bowman.
Edinburg, Ohio.....	41 20	81 00	520	12	Smith Sanford.
Elgin, Ill.....	42 00	88 15	600	12	J. B. Newcomb.
Elkhorn, Neb.....	42 22	96 12	800	9	Anna M. J. Bowen.

<sup>a</sup> Near Lima.  
Farmer's College.

<sup>c</sup> Lodi, Townsendville  
d Genito Mills.

Brown Cottage.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1858.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Evansville, Ind.....	38 08	87 29	390	9	John F. Crisp.
Evanstown, Ill.....	42 00	87 51	603	3	H. G. Meacham.
Fairfield, Iowa.....	41 01	91 57	940	12	Dr. J. M. Shaffer.
Fishkill, N. Y.....	41 34	74 18	42	12	Wm. H. Denning.
Flatbush, N. Y.....	40 37	74 01	54	12	Rev. B. D. Van Kleeck.
Fleming, Pa.....	40 55	77 53	780	12	Samuel Brugger.
Florida, Mass.....	42 42	73 10	2,500	12	L. F. Whitcomb.
Fordham, N. Y.....	40 54	74 03	147	■	Dr. Stillman Spooner.
Forest City, Minn.....	45 45	96 00	?	7	A. C. Smith.
Forestville, Mich.....	43 40	82 34	?	2	Lieut. C. N. Turnbull.
Fort Edward, N. Y.....	43 13	73 42	?	12	Prof. Solomon Sias.
Fort Gratiot, Mich.....	42 60	82 25	?	1	Lieut. C. N. Turnbull.
Fort Madison, Iowa.....	40 37	91 28	?	12	Daniel McCready.
Fort Simpson, British America.....	61 51	121 25	-----	10	Bernard B. Ross.
Fort Snyder, Oregon.....	42 00	?	8,011	1	James A. Snyder.
Fort Thompson, Oregon.....	42 58	108 56	?	1	W. H. Wagner.
Fort Union, Dacotah Territory.....	48 00	104 00	-----	1	F. G. Riter.
Francestown, N. H.....	42 59	71 45	?	5	A. H. Bixby.
Franklin, Iowa.....	42 45	92 11	?	■	Dexter Beal.
Frederick, Md.....	39 24	77 18	?	12	Henry E. Hanshew.
Freehold, N. J.....	40 15	74 21	?	12	B. F. Simpson and O. B. Willis.
Fremont Centre, Ill.....	42 18	88 06	736	3	Isaac H. Smith.
Gallipolis, Ohio.....	39 00	82 01	520	12	A. P. Rogers.
Gardiner, Maine.....	44 11	69 46	90	12	R. H. Gardiner.
Gaston, N. C. (a).....	36 32	77 45	?	12	Dr. G. F. & J. A. Moore.
Georgetown, Del.....	38 43	75 22	?	12	D. W. Mauld.
Gettysburg, Pa.....	39 51	77 15	?	12	Prof. M. Jacobs.
Gilbert's Trading Post, Neb.....	42 28	103 40	-----	1	O. H. Miller.
Glenwood, Tenn. (b).....	36 28	87 13	481	12	Prof Wm M. Stewart.
Goldsborough, N. C.....	35 20	77 51	?	3	Rev. Daniel Morrelle.
Goliad, Texas.....	28 40	97 35	50	12	John C. Brightman.
Grand Rapids, Mich.....	43 00	86 00	852	3	A. O. Currier.
Grand Rapids, Mich.....	43 00	86 00	852	12	L. H. Streng.
Great Salt Lake City, Utah.....	40 45	111 26	4,250	3	W. W. Phelps.
Green Bay, Wis.....	44 30	88 00	584	8	D. Underwood.
Greene Springs, Ala. (c).....	32 50	87 46	?	12	Prof. H. Tutwiler.
Greensborough, Ala.....	32 40	87 40	350	11	Robert B. Waller.
Guatemala, Central America.....	14 37	30 30	4,961	12	?
Hamilton, Canada.....	43 15	79 57	?	12	Dr. William Craigie.
Harrisburg, Pa.....	40 16	76 50	?	12	Dr. John Heisely.
Harrisburg, Pa.....	40 16	76 55	?	12	W. O. Hickok.
Hartwood, Va.....	38 15	77 34	350	12	Abram Van Doren.
Hazlewood, Minn.....	45 00	95 30	?	12	Rev. S. B. Riggs.
Hibernia, Pa.....	30 15	81 30	15 ?	1	L. F. Batchelder.
Hillsborough, Ga.....	33 13	83 45	566	6	Eli S. Glover.
Hillsborough, Ohio.....	39 13	83 30	1,000	12	J. McD. Mathews.
Hillsborough, Ill.....	39 12	89 26	?	3	John S. Titcomb.
Hiram, Ohio.....	41 20	81 15	675	12	S. M. Luther.
Holiday's Cove, Va.....	40 22 ?	80 31 ?	?	3	R. B. Sanders.
Houseville, N. Y.....	43 40	75 32	?	■	Walter D. Yale.
Hudson, Ohio.....	41 15	81 24	1,137	5	C. A. Young & E. W. Childs.
Huntsville, Texas.....	-----	-----	-----	12	T. Gibbs.
Iowa City, Iowa.....	41 39	91 33	?	■	Dr. William Reynolds.
Jackson, Jackson County, Ohio.....	39 10	82 32	666	6	Moses Gilmor.
Jackson, Monroe County, Ohio.....	39 34	80 56	540	■	Enoch D. Johnson.
Jacksonville, Fla.....	30 30	82 00	13	12	Dr. A. S. Baldwin.
Jacksonville, Ill.....	39 30	90 06	?	11	Timothy Dudley.
Janesville, Wis.....	42 42	89 91	768	11	J. F. Willard.
Jefferson, Ohio.....	42 00	81 00	?	12	James D. Herrick.
Jerusalem, Palestine.....	31 47	35 13	2,610	4	Dr. E. G. Barclay.
Kanawha, Va.....	38 53	81 25	?	8	W. C. Reynolds.
Kenosha, Wis.....	42 35	87 50	600	12	Rev. John Gridley.

a Green Plains.

b Clarksville.

c Havana.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1858.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Laconia, N. H. (a).....				12	Josiah B. French.
Lake Village, N. H. (b).....				12	Josiah B. French.
Lake, N. Y.....	43 15	73 33	?	11	Peter Reid.
Lambertville, N. J.....	40 23	74 56	?	12	L. H. Parsons.
Lancaster, Ohio.....	39 40	82 40	?	9	H. W. Jaeger.
Lausing, Mich.....	42 44	77 30	750 ?	2	J. C. Holmes.
Lapham, Minn.....	46 10	96 00	850	9	Samuel Locke & F. McMullin.
Larissa, Texas.....	31 45	95 50	755	12	F. L. Yoakum.
Lawrence, Mass.....	42 42	71 11	?	12	John Fallon.
Lawrence, Kansas.....	38 58	95 12	800	12	G. W. Brown.
Leavenworth City, Kansas.....	39 19	94 33	787	9	E. L. Berthoud.
Leavenworth City, Kansas.....	39 20	94 33	1,342	12	H. D. McCarty.
Leitersburg, Md.....	39 35	77 30	?	7	Jacob E. Bell.
Leonardtown, Md.....	38 17	76 43	?	3	Dr. A. McWilliams.
Lewisville, Va.....	38 56	80 01	180	7	Rev. Charles B. Mackee.
Lewisburg, Pa.....	40 58	76 58	?	12	Charles S. James.
Lewisburg, Va.....	38 00	80 00	2,000	10	Dr. Thomas Patton.
Linden, Pa.....	41 10	77 11	?	?	James Barrett.
Lind, Wis.....	44 20	89 00	?	5	R. H. Struthers.
Lockport, N. Y.....	43 10	78 51	550	1	E. S. Holmes.
Logansport, Ind.....	40 45	86 14	?	12	Charles B. Lasselle.
Louisville, Ky.....	38 03	85 30	450	?	S. R. Williams.
Madison, Ohio.....	41 49	81 10	?	12	Rev. L. S. Atkins.
Madison, Ohio.....	41 52	81 00	650	12	Mrs. Ardelia C. King.
Madison, Wis.....	43 05	89 25	892	10	Prof. J. W. Sterling.
Madison, Ind.....	38 15	85 00	450	12	C. Barnes.
Madrid, N. Y.....	44 43	75 33	289	1	E. A. Dayton.
Manchester, Ill.....	39 33	90 34	683	12	John Grant.
Manhattan, Kansas.....	39 13	96 45	?	11	Isaac T. Goodnow.
Manitowoc, Wis.....	44 07	87 37	?	12	Jacob Lüps.
Mapleton, Kansas.....	38 04	94 51	?	6	Dr. S. O. Himoe.
Marlborough, N. C.....	35 28	75 36	?	8	Robert H. Drysdale.
Marquette, Mich.....	46 32	87 41	630	12	G. H. Blaker.
Marysville, Cal.....	39 12	121 42	?	12	W. C. Belcher.
Marengo, Ill.....	42 14	88 38	650	12	O. R. Rogers.
Meadow Dale, Va.....	38 23	79 35	?	12	James Slaven.
Meadville, Pa.....	41 39	80 11	1,088	9	T. F. Thickstun.
Medina, Ohio.....	41 07	81 42	1,206	10	Rev. L. F. Ward.
Memphis, Tenn.....	35 08	90 00	262	12	Dr. W. J. Tuck.
Menasha, Wis.....	44 13	88 18	?	3	C. D. Underwood.
Mendon, Mass.....	42 06	72 33	?	12	Dr. John George Metcalf.
Micanopy, Fla.....	29 35	82 31	78	7	James B. Bean.
Michigan City, Ind.....	41 41	86 53	622	10	C. S. Woodard.
Middletown, Ct.....	41 33	72 39	200 ?	4	John Johnston.
Milford, Del.....	38 55	75 27	25	6	R. A. Martin.
Millersburg, Ky.....	38 20	84 00	804	5	Rev. G. S. Savage, M. D.
Milwaukee, Wis.....	43 04	87 59	658	12	F. C. Pomeroy.
Milwaukee, Wis.....	43 04	87 59	593	12	Dr. C. Winkler.
Milwaukee, Wis.....	43 03	87 57	593	8	I. A. Lapham.
Ninatitlan, Mexico.....	17 59	94 07	45	9	Charles Laszlo.
Mirador, Mexico.....	19 15	96 25	3,500	12	Carl Sartorius.
Moneka, Kansas.....	38 19 ?	94 42 ?	?	2	John O. Wattles.
Monroe, Mich.....	41 56	83 22	590	11	Miss Helen I. Whelpley.
Monson, Maine.....	45 11	69 35	?	4	Benjamin F. Wilbur.
Montgomery, Ala.....	32 25	86 22	162	3	Rev. J. Avery Shepherd.
Montreal, Canada.....	45 30	73 36	57	12	Dr. A. Hall.
Montross, Va.....	38 07	76 54	200	11	E. E. Spence.
Montville, Ohio.....	41 07	81 47	1,261	3	W. P. Clarke.
Moose Factory, H. B. Territory.....	51 15	80 45	?	12	J. Mackenzie.
Morrisania, N. Y.....	40 53	74 01	150	12	J. Zaepffel.
Morrisville, Pa.....	40 12	74 53	30	12	Ebenezer Hance.
Mossy Creek, Va.....	38 30	79 00	-----	5	Jed. Hotchkiss.

a At the outlet of Lake Winnepiesaukee.

b About four miles south of Laconia.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1853.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fet.		
Mount Joy, Pa. ....	40 08	77 32	?	12	Dr. J. B. Hoffer.
Mount Union, Ohio. ....	41 20	81 01	?	5	Newton Anthony.
Murfreesborough, N. C. ....	36 30	77 06	?	12	Rev. A. McDowell.
Murrysville, Pa. ....	40 28	79 35	960	12	Thomas H. Stuart.
Muscatine, Iowa. ....	41 26	91 05	586	12	T. S. Parvin.
Nantucket, Mass. ....	41 16	70 06	30	12	Hon. Wm. Mitchell.
Nassau, Bahamas. ....	25 05	77 21	?	12	A. M. Smith.
Natchez, Miss. ....	31 34	91 25	264	10	Robert McCary.
Newark, N. J. ....	40 45	74 10	30	12	W. T. Whitehead.
Newark, Del. ....	39 38	75 47	120	2	Mrs. E. D. Porter.
New Bedford, Mass. ....	41 39	70 56	90	12	Samuel Rodman.
New Braunfels, Texas. ....	29 42	98 15	?	12	Otto Friedrich.
New Buffalo, Mich. ....	41 45	86 46	600	12	J. B. Crosby.
Newburyport, Mass. ....	42 47	70 52	46	11	Dr. H. C. Perkins.
New Danemoro, Wis. ....	44 17	90 38	?	6	E. Haeuser.
New Harmony, Ind. ....	38 08	87 50	320	12	John Chappellsmith.
New Lisbon, Ohio. ....	40 45	80 46	?	12	J. F. Benner.
New London, Conn. ....	41 32	72 03	90	7	Rev. Tryon Edwards, D. D.
New London, Wis. ....	44 21	88 45	?	8	J. Everett Breed.
New Orleans, La. ....	29 57	90 00	?	12	Lewes B. Taylor.
New York City, N. Y. (a) ....	40 43	74 05	159	12	Prof. O. W. Morris.
Nichols, N. Y. ....	42 00	76 32	?	12	Robert Howell.
Nolin, Ky. ....	37 10	85 35	?	2	J. Grinnell.
Norristown, Pa. ....	40 08	75 19	153	12	Rev. J. Grier Balston.
North Burnstead, N. H. ....	43 38	71 27	?	1	W. F. Hanscam.
North Whitehall, Pa. ....	40 40	75 26	250	12	Edward Kohler.
Northwood, Ohio (b) ....	40 28	83 45	1,170	11	J. C. Smith and R. Shields.
Norwich, Conn. ....	41 32	72 03	50	2	N. Scholfield.
Norwich, Vt. ....	43 42	72 21	?	12	Prof. A. Jackman.
Notre Dame, Ind. ....	41 45	86 10	?	3	Thomas Vagnier.
Oakland, Md. ....	39 40	79 00	?	6	S. R. Cofrau.
Ogdensburg, N. Y. ....	44 43	75 26	?	12	W. E. Guest.
Omaha, Neb. ....	41 15	96 10	?	11	William N. Byers.
Oregon City, Oregon. ....				12	G. H. Atkinson.
Oswego, N. Y. ....	43 28	77 34	232	5	Wm S. Malcolm.
Ottawa, Ill. ....	41 20	88 47	500	12	Dr. J. O. Harris.
Ottawa Point, Mich. ....	44 16	83 25	?	4	John Oliver.
Ovid, N. Y. ....	42 41	76 52	800	5	J. W. Chickering.
Paradise, Penn. ....	40 00	76 08	?	12	Jacob Frantz.
Paris, Ky. ....	38 16	84 07	810	12	Dr. L. G. Ray and Mrs. N. Ray.
Paulding, Miss. ....	32 20	89 20	?	11	Rev. E. S. Robinson.
Pekin, Ill. ....	40 36	89 45	?	12	J. H. Riblet.
Penn Yan, N. Y. ....	42 42	77 11	740	12	Dr. H. P. Surtwell.
Peoria, Ill. ....	40 36	89 30	?	12	Dr. Frederick Brendel.
Perrysburg, Ohio. ....	41 39	83 40	?	4	F. Hollenbeck.
Perry, Maine. ....	45 00	67 06	100	12	Wm. D. Dana.
Philadelphia, Pa. ....	39 57	75 11	60	12	Prof. James A. Kirkpatrick.
Pittsburg, Pa., [Oakland Observ'y] ..	40 32	80 02	1,026	12	Prof. W. C. Wilson.
Pittsburg, Pa., [Marine Hospital] ....	40 30	80 00	?	12	Wm. Martin and Dr. Alex. Spooner.
Platteville, Wis. ....	42 45	89 25	?	12	Dr. J. L. Pickard.
Pleasant Plain, Iowa. ....	41 07	91 54	?	12	Townsend McConnel.
Pocopson, Pa. ....	39 54	75 37	218	12	Fenelon Darlington.
Point Pleasant, Va. ....	38 50	82 31	480	3	W. B. Boyers.
Pomfret, Conn. ....	41 52	72 00	596	12	Rev. D. Hunt.
Pompey, N. Y. ....	42 52	76 09	1,737	3	S. Marshall Ingalls.
Peplar Grove, Va. ....	38 20	81 21	?	12	James E. Kendall.
Port Huron, Mich. ....	42 53	82 24	606	12	James Allen.
Portland, Maine. ....	43 39	70 15	87	12	Henry Willis.
Portland, Oregon. ....	45 24	121 30	150	4	George H. Stibbins.
Portsmouth, Va. ....	36 50	76 19	34	12	Prof. N. B. Webster.
Portsmouth, Ohio. ....	38 50	82 49	468	5	James H. Poe.
Pottsville, Pa. ....	40 41	76 09	?	1	D. Washburn.

a Deaf and Dumb Institute.

b Belle Centre—Geneva Hall.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1858.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Poultney, Iowa (a) .....	41 40	91 21	?	7	B. F. Odell.
Princeton, Minn. ....	45 50	93 45	?	11	O. E. Garrison.
Providence, R. I. ....	41 49	71 25	120	12	Prof. A. Caswell.
Racine, Wis. ....	42 49	87 40	?	4	W. J. Durham.
Reading, Pa. ....	40 19	75 56	262	3	J. Burd Peale, M. D., & Charles Hahn.
Red River Settlement, H. B. Territory	50 06	90 00	653	11	Donald Gunn.
Richmond, Mass. (b) .....	42 23	73 20	1,190	10	Wm. Bacon.
Richmond, Ind. ....	39 47	84 47	800	12	Joseph Moore.
Richmond, Ind. ....	39 47	84 47	?	7	W. W. Austin.
Rigolet, Labrador. ....	54 00	55 00	?	5	Henry Connelly.
Riley, Ill. ....	42 08	88 33	650	12	E. Babcock.
Ripley, Ohio ....	38 47	83 31	?	12	J. Ammen.
Rochester, N. Y. ....	43 08	77 51	516	12	J. C. Seely.
Rose Hill, Va. ....	38 00	76 57	250	8	George W. Upshaw.
Rossville, Iowa. ....	43 10	91 21	1,400	10	Carlisle D. Beeman.
Rougemont, Va. ....	38 05	78 21	450	12	George C. Dickinson.
Rupert, Vt. ....	43 15	73 11	750	12	Joseph Parker.
Ruthven, Va. ....	37 21	77 33	?	7	Julien C. Ruffin.
Sacramento, Cal. ....	38 35	121 40	49	12	Dr. Thomas M. Logan.
Sag Harbor, N. Y. ....	41 00	72 20	40	12	Ephraim N. Byram.
St. Augustine, Fla. ....	29 48	81 35	5	11	Dr. P. B. Mauran.
St. Croix, Wis. ....	45 30	92 40	660 ?	3	William M. Blanding.
St. George's, Bermuda, W. I. ....	32 23	64 40	123	5	E. Mitchel and others.
St. John's, Newfoundland. ....	47 35	52 38	?	12	John Delany and Sons.
St. John's, S. C. ....	33 00	80 00	50	11	T. P. Ravenel.
St. Johnsbury, Vt. ....	44 25	72 01	540	12	Franklin Fairbanks.
St. Joseph's, Mo. ....	39 40	94 40	?	1	E. B. Neely.
St. Louis, Mo. ....	28 37	90 16	461	12	Dr. A. Wislizenus.
St. Martin, Canada ....	45 32	73 36	118	12	Dr. Charles Smallwood, LL.D.
Salem, Va. ....	39 20	80 01	1,100	3	S. C. Wells.
Salt Ponds, Fa. ....	24 33	81 48	4	12	William C. Dennis.
Sandwich, Ill. ....	41 31	88 50	?	1	Dr. N. E. Ballou.
San Francisco, Cal. ....	37 48	122 23	115	12	Dr. W. O. Ayres.
Saratoga, N. Y. ....	43 06	74 00	960	12	Walter H. Riker.
Savannah, Ga. ....	32 05	81 07	42	12	Dr. John F. Posey.
Savannah, Ohio. ....	41 12	82 31	?	12	Dr. John Ingram.
Saybrook, Conn. ....	41 18	72 20	10	12	James Rankin.
Schenectady, N. Y. ....	42 49	73 55	290	2	Alexis A. Julien.
Selma, Ala. ....	32 25	86 51	200	9	Dr. Samuel K. Jennings.
Sergeantsville, N. J. (c) .....	40 29	75 03	?	3	John T. Sergeant.
Shamokin, Pa. (d) .....	40 45	76 31	700	12	P. Friel.
Shelburne, N. H. ....	44 23	71 06	700	12	Fletcher Odell.
Sioux City, Iowa ....	42 31	96 25	?	12	Dr. John J. Saville.
Smithfield, Va. ....	36 50	76 41	100	12	Dr. John R. Purdie.
Somerset, Pa. ....	40 02	79 02	1,997	12	George Mowry.
South Pass, Ill. ....	37 28	89 14	?	11	Frank Baker.
Sparta, Ga. ....	33 17	83 09	550	12	Dr. E. M. Pendleton.
Spencertown, N. Y. ....	42 19	73 41	800	6	Irving Magee.
Springdale, Ky. ....	38 07	85 34	570	12	Mrs. L. Young.
Springfield, Ill. ....	42 06	72 35	-----	3	F. A. Brewer.
Springfield, Mo. ....	37 12	93 12	?	4	J. A. Stephens.
Stanbridge, Canada ....	45 08	73 00	?	12	J. C. Baker.
Steuben, Maine. ....	44 44	67 58	50	12	J. D. Parker.
Stillwater, Minn. ....	45 04	92 45	756	1	A. Van Vorhes.
Stratford, N. H. ....	44 08	71 34	1,000	9	Branch Brown.
Stribling Springs, Va. ....	38 17	79 12	1,639	4	Jed Hotchkiss.
Sykesville, Md. (e) .....	39 23	76 57	700	12	Miss Harriott M. Baer.
Tarentum, Pa. ....	40 37	79 19	950	12	John H. Baird.
Thomson, Ga. ....	33 30 ?	82 20 ?	?	1	W. T. Grant.
Thunder Bay Island, Mich. ....	45 02	83 09	?	5	J. J. Malden.
Topeka, Kansas. ....	39 03	95 39	?	6	F. W. Giles.

a Plum Spring.  
b Elmwood.

c Sand Brook.  
d Lancaster Colliery.

e Shellman Hall.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1858.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Toronto, Canada.....	43 39	79 21	108	12	Magnetic Observatory.
Trinity, La.....	42 44	73 36	58	1	Dr. Edward Merrill.
Turks Island, West Indies.....	21 29	71 05	?	5	J. B. Hayne.
Union Hill, Texas.....	30 30	96 31	540	12	Dr. W. H. Gantt.
Union Rancho, Cal.....	39 30	121 00	?	1	William L. Dunkum.
Upper Alton, Ill.....	38 55	90 10	?	7	John James.
Urbana, Ohio.....	40 06	83 43	1,015	12	Prof. M. G. Williams.
Vera Cruz, Mexico.....	19 08	96 08	?	2	Carl Sartorius.
Vera Cruz, Mexico.....	19 08	96 08	26	12	Dr. German Berendt.
Wabashaw, Minn.....	44 30	92 15	850	7	Spencer L. Hillier.
Wallingford, Conn.....	41 26	72 50	133	12	B. F. Harrison.
Wampsville, N. Y.....	43 04	75 50	500	12	Dr. Stillman Spooner.
Warrington, Pa. (a).....	30 20	87 16	12	1	Lieut. J. W. Hester.
Warsaw, Ill.....	40 20	91 31	?	7	Benjamin Whitaker.
Warsaw, Wis.....	45 00	89 30	?	2	W. A. Gordon, M. D.
Washington, D. C.....	38 53	77 01	30	12	Smithsonian Institution.
Washington, D. C., (near).....				8	J. Weissner.
Washington, Texas.....	30 26	96 15	?	8	B. H. Rucker.
Waterford, N. Y.....	42 48	73 41	?	12	John C. House.
Waukesha, Wis.....	42 50	88 11	812	11	Prof. S. A. Bean.
Waynesville, Ill.....	40 16	89 07	?	12	Joshua E. Cantril.
Welchfield, Ohio.....	41 23	81 12	1,115	12	B. F. Abell.
Wellsville, N. Y.....	42 07	78 06	1,480	4	H. M. Sheerar.
West Day, N. Y.....	43 00 ?	74 36 ?	?	8	Jude M. Young.
West Enfield, N. H.....	43 30	72 00	?	12	Nathaniel Purmort.
Westerville, Ohio.....	40 04	83 03	?	12	Prof. John Haywood.
Westfield, Mass.....	42 06	72 48	?	12	Rev. Emerson Davis, D. D.
West Haverford, Pa.....	40 00	75 21	?	9	Paul Swift.
West Salem, Ill.....	38 30	88 00	?	12	Henry A. Titze.
Westtown, Pa.....	39 57	75 43	550	12	Samuel Alsop.
West Urbana, Ill.....	40 09	88 17	550	12	Dr. John Swain.
Wheaton, Ill.....	41 49	88 06	682	12	G. H. Collier.
Whitemarsh Island, Ga.....	32 04	81 05	18	12	R. T. Gibson.
Williamstown, Mass.....	42 43	73 13	720	12	Curtis J. Lyon.
Wilson, N. Y.....	43 20	78 56	250	1	E. S. Holmes.
Winchester, Va.....	39 15	78 10	?	10	John W. Marvin.
Windham, Ohio.....	41 10	81 05	?	12	Samuel W. Treat.
Windsor, Nova Scotia.....	44 59	64 07	200	12	Rev. J. M. Hensley & Prof. H. How.
Winnebago, Ill.....	42 17	89 11	?	12	James W. Tolman.
Wirt Court-House, Va.....	39 05	81 26	?	12	Dr. Josiah W. Hoff.
Wolfville, Nova Scotia (b).....	45 06	64 25	95	10	A. P. S. Stuart.
Woodstock, Vt.....	43 36	72 35	650	12	Charles Marsh.
Worcester, Mass.....	42 16	71 48	526	12	J. S. Sargent.
Zebulon, Ga.....	33 07	84 26	?	6	Mrs. J. T. Arnold.

a Pensacola.

b Horton.



## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches</i>			<i>Inches</i>			<i>Inches.</i>
British America .. Hamilton .....	29.67	8	9 a. m.	30.32	11	9 a. m.	29.10
Montreal .....	30.02	22	9 p. m.	30.79	4	2 p. m.	29.16
Rigolet (a) .....	29.78	13	Sunset.	30.30	31	Sunrise.	28.80
St. John's .....	29.57	11	9 p. m.	30.18	30	2 p. m.	<sup>b</sup> 29.00
St. Martin .....	29.91	22	9 p. m.	30.70	4	2 p. m.	29.07
Toronto .....	29.67	8	6 a. m.	30.37	4	2 p. m.	29.10
Windsor .....	29.91	23	9 p. m.	30.60	30	7 a. m.	28.84
Wolfville .....	29.90	23	7 a. m.	30.75	30	2 p. m.	29.15
Maine .....	29.88	24	7 a. m.	30.55	4	2 p. m.	29.21
Gardiner .....	29.92	23	7 a. m.	30.73	4	2 p. m.	29.28
Portland .....	29.94	23	7 a. m.	30.82	30	2 p. m.	29.21
Steuben .....	29.10	23	7 a. m.	29.80	4	2 p. m.	28.85
New Hampshire .. Claremont .....	29.66	23	7 a. m.	30.36	16	2 p. m.	28.99
Concord .....	29.77	23	7 a. m.	30.44	4	2 p. m.	<sup>c</sup> 29.13
Shelburne .....	29.69	22	9 p. m.	30.42	4	2 p. m.	28.98
Vermont .....	29.71	23	7 a. m.	30.40	4	2 p. m.	29.06
Burlington .....	29.42	23	7 a. m.	<sup>d</sup> 30.14	4	2 p. m.	28.70
Norwich .....	29.82	8	2 p. m.	30.57	16	2 p. m.	29.19
St. Johnsbury .....	29.86	23	7 a. m.	30.56	16	2 p. m.	29.21
Massachusetts .. Amherst .....	30.02	23	7 a. m.	30.75	16	2 p. m.	29.35
Bridgewater .....	29.85	8	9 p. m.	30.50	16	2 p. m.	29.20
Cambridge .....	29.93	23	7 a. m.	30.63	16	2 p. m.	29.27
Canton .....	30.07	8	9 p. m.	30.75	29	2 p. m.	<sup>e</sup> 29.50
Lawrence .....	29.99	23	7 a. m.	<sup>f</sup> 30.67	16	2 p. m.	29.35
Nantucket .....	30.01?	23	7 a. m.	30.78	16	2 p. m.	29.37
New Bedford .....	30.16	23	7 a. m.	30.63	16	2 p. m.	29.37
Newburyport .....	29.31	23	7 a. m.	29.99	16	2 p. m.	28.70
Westfield .....	29.49	23	7 a. m.	30.17	4	2 p. m.	28.92
Williamstown .....	29.87	23	Sunrise.	30.55	16	1 p. m.	29.22
Worcester .....	29.97	8	9 p. m.	30.58	16	2 p. m.	29.30
Rhode Island .. Providence .....	29.43	23	7 a. m.	30.10	16	2 p. m.	28.79
Connecticut .....	29.96	23	7 a. m.	30.65	12	7 a. m.	29.27
Norwich .....	29.38	8	9 p. m.	29.93	16	2 p. m.	28.84
Pomfret .....	29.39	8	8 a. m.	30.06	11	2 p. m.	28.74
Wallingford .....	29.48	8	2 p. m.	30.19	4	2 p. m.	28.80
New York .....	28.61	8	7 a. m.	29.23	4	2 p. m.	28.09
Bellport .....	30.25	23	2 p. m.	<sup>g</sup> 30.90	16	2 p. m.	29.61
Buffalo .....	29.97	23	7 a. m.	30.69	16	2 p. m.	29.39
Canton .....	29.90	24	9 p. m.	30.75	4	2 p. m.	<sup>h</sup> 29.28
Cazenovia .....	30.04	23	7 a. m.	30.71	16	2 p. m.	29.38
Fishkill Landing (a) .....	29.51	8	7 a. m.	30.12	11	2 p. m.	28.89
Flatbush .....	29.80	23	2 p. m.	30.46	16	2 p. m.	29.19
Fort Edward .....	30.05	23	7 a. m.	30.73	16	2 p. m.	29.40
New York city .....	30.07	8	9 p. m.	30.74	16	2 p. m.	29.43
Rochester .....	30.03	8	9 p. m.	30.62	16	2 p. m.	29.48
Sag Harbor .....	30.05	8	9 p. m.	30.69	16	7 a. m.	<sup>h</sup> 29.51
Waterford .....	29.98	8	6 p. m.	30.68	5	7 a. m.	28.76
New Jersey .....	29.15	8	9 p. m.	29.73	28	9 p. m.	28.56
Bloomfield .....	29.38	8	2 p. m.	<sup>i</sup> 30.00	16	7 a. m.	28.75
Burlington .....	28.86	8	7 a. m.	29.39	16	7 a. m.	28.33
Lambertville .....	29.95	23	7 a. m.	30.60	16	7 a. m.	29.37
Newark .....	29.60	8	9 p. m.	<sup>j</sup> 30.20	16	2 p. m.	29.01
Pennsylvania .. Bedford .....	29.56	8	2 p. m.	30.17	11	2 p. m.	28.98
Berwick (a) .....	29.85	8	2 p. m.	30.45	16	7 a. m.	29.29
Cannonsburg .....	29.81	8	2 p. m.	30.43	16	7 a. m.	29.23
Chromedale .....	29.63	8	2 p. m.	30.26	16	7 a. m.	29.05
Easton .....							
Gettysburg .....							
Harrisburg, [Heisely] .....							
Harrisburg, [Hickok] .....							
Lewisburg .....							

\* For hours of observation, &amp;c., see thermometer tables.

<sup>a</sup> Not corrected for temperature.<sup>b</sup> Same height at 9 p. m. on the 30th.<sup>c</sup> Same height at 9 p. m. on the 4th.<sup>d</sup> Same height at 9 p. m. on the 23d.<sup>e</sup> Same height at 9 p. m. on the 9th.<sup>f</sup> Same height at 9 p. m. on the 8th.<sup>g</sup> Same height at 2 p. m. on the 23d.<sup>h</sup> Same height at 2 p. m. on the 16th.<sup>i</sup> Same height at 2 p. m. and 9 p. m. on the 22d.<sup>j</sup> Same height at 7 a. m. on the 23d.

## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania . . . . .							
Morrisville . . . . .	30.15	8	9 p. m.	30.80	16	2 p. m.	29.56
Mount Joy (a) . . . . .	29.78	8	2 p. m.	30.42	16	7 a. m.	29.19
Murrysville . . . . .	28.90	8	7 a. m.	29.48	11	2 p. m.	28.33
Norristown . . . . .	29.98	23	7 a. m.	30.65	16	7 a. m.	29.33
Philadelphia . . . . .	29.95	8	2 p. m.	30.53	16	2 p. m.	29.41
Pittsburg, [Marine Hospital] . . . . .	29.00	8	7 a. m.	29.70	16	7 a. m.	28.45
Pittsburg, [Oakland Station] (a) . . . . .	28.92	8	7 a. m.	29.45	11	2 p. m.	28.44
Pottsville (a) . . . . .	29.58	8	2 p. m.	30.18	11	2 p. m.	<i>b</i> 29.09
Somerset . . . . .	27.69	8	7 a. m.	28.16	16	7 a. m.	27.23
Westtown . . . . .	29.52	23	7 a. m.	30.11	16	7 a. m.	28.95
Delaware . . . . .							
Milford . . . . .	29.72	8	9 p. m.	30.37	16	2 p. m.	29.22
Newark . . . . .	29.91	8	7 a. m.	30.53	16	2 p. m.	29.40
Maryland . . . . .							
Annapolis . . . . .	30.10	8	2 p. m.	30.70	16	7 a. m.	<i>c</i> 29.59
Baltimore . . . . .	29.96	8	2 p. m.	30.58	16	7 a. m.	29.40
Chestertown . . . . .	30.09	23	7 a. m.	30.69	16	7 a. m.	29.49
Frederick . . . . .	29.83	8	7 a. m.	30.43	16	7 a. m.	29.26
Leonardtown (a) . . . . .	30.06	8	2 p. m.	30.59	16	7 a. m.	29.56
Oakland . . . . .	27.59?	22	2 p. m.	28.06	14	2 p. m.	27.01
Dist. of Columbia . . . . .							
Washington . . . . .	30.12	8	7 a. m.	30.75	28	9 p. m.	29.53
Virginia . . . . .							
Alexandria . . . . .	30.10	8	2 p. m.	30.67	16	7 a. m.	29.58
Portsmouth . . . . .	30.11	8	2 p. m.	30.67	28	9 p. m.	29.54
Rose Hill . . . . .	30.06?	7	9 p. m.	30.68	16	2 p. m.	29.54
Ruthven . . . . .	29.77	8	7 a. m.	30.36	16	7 a. m.	29.25
North Carolina . . . . .							
Ashville . . . . .	27.77	8	7 a. m.	28.26	28	2 p. m.	27.31
Chapel Hill . . . . .	29.67	8	7 a. m.	30.17	16	2 p. m.	29.21
Davidson College . . . . .	29.27	8	7 a. m.	29.78	28	2 p. m.	28.73
Murfreesborough . . . . .	29.47	8	7 a. m.	29.98	16	2 p. m.	28.95
South Carolina . . . . .							
All Saints . . . . .	30.08	8	2 p. m.	30.48	28	2 p. m.	29.48
Charleston, [Dawson] . . . . .				30.62			29.70
Charleston, [Johnson] . . . . .	30.15	8	9 p. m.	30.55	28	2 p. m.	29.60
Georgia . . . . .							
Athens . . . . .	29.35	8	2 p. m.	29.74	27	2 p. m.	28.89
Hillsborough . . . . .	29.49	8	9 p. m.	29.88	28	2 p. m.	29.03
Savannah . . . . .	30.14	8	9 p. m.	30.51	28	2 p. m.	29.60
Florida . . . . .							
Atsena . . . . .	29.87	8	2 p. m.	30.08	28	9 p. m.	29.59
Jacksonville . . . . .	30.17	8	9 p. m.	30.46	28	2 p. m.	29.71
St. Augustine . . . . .	30.17	24	9 p. m.	<i>d</i> 30.40	28	2 p. m.	28.64
Salt Ponds (a) . . . . .	29.74	8	2 p. m.	<i>e</i> 29.88	23	7 a. m.	29.60
Warrington . . . . .	30.14	8	7 a. m.	30.35	16	9 p. m.	29.79
Alabama . . . . .							
Auburn . . . . .	29.44	8	9 p. m.	29.75	15	2 p. m.	<i>f</i> 29.09
Greensborough . . . . .	29.71	8	7 a. m.	30.00	15	9 p. m.	29.29
Texas . . . . .							
Goliad . . . . .	30.06	2	9 p. m.	30.35	24	2 p. m.	29.79
Washington . . . . .	29.70	8	7 a. m.	29.99	14	9 p. m.	29.40
Tennessee . . . . .							
Glenwood . . . . .	29.63	7	9 p. m.	30.00	10	9 p. m.	29.16
Memphis . . . . .	29.81	7	9 p. m.	30.17	10	2 p. m.	29.32
Kentucky . . . . .							
Bardstown (g) . . . . .	30.04	7	9 p. m.	30.52	5	2 p. m.	29.49
Paris . . . . .	29.33	8	7 a. m.	29.70	5	2 p. m.	28.76
Springdale . . . . .	29.49	8	7 a. m.	29.95	5	2 p. m.	28.99
Ohio . . . . .							
Bowling Green . . . . .	29.28	1	Sunrise	<i>h</i> 29.86	11	Sunrise	28.58
Cincinnati, [Harper] . . . . .	29.57	8	7 a. m.	30.01	11	7 a. m.	29.10
Cincinnati, [Hurt] . . . . .	29.35	8	7 a. m.	29.91	11	7 a. m.	28.76
Cleveland (g) . . . . .	29.05	8	7 a. m.	<i>i</i> 29.60	11	7 a. m.	<i>j</i> 28.53
Hillsborough . . . . .	28.87	8	7 a. m.	29.37	11	7 a. m.	28.37
Medina . . . . .	28.84	8	7 a. m.	29.46	11	7 a. m.	<i>j</i> 28.36
New Lisbon (a) . . . . .	28.69	8	7 a. m.	<i>k</i> 29.20	11	7 a. m.	<i>j</i> 28.20
Northwood . . . . .	28.87	8	7 a. m.	29.40	11	7 a. m.	28.26
Ripley . . . . .	29.47	8	7 a. m.	29.98	11	7 a. m.	28.98
Savannah . . . . .	28.91	8	7 a. m.	29.48	11	7 a. m.	28.35

*a* Not corrected for temperature.*b* Same height at 2 p. m. on the 28th.*c* Same height at 2 p. m. on the 16th.*d* Same height at 7 a. m. on the 25th.*e* Same height at 2 p. m. on the 26th.*f* Same height at 9 p. m. on the 15th.*g* Aneroid.*h* Same height at sunrise on the 8th.*i* Same height at 2 p. m. on the 8th.*j* Same height at 2 p. m. on the 11th.*k* Same height at 2 p. m. and 9 p. m. on the 8th.



## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio	Urbana	28.93	8	7 a. m.	29.45	11	7 a. m.	28.40
	Westerville	28.93	8	7 a. m.	29.44	11	7 a. m.	28.38
Michigan	Battle Creek	29.15	8	7 a. m.	29.69	11	7 a. m.	28.43
	Marquette	29.33	7	2 p. m.	<sup>a</sup> 29.90	12	7 a. m.	28.56
	New Buffalo	29.31	8	9 p. m.	29.89	11	7 a. m.	28.63
Indiana	Evansville	28.88	7	9 p. m.	29.35	5	2 p. m.	28.44
	Madison	29.54	7	9 p. m.	30.04	11	7 a. m.	29.01
	Michigan City	29.27	7	9 p. m.	29.81	11	7 a. m.	28.59
	New Harmony	29.72	7	9 p. m.	30.23	10	9 p. m.	29.11
	Richmond	29.02	8	7 a. m.	29.54	11	7 a. m.	28.43
Illinois	Athens	29.44	7	9 p. m.	29.98	10	9 p. m.	28.68
	Batavia ( <i>b</i> )	28.95	7	2 p. m.	29.60	10	2 p. m.	28.40
	Manchester	28.85	7	7 a. m.	29.38	10	1 p. m.	28.38
	West Urbana	29.27	7	9 p. m.	29.81	10	9 p. m.	28.61
	Wheaton	29.25	7	9 p. m.	29.86	10	9 p. m.	28.50
Missouri	Cape Girardeau	29.43	7	9 p. m.	30.16	10	9 p. m.	29.11
	St. Joseph's	29.09	7	9 a. m.	29.71	10	3 p. m.	28.41
	St. Louis	29.60	7	9 p. m.	30.11	10	9 p. m.	28.87
	Springfield	28.70	7	Sunrise	29.09	10	3 p. m.	28.01
Wisconsin	Appleton	28.99	7	9 p. m.	29.56	11	7 a. m.	28.20
	Beloit	29.18	7	9 p. m.	29.79	10	9 p. m.	28.39
	Kenosha	29.44	8	7 a. m.	29.96	11	7 a. m.	28.70
	Madison, [Sterling]	29.02	7	9 p. m.	29.61	10	9 p. m.	28.25
	Manitowoc ( <i>b</i> )	29.73	7	9 p. m.	30.38	11	7 a. m.	28.92
	Milwaukee, [Winkler]	29.26	7	9 p. m.	29.84	11	7 a. m.	28.46
	Racine ( <i>b</i> )	29.22	7	9 p. m.	29.83	10	9 p. m.	<sup>c</sup> 28.56
	St. Croix	29.13	7	7 a. m.	29.84	11	7 a. m.	28.61
	Waukesha	29.12	7	9 p. m.	29.77	11	7 a. m.	28.35
Iowa	Dubuque	29.35	7	9 p. m.	30.00	10	9 p. m.	28.49
	Fairfield	29.20	7	9 p. m.	29.77	10	9 p. m.	28.37
	Muscatine	29.50	8	7 a. m.	30.17	13	9 p. m.	29.09
Minnesota	Wabashaw	29.23	8	7 a. m.	29.84	11	9 p. m.	28.56
Kansas	Lawrence	29.12	7	7 a. m.	29.69	10	2 p. m.	28.36
	Leavenworth City	28.72	7	7 a. m.	29.17	10	2 p. m.	28.23
Mexico	Cordova	27.14	8	9 a. m.	27.31	13	12 m.	26.93
	Mirador	22.83	8	7 a. m.	22.97	31	2 p. m.	22.64
	Vera Cruz	30.01	21	9 a. m.	30.18	14	3 p. m.	29.81
California	Sacramento	30.12	2	2 p. m.	30.41	22	2 p. m.	29.51
	San Francisco	30.07	2	7 a. m.	30.38	22	2 p. m.	29.44
West Indies	Centre Signal Station, Bermuda ( <i>d</i> )	29.93	9	Noon.	30.42	29	Noon.	29.35
	Nassau, Bahamas ( <i>e</i> )	30.15	1	-----	<sup>f</sup> 30.29	28	-----	29.98
	St. George's, Bermuda	30.05	9	9½ a. m.	30.42	29	9½ a. m.	29.25
Central America	Guatemala	25.25	-----	-----	25.38	-----	-----	25.13
South America	Catharina Sophia, Surinam ( <i>g</i> )	29.65	30	2 p. m.	<sup>h</sup> 29.85	12	2 p. m.	<sup>i</sup> 29.57
	Catharina Sophia, Surinam	29.89	20	6 a. m.	29.96	11	2 p. m.	29.81

<sup>a</sup> Same height at 9 p. m. on the 7th.<sup>b</sup> Not corrected for temperature.<sup>c</sup> Same height at 7 a. m. on the 11th.<sup>d</sup> For 17 days only.<sup>e</sup> Mean obtained from daily maximum and minimum.<sup>f</sup> Same height on the 11th.<sup>g</sup> Aneroid.<sup>h</sup> Same height at 6 p. m. on the 30th.<sup>i</sup> Same height at 6 p. m. on the 11th and 12th.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America							
Hamilton	29.61	17	9 a. m.	29.98	10	9 p. m.	28.94
Montreal	29.95	13	7 a. m.	30.40	10	7 a. m.	29.28
Rigolet (a)	29.46	2	Sunset.	30.00	12	Sunrise.	28.60
St. John's	29.22	25	7 a. m.	29.73	3	2 p. m.	28.82
St. Martin	29.83	13	7 a. m.	30.33	10	7 a. m.	29.20
Toronto	29.66	23	2 p. m.	30.06	9	10 p. m.	28.99
Windsor	29.75	1	9 p. m.	30.37	10	2 p. m.	29.12
Wolfville	29.77	2	7 a. m.	30.43	10	9 p. m.	29.20
Maine							
Gardiner	29.75	1	9 p. m.	30.19	10	2 p. m.	29.14
Portland	29.86	1	2 p. m.	30.38	10	2 p. m.	29.22
Steuben	29.81	1	9 p. m.	30.34	10	2 p. m.	29.16
New Hampshire							
Concord	29.54	23	9 p. m.	29.99	10	7 a. m.	28.90
Shelburne	29.67	1	9 p. m.	<i>b</i> 30.06	10	2 p. m.	29.05
Vermont							
Burlington	29.61	23	9 p. m.	30.03	10	2 p. m.	28.82
Norwich (c)	29.66	13	7 a. m.	29.96	10	7 a. m.	29.02
St. Johnsbury	29.30	23	9 p. m.	29.75	10	7 a. m.	28.66
Massachusetts							
Amherst	29.73	24	7 a. m.	30.14	10	2 p. m.	29.12
Bridgewater	29.77	24	7 a. m.	30.20	10	7 a. m.	29.12
Cambridge	29.92	24	7 a. m.	30.35	10	7 a. m.	29.26
Lawrence	29.83	23	9 p. m.	30.26	10	7 a. m.	29.21
Nantucket	29.95	24	7 a. m.	30.35	10	7 a. m.	29.39
New Bedford	29.88	23	9 p. m.	<i>b</i> 30.30	10	7 a. m.	29.25
Newburyport	29.97	1	9 p. m.	30.60	2	2 p. m.	29.41
Westfield	29.87	23	9 p. m.	30.28	10	7 a. m.	<i>d</i> 29.28
Williamstown	29.21	23	9 p. m.	29.62	10	7 a. m.	28.68
Worcester	29.40	24	7 a. m.	29.78	2	2 p. m.	28.83
Rhode Island							
Providence	29.77	23	10 p. m.	30.31	10	Sunrise.	29.12
Connecticut							
New London	29.91	18	7 a. m.	30.39	10	7 a. m.	29.27
Norwich	29.90	23	9 p. m.	30.25	10	7 a. m.	29.25
Pomfret	29.32	23	9 p. m.	29.73	10	7 a. m.	28.70
Wallingford	29.87	23	9 p. m.	30.31	10	7 a. m.	29.24
New York							
Bellport	29.31	23	9 p. m.	29.64	10	2 p. m.	28.75
Buffalo	29.33	23	2 p. m.	29.76	9	9 p. m.	28.65
Canton	29.41	23	9 p. m.	29.82	9	9 p. m.	28.76
Cazenovia	28.52	23	9 p. m.	28.91	9	9 p. m.	27.96
Fishkill (a)	30.11	23	9 p. m.	30.59	10	2 p. m.	29.60
Flatbush	29.92	23	9 p. m.	30.36	10	7 a. m.	29.26
Fort Edward	29.82	23	2 p. m.	<i>e</i> 30.23	20	7 a. m.	<i>f</i> 29.23
New York city	29.98	23	9 p. m.	30.44	10	7 a. m.	29.38
Rochester	29.46	23	2 p. m.	29.86	9	9 p. m.	28.77
Sag Harbor	29.70	23	9 p. m.	30.15	10	7 a. m.	29.11
Waterford	29.96	24	7 a. m.	30.39	10	7 a. m.	29.40
New Jersey							
Bloomfield	29.96	23	9 p. m.	30.38	10	7 a. m.	29.40
Burlington	29.96	23	9 p. m.	30.31	10	7 a. m.	29.43
Lambertville	29.72	23	9 p. m.	30.36	10	7 a. m.	29.42
Newark	29.97	23	9 p. m.	30.35	10	7 a. m.	29.39
Pennsylvania							
Bedford	29.03	23	2 p. m.	<i>e</i> 29.33	2	2 p. m.	28.62
Berwick (a)	29.24	23	2 p. m.	29.58	9	9 p. m.	28.66
Cannonsburg	28.80	23	2 p. m.	<i>e</i> 29.11	9	9 p. m.	28.24
Chromedale	29.87	23	9 p. m.	30.29	7	7 a. m.	<i>g</i> 29.36
Easton	29.50	23	9 p. m.	29.88	10	7 a. m.	28.98
Gettysburg	29.48	13	2 p. m.	<i>e</i> 29.85	2	7 a. m.	<i>h</i> 29.00
Harrisburg, [Heisely]	29.77	23	9 p. m.	30.15	10	9 p. m.	29.23
Harrisburg, [Hickok]	29.72	23	9 p. m.	30.12	9	9 p. m.	29.18
Lewisburg	29.56	23	9 p. m.	29.93	9	9 p. m.	28.99
Morrisville	30.10	23	9 p. m.	<i>b</i> 30.49	10	7 a. m.	29.56
Mount Joy (a)	29.67	23	9 p. m.	30.04	28	9 p. m.	29.16
Murrysville	28.82	23	2 p. m.	29.15	9	9 p. m.	28.30

\* For hours of observation, &amp;c., see thermometer tables.

*a* Not corrected for temperature.*b* Same height at 7 a. m. on the 24th.*c* Incomplete.*d* Same height at 2 p. m. on the 10th.*e* Same height at 9 p. m. on the 23d.*f* Same height at 2 p. m. on the 2d.*g* Same height at 7 a. m. on the 10th.*h* Same height at 9 p. m. on the 28th.



## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania	Norristown	29.94	23	9 p. m.	30.34	9	9 p. m.	29.40
	Philadelphia	29.87	23	9 p. m.	30.25	10	7 a. m.	29.40
	Pittsburg, [Marine Hospital]	28.93	15	9 p. m.	29.31	9	9 p. m.	28.36
	Pittsburg, [Oakland Station] (a)	28.81	23	2 p. m.	29.15	9	9 p. m.	28.35
	Reading	29.66	23	9 p. m.	30.04	5	9 p. m.	28.89
	Somerset	27.58	23	9 p. m.	b 27.85	9	9 p. m.	27.14
	Westtown	29.43	23	9 p. m.	29.81	9	9 p. m.	28.94
Delaware	Milford	29.69	23	9 p. m.	30.07	10	7 a. m.	29.24
	Newark	29.86	23	9 p. m.	30.25	9	9 p. m.	29.34
Maryland	Annapolis	30.04	23	9 p. m.	30.43	10	7 a. m.	29.59
	Baltimore	29.88	23	9 p. m.	30.30	9	9 p. m.	29.39
	Chestertown	29.99	23	9 p. m.	30.39	1	9 p. m.	c 29.52
	Frederick	29.75	23	9 p. m.	30.08	9	9 p. m.	29.23
	Oakland	27.54	11	7 a. m.	27.92	2	7 a. m.	27.13
Dist. of Columbia	Washington	30.03	23	9 p. m.	30.43	9	9 p. m.	29.18
Virginia	Alexandria	30.01	23	9 p. m.	30.41	9	9 p. m.	29.56
	Portsmouth	30.03	21	9 p. m.	30.44	10	7 a. m.	29.55
	Rose Hill	29.97	23	9 p. m.	30.37	10	2 p. m.	d 29.46
	Ruthven	29.73	23	9 p. m.	30.06	10	7 a. m.	29.27
North Carolina	Ashville	27.68	15	7 a. m.	27.96	1	2 p. m.	27.33
	Chapel Hill	29.66	23	9 p. m.	29.89	10	7 a. m.	29.18
	Davidson College	29.15	23	9 p. m.	29.44	10	7 a. m.	28.74
	Murfreesborough	29.43	23	9 p. m.	29.76	10	2 p. m.	29.03
South Carolina	All Saints	29.97	16	7 a. m.	30.24	1	2 p. m.	29.58
	Charleston, [Johnson]	30.06	6	7 a. m.	e 30.34	1	2 p. m.	29.68
	Charleston, [Dawson]				30.38			29.78
	St John's (f)	30.03	6	2 p. m.	30.40	1	9 p. m.	g 29.80
Georgia	Athens	29.26	16	7 a. m.	29.53	1	2 p. m.	28.86
	Hillsborough	29.40	16	7 a. m.	29.65	1	7 a. m.	29.01
	Savannah	30.04	3	7 a. m.	30.30	1	2 p. m.	29.62
Florida	Atsena	29.77	5	2 p. m.	e 29.95	1	7 a. m.	29.51
	Jacksonville	30.12	16	2 p. m.	30.42	1	2 p. m.	29.76
	St. Augustine	30.07	16	7 a. m.	e 30.29	1	2 p. m.	29.75
	Salt Ponds (a)	29.69	5	2 p. m.	29.80	1	7 a. m.	29.52
Alabama	Greensborough	29.65	16	7 a. m.	h 29.89	1	7 a. m.	29.20
Mississippi	Columbus	29.85	7	9 p. m.	30.14	1	7 a. m.	29.38
	Paulding	29.70	16	7 a. m.	29.93	1	7 a. m.	29.19
Texas	Goliad	30.04	16	7 a. m.	30.31	12	2 p. m.	i 29.63
	Washington	29.71	16	7 a. m.	29.98	12	2 p. m.	29.32
Tennessee	Glenwood	29.58	15	7 a. m.	29.88	1	2 p. m.	29.01
	Memphis	29.79	15	7 a. m.	30.04	1	7 a. m.	29.31
Kentucky	Bardstown (f)	29.99	15	2 p. m.	30.37	1	2 p. m.	29.40
	Millersburg	29.24	15	9 p. m.	29.53	28	2 p. m.	28.83
	Paris	29.16	15	2 p. m.	j 29.50	1	2 p. m.	28.66
Ohio	Springdale	29.44	15	2 p. m.	29.78	1	9 p. m.	28.89
	Bowling Green	29.23	17	Sunrise.	29.62	9	2 p. m.	28.60
	Cincinnati, [Harper]	29.54	15	9 p. m.	29.80	1	9 p. m.	28.98
	Cincinnati, [Hurt]	29.38	23	7 a. m.	29.81	2	2 p. m.	28.87
	Cleveland (f)	29.01	17	7 a. m.	29.34	2	7 a. m.	28.53
	Hillsborough	28.81	15	9 p. m.	29.15	1	9 p. m.	28.30
	Medina	28.78	17	7 a. m.	29.11	1	9 p. m.	28.21
	New Lisbon (a)	28.58	23	2 p. m.	28.94	2	2 p. m.	l 28.10
	Northwood	28.79	15	2 p. m.	b 29.13	1	9 p. m.	28.24
	Ripley	29.40	15	7 a. m.	m 29.72	1	9 p. m.	28.86
	Savannah	28.85	17	7 a. m.	29.22	2	7 a. m.	28.31
	Urbana	28.88	15	2 p. m.	29.21	1	9 p. m.	28.40
	Westerville	28.87	17	7 a. m.	b 29.21	1	9 p. m.	28.36

a Not corrected for temperature.

b Same height at 2 p. m. on the 23d.

c Same height at 9 p. m. on the 9th, at 7 a. m. on the 10th, and at 9 p. m. on the 28th.

d Same height at 9 p. m. on the 19th.

e Same height at 9 p. m. on the 15th.

f Aneroid.

g Same height at 7 a. m. on the 2d.

h Same height at 9 p. m. on the 16th.

i Same height at 9 p. m. on the 12th.

j Same height at 2 p. m. on the 15th.

k Same height at 2 p. m. on the 9th.

l Same height at 9 p. m. on the 9th.

m Same height at 7 a. m. on the 23d.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Michigan .....	29.13	17	7 a. m.	29.50	1	9 p. m.	a 28.64
Marquette .....	29.37	17	7 a. m.	29.88	24	2 p. m.	28.75
New Buffalo .....	29.30	17	7 a. m.	b 29.64	2	7 a. m.	c 28.86
Indiana .....	28.86	16	7 a. m.	29.21	27	2 p. m.	28.30
Madison .....	29.50	15	7 a. m.	d 29.82	1	9 p. m.	28.95
Michigan City .....	29.28	15	9 p. m.	29.61	9	2 p. m.	28.84
New Harmony .....	29.71	15	9 p. m.	30.02	1	2 p. m.	29.12
Richmond .....	28.98	15	2 p. m.	29.31	1	9 p. m.	28.40
Illinois .....	29.46	15	7 a. m.	29.84	1	2 p. m.	29.00
Athens .....	28.99	15	2 p. m.	29.40	13	2 p. m.	28.35
Batavia (e) .....	28.89	15	7 a. m.	29.33	13	1 p. m.	28.43
Manchester .....	29.26	15	7 a. m.	29.60	13	2 p. m.	28.80
Wheaton .....	29.27	15	2 p. m.	29.62	1	9 p. m.	28.83
Missouri .....	29.61	15	7 a. m.	30.00	13	7 a. m.	29.11
Springfield .....	28.68	15	Sunrise.	f 28.97	27	3 p. m.	28.27
Wisconsin .....	29.03	17	7 a. m.	29.47	27	7 a. m.	28.57
Appleton .....	29.23	15	7 a. m.	g 29.56	13	2 p. m.	28.86
Beloit .....	29.46	14	2 p. m.	29.88	8	7 a. m.	29.10
Kenosha .....	29.04	17	7 a. m.	29.42	7	7 a. m.	28.17
Madison, [Sterling] .....	29.77	17	7 a. m.	30.21	26	9 p. m.	29.30
Manitowoc (e) .....	29.28	17	7 a. m.	29.65	2	2 p. m.	h 28.87
Milwaukee, [Winkler] .....	29.23	15	2 p. m.	29.62	9	7 a. m.	28.76
Racine (e) .....	29.18?	15	7 a. m.	29.64	26	2 p. m.	28.69
St. Croix .....	29.42	16	7 a. m.	29.77	16	9 p. m.	28.94
Iowa .....	29.19	15	7 a. m.	29.73	13	7 a. m.	28.82
Dubuque .....	29.58	15	7 a. m.	i 29.93	26	9 p. m.	29.19
Fairfield .....	29.28?	13	2 p. m.	29.72	26	2 p. m.	28.64
Minnesota .....	29.17	15	7 a. m.	29.61	26	2 p. m.	28.66
Kansas .....	28.75	22	7 a. m.	29.06	1	2 p. m.	j 28.51
Lawrence .....	27.13	26	9 a. m.	27.38	12	3 p. m.	26.84
Leavenworth City, [McCarty] .....	22.83	26	7 a. m.	23.03	12	2 p. m.	22.56
Mexico .....	30.01	26	10 a. m.	30.26	12	3 p. m.	29.63
Cordova .....	30.08	4	7 a. m.	30.30	11	9 p. m.	29.81
Mirador .....	29.99	21	7 a. m.	30.22	16	9 p. m.	29.61
California .....	29.97	1	Noon	30.22	17	Noon	29.70
West Indies .....	30.09	3	-----	30.23	23	-----	29.98
Centre Signal Station, Bermuda (k) ..	29.89	23	3½ a. m.	30.30	26	3½ a. m.	29.47
Nassau, Bahamas (l) .....	25.25	-----	-----	25.39	-----	-----	25.13
St. George's, Bermuda .....	29.86	11	6 p. m.	29.96	28	6 p. m.	29.78
Central America .....	29.89	5	6 a. m.	29.99	17	6 p. m.	29.76
South America .....							
Catharina Sophia, Surinam .....							
Catharina Sophia, Surinam .....							

a Same height at 2 p. m. on the 9th.

b Same height at 9 p. m. on the 15th.

c Same height at 9 p. m. on the 1st.

d Same height at 2 p. m. on the 15th and at 2 p. m. on the 23d.

e Not corrected for temperature.

f Same height at 3 p. m. on the 22d.

g Same height at 2 p. m. on the 15th.

h Same height at 9 p. m. on the 26th.

i Same height at 2 and 9 p. m. on the 15th.

j Same height at 9 p. m. on the 12th.

k For the first 21 days only.

l Mean obtained from daily maximum and minimum.

m Aneroid.



## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.60	13	9 a. m.	30.10	21	9 a. m.	28.90
Montreal .....	29.84	19	9 p. m.	30.46	21	2 p. m.	29.12
Rigolet (a) .....	29.68	4	Sunset.	30.28	10	Sunrise.	28.60
St. John's .....	29.28	4	7 a. m.	29.82	26	9 p. m.	28.46
St. Martin .....	29.73	13	2 p. m.	30.27	21	2 p. m.	29.02
Toronto .....	29.62	13	6 a. m.	30.15	21	6 a. m.	28.92
Windsor .....	29.62	14	7 a. m.	30.38	9	2 p. m.	28.61
Wolfville .....	29.73	31	9 p. m.	30.36	9	2 p. m.	28.85
Maine .....	29.62	13	9 p. m.	30.21	9	2 p. m.	28.88
Gardiner .....	29.74	13	9 p. m.	30.37	9	7 a. m.	28.99
Portland .....	29.69	30	9 p. m.	30.35	9	2 p. m.	28.58
Steuben .....	29.39	13	2 p. m.	29.82	9	7 a. m.	29.00
New Hampshire .. Concord .....	29.38	20	7 a. m.	29.96	9	2 p. m.	28.83
Concord, [Sawyer] .....	29.58	13	9 p. m.	30.12	9	2 p. m.	28.97
Shelburne .....	29.52	13	7 a. m.	30.14	21	2 p. m.	28.88
Vermont .....	29.57	13	2 p. m.	30.08	18	7 a. m.	29.18
Burlington .....	29.23	13	9 p. m.	29.82	9	2 p. m.	28.56
Norwich (b) .....	29.64	13	9 p. m.	30.21	9	7 a. m.	28.96
St. Johnsbury .....	29.65	13	7 p. m.	30.26	9	7 a. m.	28.96
Massachusetts .. Amherst .....	29.80	13	9 p. m.	c 30.43	9	7 a. m.	29.08
Bridgewater .....	29.73	13	9 p. m.	30.36	9	7 a. m.	29.00
Cambridge .....	29.84	13	9 p. m.	30.44	9	7 a. m.	29.07
Lawrence .....	29.77	13	9 p. m.	30.39	9	7 a. m.	29.02
Nantucket .....	29.82	13	9 p. m.	30.45	9	7 a. m.	29.08
New Bedford .....	29.77	13	2 p. m.	30.33	9	7 a. m.	d 29.16
Newburyport .....	29.13	13	9 p. m.	29.69	9	2 p. m.	28.49
Westfield .....	29.32	13	9 p. m.	30.22	9	7 a. m.	28.62
Williamstown .....	29.72	13	10 p. m.	30.34	9	Sunrise.	28.97
Worcester .....	29.24	13	9 p. m.	29.80	9	7 a. m.	28.52
Rhode Island .. Providence .....	29.78	13	9 p. m.	30.36	9	7 a. m.	29.10
Connecticut .....	29.24	13	9 p. m.	29.77	8	9 p. m.	e 28.73
Pomfret .....	29.31	13	8 a. m.	29.85	21	8 a. m.	28.65
Wallingford .....	29.34	14	7 a. m.	f 29.91	12	7 a. m.	28.77
New York .....	28.49	13	2 p. m.	29.00	9	7 a. m.	g 29.74
Bellport .....	30.07	13	2 p. m.	h 30.65	9	7 a. m.	d 29.45
Buffalo .....	29.83	13	9 p. m.	30.39	9	7 a. m.	29.24
Canton .....	29.70	14	2 p. m.	30.28	9	2 p. m.	29.06
Cazenovia .....	29.89	13	2 p. m.	30.44	9	7 a. m.	29.08
Fishkill (a) .....	29.40	13	7 a. m.	29.90	21	7 a. m.	g 28.81
Flatbush .....	29.63	13	9 p. m.	30.25	9	7 a. m.	28.95
Fort Edward .....	29.85	13	2 p. m.	30.40	9	2 p. m.	29.26
New York city .....	29.84	13	9 p. m.	30.39	9	2 p. m.	29.27
Rochester .....	29.92	13	9 p. m.	30.41	9	7 a. m.	d 29.36
Sag Harbor .....	29.96	13	6 p. m.	30.48	21	6 p. m.	29.34
Waterford .....	29.00	13	7 a. m.	29.61	9	2 p. m.	i 28.56
Bloomfield .....	29.23	13	7 a. m.	29.75	9	2 p. m.	28.58
Lambertville .....	29.88	13	2 p. m.	30.13	9	7 a. m.	29.31
Newark .....	28.80	20	2 p. m.	29.22	10	2 p. m.	28.36
Pennsylvania .. Bedford .....	29.80	13	2 p. m.	30.31	21	9 p. m.	29.13
Berwick (a) .....	29.42	13	2 p. m.	29.92	9	7 a. m.	28.89
Byberry .....	29.43	13	7 a. m.	29.89	21	2 p. m.	28.82
Cannonsburg .....	29.71	13	2 p. m.	30.20	21	2 p. m.	29.21
Chromedale .....	29.66	13	7 a. m.	30.15	21	2 p. m.	29.05
Easton .....	28.64	13	7 a. m.	29.05	9	7 a. m.	28.17
Gettysburg .....	29.49	13	7 a. m.	29.99	21	2 p. m.	28.84
Harrisburg, [Heisely] .....	30.01	13	2 p. m.	j 30.52	21	2 p. m.	29.46
Harrisburg, [Hickok] .....	29.60	13	2 p. m.	30.04	9	7 a. m.	29.04
Indiana (a) .....							
Lewisburg .....							
Morrisville .....							
Mount Joy (a) .....							

\* For hours of observation, &amp;c., see thermometer tables.

a Not corrected for temperature.

b Incomplete.

c Same height at 7 a. m. on the 18th.

d Same height at 2 p. m. on the 9th.

e Same height at 7 a. m. and 2 p. m. on the 10th.

f Same height at 2 p. m. on the 14th.

g Same height at 2 p. m. on the 21st.

h Same height at 9 p. m. on the 13th.

i Same height at 9 p. m. on the 6th.

j Same height at 2 p. m. on the 13th.

## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania . . . . .							
Murrysville . . . . .	28.81	13	7 a. m.	29.26	21	7 a. m.	28.32
Norristown . . . . .	29.85	13	2 p. m.	30.38	9	7 a. m.	29.29
Philadelphia . . . . .	29.81	13	2 p. m.	30.27	21	2 p. m.	29.31
Pittsburg, [Marine Hospital] . . . . .	28.91	13	2 p. m.	29.36	21	7 a. m.	28.42
Pittsburg, [Oakland Observatory] (a) . . . . .	28.86	13	7 a. m.	<i>b</i> 29.28	9	7 a. m.	28.35
Reading . . . . .	29.58	13	2 p. m.	30.07	21	2 p. m.	29.07
Somerset . . . . .	27.59	13	2 p. m.	27.98	5	2 p. m.	27.12
Westtown . . . . .	29.36	13	2 p. m.	29.88	21	2 p. m.	28.75
Delaware . . . . .							
Milford . . . . .	29.66	13	2 p. m.	30.16	8	2 p. m.	29.11
Maryland . . . . .							
Annapolis . . . . .	29.99	13	2 p. m.	30.45	21	2 p. m.	29.45
Baltimore . . . . .	29.78	13	9 p. m.	30.48	21	2 p. m.	29.25
Chestertown . . . . .	29.94	13	9 p. m.	30.53	21	2 p. m.	29.37
Frederick . . . . .	29.69	13	7 a. m.	30.19	21	2 p. m.	29.08
Oakland . . . . .	29.50	13	7 a. m.	27.89	9	7 a. m.	26.99
Dist. of Columbia . . . . .							
Washington . . . . .	29.97	13	2 p. m.	30.45	21	2 p. m.	29.40
Virginia . . . . .							
Alexandria . . . . .	29.97	13	7 a. m.	30.41	21	2 p. m.	29.44
Portsmouth . . . . .	30.01	13	9 p. m.	30.48	8	2 p. m.	29.31
Rose Hill . . . . .	29.89	13	7 a. m.	30.44	8	2 p. m.	29.36
Ruthven . . . . .	29.66	13	7 a. m.	<i>b</i> 30.13	8	2 p. m.	29.09
North Carolina . . . . .							
Asheville . . . . .	27.73	13	9 a. m.	28.15	8	2 p. m.	27.10
Chapel Hill . . . . .	29.56	13	7 a. m.	30.07	8	2 p. m.	28.93
Davidson College . . . . .	29.16	13	7 a. m.	29.63	8	7 a. m.	28.51
Murfreesborough . . . . .	29.36	13	7 a. m.	29.79	8	2 p. m.	28.95
South Carolina . . . . .							
All Saints . . . . .	29.99	13	2 p. m.	30.45	8	7 a. m.	29.20
Charleston, [Dawson] . . . . .				30.59			29.47
Charleston, [Johnson] . . . . .	30.10	13	7 a. m.	30.53	8	2 p. m.	29.40
St. John's (c) . . . . .	30.18	13	2 p. m.	30.65	1	2 p. m.	29.75
Georgia . . . . .							
Athens . . . . .	29.29	13	7 a. m.	29.71	8	7 a. m.	28.60
Hillsborough . . . . .	29.44	13	7 a. m.	29.81	1	7 a. m.	29.19
Savannah . . . . .	30.05	13	7 a. m.	30.46	8	7 a. m.	<i>d</i> 29.36
Sparta . . . . .	29.30	13	7 a. m.	29.70	8	7 a. m.	28.59
Florida . . . . .							
Atsena . . . . .	29.82	14	7 a. m.	<i>e</i> 30.10	8	7 a. m.	<i>d</i> 29.30
Jacksonville . . . . .	30.11	13	9 p. m.	30.45	8	2 p. m.	29.45
St. Augustine . . . . .	30.10	15	7 a. m.	<i>f</i> 30.45	7	9 p. m.	29.43
Salt Ponds (a) . . . . .	29.73	3	2 p. m.	29.96	8	7 a. m.	29.39
Alabama . . . . .							
Greensborough . . . . .	29.63	4	7 a. m.	29.94	25	7 a. m.	29.02
Mississippi . . . . .							
Columbus . . . . .	29.82	4	7 a. m.	30.16	7	9 p. m.	29.34
Paulding . . . . .	29.70	2	7 a. m.	30.03	7	9 p. m.	29.18
Texas . . . . .							
Goliad . . . . .	29.94	1	9 p. m.	30.37	29	9 p. m.	29.59
Tennessee . . . . .							
Glenwood . . . . .	29.56	4	9 p. m.	29.92	7	9 p. m.	29.15
Memphis . . . . .	29.77	3	7 a. m.	30.09	7	2 p. m.	29.33
Kentucky . . . . .							
Bardstown (c) . . . . .	30.00	12	9 p. m.	30.40	8	7 a. m.	29.61
Millersburg . . . . .	29.19	5	7 a. m.	<i>g</i> 29.49	28	9 p. m.	28.69
Paris . . . . .	29.18	13	7 a. m.	29.55	17	2 p. m.	28.74
Springdale . . . . .	29.43	4	7 a. m.	29.79	17	2 p. m.	29.04
Ohio . . . . .							
Bowling Green . . . . .	29.22	13	7 a. m.	<i>h</i> 29.64	17	2 p. m.	28.69
Cincinnati, [Harper] . . . . .	29.53	13	7 a. m.	29.82	17	2 p. m.	28.95
Cincinnati, [Hurt] . . . . .	29.26	5	7 a. m.	29.81	17	2 p. m.	28.55
Cleveland (c) . . . . .	29.01	13	7 a. m.	29.44	21	7 a. m.	28.53
Hillsborough . . . . .	28.82	13	7 a. m.	29.23	17	2 p. m.	28.47
Medina . . . . .	28.77	14	7 a. m.	29.23	21	7 a. m.	28.28
New Lisbon (a) . . . . .	28.59	13	7 a. m.	29.03	21	7 a. m.	28.15
Northwood . . . . .	28.82	12	9 p. m.	29.18	17	2 p. m.	28.29
Ripley . . . . .	29.42	13	7 a. m.	29.81	10	9 p. m.	29.05
Savannah . . . . .	28.86	12	9 p. m.	<i>i</i> 29.30	17	2 p. m.	28.36
Urbana . . . . .	28.87	13	7 a. m.	29.31	17	2 p. m.	28.40
Westerville . . . . .	28.87	13	7 a. m.	29.29	17	2 p. m.	28.43
Michigan . . . . .							
Battle Creek . . . . .	29.11	6	7 a. m.	29.51	17	2 p. m.	28.54

*a* Not corrected for temperature.*b* Same height at 2 p. m. on the 13th.*c* Aneroid.*d* Same height at 2 p. m. on the 8th.*e* Same height at 9 p. m. on the 13th and 14th, and 7 a. m. on the 15th.*f* Same height at 9 p. m. on the 14th.*g* Same height at 9 p. m. on the 5th.*h* Same height at 7 a. m. on the 5th.*i* Same height at 7 a. m. on the 13th.



## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
Day.	Hour.	Day.	Hour.					
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Michigan	Marquette	29.32	5	7 a. m.	29.92	10	9 p. m.	<i>a</i> 28.63
	New Buffalo	29.29	5	7 a. m.	29.69	17	1 p. m.	28.65
Indiana	Evansville	28.87	4	7 a. m.	29.20	17	7 a. m.	28.43
	Madison	29.50	12	9 p. m.	29.89	17	2 p. m.	28.99
	Michigan City	29.26	5	7 a. m.	29.66	17	2 p. m.	28.66
	New Harmony	29.68	12	2 p. m.	<i>b</i> 30.09	17	7 a. m.	29.20
	Richmond ( <i>c</i> )	28.98	5	2 p. m.	29.35	8	2 p. m.	28.66
Illinois	Athens	29.40	12	7 a. m.	29.81	10	2 p. m.	28.88
	Batavia	29.12	29	9 p. m.	<i>d</i> 29.35	17	2 p. m.	28.63
	Manchester	28.83	13	7 a. m.	29.44	17	1 p. m.	28.34
	West Urbana	29.23	12	2 p. m.	29.69	17	2 p. m.	28.77
	Wheaton	29.22	5	7 a. m.	29.63	17	2 p. m.	28.59
Missouri	St. Louis	29.56	12	7 a. m.	29.96	10	2 p. m.	29.12
	Springfield	28.65	12	3 p. m.	29.21	16	9 p. m.	28.32
Wisconsin	Appleton	28.96	5	7 a. m.	29.46	17	2 p. m.	28.25
	Beloit	29.17	5	7 a. m.	29.56	17	2 p. m.	28.52
	Kenosha ( <i>e</i> )	29.46	5	7 a. m.	29.85	17	2 p. m.	28.82
	Madison, [Sterling]	28.96	5	7 a. m.	29.41	17	2 p. m.	28.30
	Manitowoc ( <i>f</i> )	29.72	5	7 a. m.	30.22	17	2 p. m.	29.03
	Milwaukee, [Winkler]	29.24	5	7 a. m.	29.69	17	2 p. m.	28.62
	Racine ( <i>f</i> )	29.15	12	9 p. m.	29.58	17	2 p. m.	28.52
	St. Croix	29.14?	5	7 a. m.	29.50	10	2 p. m.	28.50
	Waukesha	29.13	5	7 a. m.	29.49	17	2 p. m.	28.45
Iowa	Dubuque	29.31	5	7 a. m.	29.73	17	2 p. m.	28.67
	Fairfield	29.17	12	7 a. m.	29.61	17	7 a. m.	28.60
	Muscatine	29.62	12	7 a. m.	<i>g</i> 29.89	17	7 a. m.	28.94
Minnesota	Wabashaw	29.12	5	7 a. m.	29.53	11	2 p. m.	28.43
Kansas	Lawrence	29.05	12	7 a. m.	29.47	16	9 p. m.	28.59
	Leavenworth City	28.66	12	7 a. m.	28.99	16	9 p. m.	28.49
Mexico	Cordova	27.11	2	9 a. m.	27.42	6	3 p. m.	26.82
	Mirador	22.76	2	7 a. m.	23.07	6	2 p. m.	22.51
	Vera Cruz	29.97	2	10 a. m.	30.35	7	6 a. m.	29.68
California	Sacramento, [Logan]	30.02	30	7 a. m.	30.21	27	7 a. m.	29.68
	San Francisco	29.95	30	7 a. m.	30.14	27	7 a. m.	29.62
West Indies	Nassau, Bahamas ( <i>h</i> )	30.12	15		30.31	8		29.76
	St. George's, Bermuda	29.81	14	9½ a. m.	30.30	9	9½ a. m.	29.40
Central America	Guatemala	25.23			25.39			25.08
South America	Catharina Sophia, Surinam ( <i>i</i> )	29.82	10	2 p. m.	29.92	20	6 p. m.	<i>j</i> 29.74
	Catharina Sophia, Surinam	29.84	10	2 p. m.	29.93	20	6 p. m.	29.76

*a* Same height at 9 p. m. on the 20th and at 7 a. m. on the 21st.*b* Same height at 9 p. m. on the 12th.*c* Observations omitted from 11th to 23d, inclusive.*d* Same height at 7 a. m. on the 30th.*e* Incomplete.*f* Not corrected for temperature.*g* Same height at 2 p. m. on the 12th.*h* Mean obtained from daily maximum and minimum.*i* Aneroid.*j* Same height at 2 p. m. on the 22d.

## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.53	7	9 a. m.	29.98	14	9 a. m.	a 29.10
Montreal .....	29.84	19	7 a. m.	30.37	14	2 p. m.	29.28
Rigolet (b) .....	29.83	26	Sunset.	30.44	3	Sunrise	c 29.40
St. John's .....	29.38	26	7 a. m.	d 29.96	11	7 a. m.	e 28.94
St. Martin .....	29.76	19	6 a. m.	30.20	14	2 p. m.	29.26
Toronto .....	29.50	7	6 a. m.	30.00	30	6 a. m.	29.03
Windsor .....	29.79	2	7 a. m.	30.25	14	9 p. m.	29.30
Wolfville .....	29.83	1	2 p. m.	30.22	15	2 p. m.	29.37
Maine .....	29.72	19	7 a. m.	30.12	28	7 a. m.	29.20
Gardiner .....	29.80	1	9 p. m.	30.24	28	7 a. m.	29.13
Perry .....	29.83	19	7 a. m.	30.24	14	2 p. m.	f 29.34
Portland .....	29.81	1	9 p. m.	30.21	15	2 p. m.	29.21
Steuben .....	29.50	19	7 a. m.	29.92	14	2 p. m.	29.02
New Hampshire .. Concord .....	29.67	19	7 a. m.	30.06	14	9 p. m.	g 29.24
Shelburne .....	29.52	19	7 a. m.	29.91	14	2 p. m.	29.04
Vermont .....	29.61	1	7 a. m.	29.92	14	7 a. m.	29.15
Burlington .....	29.26	19	7 a. m.	29.71	14	2 p. m.	28.78
Norwich (h) .....	29.66	19	2 p. m.	30.09	14	2 p. m.	29.20
Massachusetts .. Amherst .....	29.68	19	7 a. m.	30.09	21	7 a. m.	29.21
Bridgewater .....	29.84	19	7 a. m.	30.27	21	7 a. m.	29.39
Cambridge .....	29.79	1	9 p. m.	30.17	21	7 a. m.	29.33
Lawrence .....	29.88	1	9 p. m.	30.25	21	7 a. m.	29.38
Nantucket .....	29.81	1	9 p. m.	i 30.18	21	7 a. m.	29.31
New Bedford .....	29.85	19	7 a. m.	30.30	15	2 p. m.	29.41
Newburyport .....	29.79	19	7 a. m.	30.17	14	2 p. m.	29.34
Westfield .....	29.17	26	9 p. m.	29.63	15	7 a. m.	28.70
Williamstown .....	29.35	1	9 p. m.	29.69	21	2 p. m.	28.92
Worcester .....	29.72	19	6 a. m.	30.19	21	6 a. m.	29.28
Rhode Island .. Providence .....	29.27	19	7 a. m.	29.67	14	7 a. m.	28.79
Connecticut .. Pomfret .....	29.79	19	7 a. m.	30.17	14	7 a. m.	29.30
Wallingford .....	29.21	8	7 a. m.	29.50	21	7 a. m.	28.83
New York .....	29.25	7	8 a. m.	29.73	20	9 p. m.	28.79
Bellport .....	29.32	19	7 a. m.	29.76	30	7 a. m.	28.83
Buñalo .....	28.49	19	7 a. m.	28.85	21	7 a. m.	27.99
Canton .....	30.09	19	7 a. m.	30.50	14	7 a. m.	29.65
Cazenovia .....	29.82	19	2 p. m.	30.19	14	7 a. m.	29.36
Fishkill Landing (b) .....	29.71	19	7 a. m.	30.17	14	2 p. m.	29.23
Flatbush .....	29.86	19	2 p. m.	30.22	14	7 a. m.	29.38
Fort Edward .....	29.35	19	7 a. m.	29.71	30	7 a. m.	28.86
New York city .....	29.64	19	2 p. m.	30.00	14	7 a. m.	29.10
Rochester .....	29.85	19	7 a. m.	30.25	21	7 a. m.	29.40
Sag Harbor .....	29.84	8	7 a. m.	30.19	14	7 a. m.	29.34
Waterford .....	29.87	19	2 p. m.	j 30.18	14	2 p. m.	29.43
New Jersey .....	29.84	1	9 p. m.	30.22	14	9 p. m.	29.40
Bloomfield .....	29.10	7	7 a. m.	29.35	13	9 p. m.	28.60
Lambertville .....	29.22	?	?	?	21	7 a. m.	28.75
Newark .....	29.85	8	7 a. m.	30.19	14	7 a. m.	k 29.40
Pennsylvania .. Bedford .....	29.68	7	7 a. m.	29.14	12	9 p. m.	28.24
Berwick (b) .....	29.42	E	7 a. m.	29.71	14	2 p. m.	28.96
Byberry .....	29.41	7	7 a. m.	29.79	20	9 p. m.	29.03
Cannonsburg .....	29.66	7	7 a. m.	30.01	14	2 p. m.	l 29.23
Easton .....	29.62	7	7 a. m.	29.98	14	2 p. m.	29.17
Gettysburg .....	28.51	7	7 a. m.	28.88	13	2 p. m.	m 28.12
Harrisburg, [Heisely] .....	29.45	7	7 a. m.	29.82	14	2 p. m.	29.00
Harrisburg, [Hickok] .....	29.97	8	7 a. m.	30.32	21	7 a. m.	29.55
Indiana .....							
Lewisburg .....							
Morrisville .....							

\* For hours of observation, &amp;c., see thermometer tables.

a Same height at 9 p. m. on the 20th, 22d, and 29th.

b Not corrected for temperature.

c Same height at sunset on the 15th and at sunrise on the 25th.

d Same height at 2 p. m. on the 26th.

e Same height at 9 p. m. on the 8th.

f Same height at 9 p. m. on the 28th.

g Same height at 7 a. m., 2 p. m., and 9 p. m., on the 15th.

h Incomplete.

i Same height at 7 a. m. and 2 p. m. on the 19th.

j Same height at 9 p. m. on the 19th.

k Same height at 2 p. m. on the 14th.

l Same height at 7 a. m. on the 14th.

m Same height at 9 p. m. on the 13th.



## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania ----- Mount Joy (a) -----	29.57	24	9 p. m.	29.89	13	9 p. m.	29.12
Murrysville -----	28.73	7	7 a. m.	29.14	13	2 p. m.	28.29
Norristown -----	29.79	8	7 a. m.	30.16	14	2 p. m.	29.30
Philadelphia -----	29.75	8	7 a. m.	30.05	14	2 p. m.	29.32
Pittsburg, [Marine Hospital] -----	28.81	7	7 a. m.	29.30	13	2 p. m.	<i>b</i> 28.42
Pittsburg, [Oakland Observatory] (a) -----	28.78	7	2 p. m.	29.11	12	9 p. m.	28.32
Reading -----	29.56	8	7 a. m.	29.90	14	2 p. m.	<i>c</i> 29.14
Somerset -----	27.55	7	2 p. m.	27.84	14	2 p. m.	27.16
Westtown (d) -----	29.33	8	7 a. m.	29.65	14	2 p. m.	28.84
Delaware ----- Milford -----	29.57	8	7 a. m.	29.91	14	2 p. m.	29.18
Maryland ----- Annapolis -----	29.93	7	7 a. m.	30.29	13	9 p. m.	29.48
Baltimore -----	29.83	7	7 a. m.	30.21	13	9 p. m.	29.37
Chestertown -----	29.88	8	2 p. m.	30.22	13	9 p. m.	29.39
Frederick -----	29.64	7	7 a. m.	30.03	13	9 p. m.	29.17
Oakland -----	27.42	7	7 a. m.	27.73	13	2 p. m.	27.03
Dist. of Columbia ----- Washington -----	29.90	7	7 a. m.	30.29	13	9 p. m.	29.40
Virginia ----- Alexandria -----	29.90	7	7 a. m.	30.25	13	9 p. m.	29.44
Portsmouth -----	29.89	7	7 a. m.	30.27	13	2 p. m.	29.44
Rose Hill -----	29.90	7	7 a. m.	30.26	13	9 p. m.	29.48
Ruthven -----	29.55	7	7 a. m.	29.83	21	7 a. m.	29.18
North Carolina ----- Asheville -----	27.67	7	7 a. m.	27.99	13	2 p. m.	<i>e</i> 27.24
Chapel Hill -----	29.45	7	7 a. m.	29.81	13	2 p. m.	29.02
Davidson College -----	29.06	28	7 a. m.	29.41	12	9 p. m.	28.62
Murfreesborough -----	29.22	26	7 a. m.	29.56	13	2 p. m.	28.81
South Carolina ----- All Saints -----	29.88	28	7 a. m.	30.22	2	2 p. m.	29.48
Charleston, [Dawson] -----				30.35			29.73
Charleston, [Johnson] -----	29.99	28	7 a. m.	30.33	2	2 p. m.	29.63
Columbia -----	29.66	28	7 a. m.	30.02	12	9 p. m.	29.20
St. John's (f) -----	30.08	28	2 p. m.	30.40	2	7 a. m.	29.65
Georgia ----- Athens -----	29.21	7	7 a. m.	29.58	13	2 p. m.	28.73
Hillsborough -----	29.32	28	2 p. m.	29.72	12	2 p. m.	28.88
Savannah -----	29.96	28	7 a. m.	30.33	1	2 p. m.	29.55
Sparta -----	29.23	28	7 a. m.	29.56	12	2 p. m.	28.78
Florida ----- Atsena -----	29.78	28	7 a. m.	<i>e</i> 30. (2	1	7 a. m.	<i>g</i> 29.34
Jacksonville -----	30.03	28	7 a. m.	30.38	1	2 p. m.	29.57
St. Augustine -----	30.06	28	7 a. m.	30.40	1	2 p. m.	29.59
Salt Ponds (a) -----	29.66	28	2 p. m.	29.86	1	7 a. m.	29.36
Alabama ----- Greensborough -----	29.55	27	7 a. m.	29.93	12	2 p. m.	29.12
Mississippi ----- Columbus -----	29.73	27	7 a. m.	30.15	12	7 a. m.	29.33
Natchez -----	29.58	27	7 a. m.	30.08	12	9 p. m.	29.23
Paulding -----	29.62	27	7 a. m.	29.98	12	2 p. m.	<i>h</i> 29.32
Texas ----- Goliad -----	29.87	27	7 a. m.	30.25	9	9 p. m.	29.51
Washington -----	29.54	27	7 a. m.	29.94	9	2 p. m.	<i>i</i> 29.22
Tennessee ----- Glenwood -----	29.43	27	7 a. m.	29.84	12	7 a. m.	28.92
Memphis -----	29.63	27	7 a. m.	30.14	12	7 a. m.	29.24
Kentucky ----- Barastown (f) -----	29.85	28	7 a. m.	30.25	13	2 p. m.	29.25
Louisville -----	29.48	27	7 a. m.	29.87	12	3 p. m.	28.91
Millersburg -----	29.10	7	7 a. m.	29.41	13	7 a. m.	<i>j</i> 28.63
Paris -----	29.04	27	7 a. m.	29.39	12	2 p. m.	28.46
Springdale -----	29.29	27	7 a. m.	29.69	13	2 p. m.	<i>k</i> 28.84
Ohio ----- Bowling Green -----	29.10	7	7 a. m.	29.56	13	7 a. m.	28.54
Cincinnati, [Harper] -----	29.41	7	7 a. m.	29.74	12	2 p. m.	28.68
Cincinnati, [Hurt] -----	29.01	27	7 a. m.	29.54	12	2 p. m.	28.30
Cleveland (f) -----	29.05	9	9 p. m.	29.45	12	9 p. m.	<i>l</i> 28.66
Hillsborough -----	28.78	27	7 a. m.	29.07	12	2 p. m.	28.11
Lancaster (f) -----	28.67	6	9 p. m.	29.07	12	2 p. m.	28.08
Medina -----	28.63	7	7 a. m.	29.11	12	9 p. m.	28.19

*a* Not corrected for temperature.*b* Same height at 9 p. m. on the 20th.*c* Same height at 9 p. m. on the 13th.*d* Incomplete.*e* Same height at 2 p. m. on the 28th.*f* Aneroid.*g* Same height at 2 p. m. on the 1st.*h* Same height at 9 p. m. on the 11th.*i* Same height at 9 p. m. on the 9th.*j* Same height at 2 p. m. and 9 p. m. on the 13th.*k* Same height at 7 a. m. and 9 p. m. on the 13th.*l* Same height at 7 a. m. on the 13th.

## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	Inches.				Inches.
Ohio.....					
New Lisbon (a).....	28.51	7	7 a. m.	12	9 p. m.
Northwood.....	28.69	7	7 a. m.	12	2 p. m.
Ripley.....	29.29	7	7 a. m.	12	7 a. m.
Savannah.....	28.75	7	7 a. m.	12	2 p. m.
Urbana.....	28.75	7	7 a. m.	12	2 p. m.
Westerville.....	28.75	7	7 a. m.	12	2 p. m.
Michigan.....					
Battle Creek.....	28.99	6	9 p. m.	8	9 p. m.
Detroit.....	28.78	2	2 p. m.	13	7 a. m.
Marquette.....	29.23	8	9 p. m.	9	7 a. m.
New Buffalo.....	29.14	8	9 p. m.	12	1 p. m.
Indiana.....					
Cannelton.....	29.51	27	7 a. m.	12	2 p. m.
Evansville.....	28.70	27	7 a. m.	12	2 p. m.
Madison.....	29.35	27	7 a. m.	12	2 p. m.
Michigan City.....	29.12	8	9 p. m.	12	2 p. m.
New Harmony.....	29.52	28	7 a. m.	13	2 p. m.
Richmond.....	28.83	7	7 a. m.	12	2 p. m.
Illinois.....					
Athens.....	29.22	26	7 a. m.	8	2 p. m.
Batavia.....	29.05	6	9 p. m.	8	2 p. m.
Manchester.....	28.65	3	7 a. m.	8	1 p. m.
West Urbana.....	29.07	27	7 a. m.	12	9 p. m.
Wheaton.....	29.06	8	9 p. m.	8	2 p. m.
Missouri.....					
St. Louis.....	29.37	26	9 p. m.	8	2 p. m.
Springfield.....	28.50	26	Sunrise.	28	3 p. m.
Wisconsin.....					
Appleton.....	28.83	7	9 p. m.	9	7 a. m.
Beloit.....	29.03	6	2 p. m.	8	9 p. m.
Kenosha (f).....	29.31	6	2 p. m.	8	9 p. m.
Madison.....	28.47	6	2 p. m.	8	2 p. m.
Manitowoc (a).....	29.60	8	9 p. m.	8	9 p. m.
Milwaukee, [Winkler].....	29.13	8	2 p. m.	8	9 p. m.
Racine (a).....	29.10	27	7 a. m.	8	7 a. m.
Waukesha.....	28.97	6	2 p. m.	8	9 p. m.
Iowa.....					
Dubuque.....	29.16	6	7 a. m.	8	2 p. m.
Fairfield.....	29.00	26	7 a. m.	8	2 p. m.
Muscatine.....	29.30	25	7 a. m.	8	2 p. m.
Kansas.....					
Lawrence.....	28.89	23	7 a. m.	11	9 p. m.
Leavenworth City, [McCarty].....	28.56	26	7 a. m.	8	7 a. m.
Mexico.....					
Cordova.....	27.07	28	9 a. m.	10	6 p. m.
Minatitlan (k).....	29.94	28	7 a. m.	18	7 a. m.
Mirador.....	22.72				
Vera Cruz.....	29.91	27	9 p. m.	10	6 a. m.
California.....					
Sacramento.....	29.99	3	7 a. m.	27	9 p. m.
San Francisco.....	29.93	20	7 a. m.	13	9 p. m.
West Indies.....					
Nassau, Bahamas (m).....	30.08	28		2	
St. George's, Bermuda.....	29.94	5	9½ a. m.	4	3½ p. m.
Central America.....					
Guatemala.....	25.23				
South America.....					
Catharina Sophia, Surinam (o).....	29.82	6	6 a. m.	11	6 p. m.
Catharina Sophia, Surinam.....	29.86	8	6 a. m.	21	6 p. m.

a Not corrected for temperature.

b Same height at 7 a. m. on the 7th and 26th.

c Same height at 7 a. m. on the 27th.

d Same height at sunrise on the 27th.

e Same height at 9 p. m. on the 6th.

f Observations taken at 7 a. m.

g Same height at 2 p. m. on the 27th.

h Same height at 2 p. m. and 9 p. m. on the 8th, and at 9 p. m. on the

12th.

i Same height at 2 p. m. on the 6th.

j Same height at 2 p. m. on the 26th.

k For the last 13 days only.

l Same height at 3 p. m. on the 28th.

m Mean obtained from daily maximum and minimum.

n Same height on the 29th.

o Aneroid.

p Same height at 6 a. m. on the 7th.

q Same height at 6 p. m. on the 21st.



## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1858.\*

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
Day.	Hour.	Day.	Hour.					
		Inches.			Inches.			Inches.
British America	Hamilton	29.61	E	9 a. m.	30.14	11	6 p. m.	29.10
	Montreal	29.95	3	7 a. m.	30.55	24	7 a. m.	29.37
	Rigolet (a)	30.03	27	Sunset.	30.25	11	Sunrise.	29.50
	St. John's	29.37	28	2 p. m.	b 29.72	4	9 p. m.	28.36
	St. Martin	29.82	3	7 a. m.	30.40	12	7 a. m.	29.39
	Toronto	29.58	3	6 a. m.	30.15	12	6 a. m.	29.11
	Windsor	29.93	29	7 a. m.	30.26	13	2 p. m.	29.55
	Wolfville	29.87	3	7 a. m.	30.21	24	9 p. m.	29.41
Maine	Gardiner	29.85	3	7 a. m.	30.27	24	2 p. m.	29.28
	Perry	29.89	3	7 a. m.	30.31	24	2 p. m.	29.33
	Portland	29.94	3	7 a. m.	30.42	24	2 p. m.	29.32
New Hampshire	Concord	29.59	3	9 p. m.	c 29.94	24	2 p. m.	29.03
	Shelburne	29.78	3	7 a. m.	30.19	24	7 a. m.	29.35
Vermont	Burlington	29.61	3	7 a. m.	30.17	24	7 a. m.	29.08
	Norwich (d)	29.64	E	9 p. m.	30.15	24	7 a. m.	29.12
	St. Johnsbury	29.37	3	7 a. m.	30.88	24	7 a. m.	28.80
Massachusetts	Amherst	29.73	3	7 a. m.	30.26	24	2 p. m.	29.26
	Bridgewater	29.81	3	7 a. m.	30.26	24	2 p. m.	29.26
	Cambridge	29.96	3	7 a. m.	30.45	24	2 p. m.	29.38
	Lawrence	29.89	3	7 a. m.	30.27	24	2 p. m.	29.29
	Nantucket	30.00	3	7 a. m.	30.42	24	2 p. m.	29.51
	New Bedford	29.92	3	7 a. m.	30.37	24	2 p. m.	29.39
	Newburyport	30.04?	3	7 a. m.	30.48	13	7 a. m.	29.58
	Westfield	29.88	3	7 a. m.	30.34	12	7 a. m.	29.45
	Williamstown	29.22	29	7 a. m.	29.54	24	7 a. m.	28.80
	Worcester	29.45	3	7 a. m.	29.86	24	7 a. m.	29.05
	Rhode Island	Providence	29.90	3	6 a. m.	30.37	24	1 p. m.
Connecticut	Pomfret	29.38	3	7 a. m.	29.84	12	2 p. m.	28.94
	Wallingford	29.89	3	7 a. m.	30.38	24	2 p. m.	29.38
New York	Bellport	29.27	3	7 a. m.	29.64	12	7 a. m.	28.92
	Buffalo	29.31	2	8 a. m.	29.85	11	9 p. m.	28.79
	Canton	29.41	3	7 a. m.	29.97	24	7 a. m.	28.50
	Cazenovia	28.57	3	7 a. m.	29.05	11	9 p. m.	28.08
	Fishkill Landing (a)	30.20	3	7 a. m.	30.70	12	7 a. m.	29.77
	Flatbush	29.93	3	7 a. m.	30.37	12	7 a. m.	29.42
	Fort Edward	29.81	3	7 a. m.	30.36	24	7 a. m.	29.27
	New York city	29.97	3	7 a. m.	30.44	24	2 p. m.	29.49
	Rochester	29.42	3	7 a. m.	29.93	11	9 p. m.	28.87
	Sag Harbor	29.69	28	9 p. m.	29.95	24	2 p. m.	29.20
	Waterford	29.92	3	7 a. m.	30.45	12	7 a. m.	29.45
New Jersey	Bloomfield	29.91	3	7 a. m.	30.42	11	9 p. m.	29.46
	Lambertville	29.93	3	2 p. m.	30.36	12	7 a. m.	29.56
	Newark	29.93	3	7 a. m.	30.40	7	7 a. m.	29.38
Pennsylvania	Bedford	29.01	3	7 a. m.	29.42	11	2 p. m.	28.52
	Berwick (a)	29.33	3	7 a. m.	29.83	11	9 p. m.	28.83
	Cannonsburg	28.72	2	2 p. m.	29.07	11	2 p. m.	28.20
	Easton	29.46	3	7 a. m.	29.93	11	9 p. m.	29.00
	Gettysburg	29.40	3	7 a. m.	29.81	11	2 p. m.	28.94
	Harrisburg, [Hickok]	29.67	3	7 a. m.	30.14	11	9 p. m.	29.21
	Harrisburg, [Heisely]	29.71	3	7 a. m.	30.17	11	9 p. m.	29.25
	Lewisburg	29.51	3	7 a. m.	30.01	11	9 p. m.	29.07
	Morrisville	30.00	3	7 a. m.	30.46	11	9 p. m.	29.55
	Mount Joy (a)	29.64	3	7 a. m.	30.09	11	9 p. m.	29.19
	Murrysville	28.77	E	7 a. m.	29.12	11	2 p. m.	28.28
	Norristown	29.86	4	7 a. m.	30.50	11	9 p. m.	29.46
	Philadelphia	29.80	3	7 a. m.	30.25	11	9 p. m.	29.39
	Pittsburg	28.86	3	7 a. m.	29.24	11	2 p. m.	28.32

\* For hours of observation, &amp;c., see thermometer tables.

a Not corrected for temperature.

b Same height at 7 a. m. on the 31st.

c Same height at 9 p. m. on the 28th.

d Incomplete.

## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania ---- Pittsburg, [Oakland Observatory] (a) .....	28.89	2	2 p. m.	29.23	11	2 p. m.	28.30
Somerset .....	27.61	3	7 a. m.	<i>b</i> 27.92	11	2 p. m.	27.15
Westtown .....	29.38	3	7 a. m.	29.85	11	9 p. m.	28.92
Delaware ---- Milford .....	29.59	3	7 a. m.	30.07	<i>e</i> 7 a. m.		<i>c</i> 29.27
Maryland ---- Annapolis .....	29.98	3	7 a. m.	30.41	11	9 p. m.	29.56
Baltimore .....	29.89	3	7 a. m.	30.34	11	2 p. m.	29.44
Chestertown .....	29.93	3	7 a. m.	30.41	11	9 p. m.	29.48
Frederick .....	29.69	3	7 a. m.	30.14	11	2 p. m.	29.17
Oakland .....	27.51	3	7 a. m.	27.83	11	2 p. m.	27.00
Dist of Columbia Washington .....	29.95	3	7 a. m.	30.39	11	2 p. m.	29.47
Virginia ---- Alexandria .....	29.96	<i>h</i> 7 a. m.		30.38	11	2 p. m.	29.51
Portsmouth .....	29.97	3	2 p. m.	30.38	11	9 p. m.	29.54
Rose Hill .....	29.91						
Ruthven .....	29.56	3	7 a. m.	<i>b</i> 29.93	11	2 p. m.	29.07
North Carolina ---- Asheville .....	27.71	3	7 a. m.	27.96	11	7 a. m.	27.32
Chapel Hill .....	29.52	3	7 a. m.	29.90	11	2 p. m.	29.09
Davidson College .....	29.13	3	7 a. m.	29.46	11	7 a. m.	<i>d</i> 28.77
Murfreesborough .....	29.20	3	7 a. m.	29.58	26	2 p. m.	28.92
South Carolina ---- All Saints .....	29.95	<i>h</i> 7 a. m.		30.23	11	2 p. m.	29.63
Charleston, [Dawson] .....				30.44			29.91
Charleston, [Johnson] .....	30.05	23	7 a. m.	30.31	6	2 p. m.	<i>c</i> 29.78
Columbia .....	29.74	23	7 a. m.	30.06	5	2 p. m.	29.44
St. John's (f) .....	30.18	23	2 p. m.	30.48	11	7 a. m.	29.91
Georgia ---- Athens .....	29.26	23	7 a. m.	29.51	20	9 p. m.	28.94
Hillsborough .....	29.38	23	7 a. m.	29.52	10	9 p. m.	29.10
Savannah .....	30.02	23	7 a. m.	30.27	<i>h</i> 2 p. m.		29.76
Sparta .....	29.28	23	7 a. m.	29.51	11	7 a. m.	28.98
Florida ---- Atsena .....	29.84	23	2 p. m.	30.00	10	9 p. m.	29.65
Jacksonville .....	30.07	14	2 p. m.	30.28	<i>h</i> 2 p. m.		29.81
St. Augustine .....	30.12	23	7 a. m.	30.34	10	9 p. m.	29.87
Salt Ponds (a) .....	29.68	3	2 p. m.	<i>g</i> 29.75	5	7 a. m.	29.55
Alabama ---- Greensborough .....	29.59	21	7 a. m.	29.77	10	2 p. m.	29.20
Mississippi ---- Columbus .....	29.77	21	7 a. m.	30.02	10	2 p. m.	29.27
Natchez .....	29.59	7	7 a. m.	<i>h</i> 29.75	10	7 a. m.	29.15
Paulding .....	29.67	21	7 a. m.	29.85	10	7 a. m.	29.38
Texas ---- Goliad .....	29.90	17	9 p. m.	30.17	<i>h</i> 2 p. m.		29.65
New Braunfels (a) .....	29.75	11	7 a. m.	27.92	28	9 p. m.	<i>i</i> 27.45
Washington .....	29.56	20	7 a. m.	29.74	28	9 p. m.	29.35
Tennessee ---- Glenwood .....	29.48	21	7 a. m.	29.80	10	9 p. m.	28.92
Memphis .....	29.68	11	7 a. m.	30.07	10	2 p. m.	29.13
Kentucky ---- Bardstown (f) .....	29.93	21	2 p. m.	30.29	11	7 a. m.	29.35
Louisville .....	29.43	21	7 a. m.	29.79	11	7 a. m.	28.87
Millersburg .....	29.11	21	7 a. m.	29.41	11	7 a. m.	28.59
Paris .....	29.10	21	7 a. m.	29.44	11	7 a. m.	28.60
Springdale .....	29.34	21	7 a. m.	29.69	11	7 a. m.	28.79
Ohio ---- Bowling Green .....	29.16	2	2 p. m.	29.64	11	7 a. m.	28.65
Cincinnati, [Harper] .....	29.36	2	7 a. m.	29.72	11	7 a. m.	28.83
Cincinnati, [Hurt] .....	28.99	22	7 a. m.	29.42	25	9 p. m.	28.58
Cleveland (f) .....	29.09	22	7 a. m.	<i>j</i> 29.36	11	2 p. m.	28.60
Dayton .....	29.03	2	7 a. m.	29.41	11	7 a. m.	28.55
Hillsborough .....	28.75	2	7 a. m.	29.10	11	7 a. m.	28.23
Lancaster (f) .....	28.74	<i>h</i> 2 p. m.		29.10	11	7 a. m.	28.22
Medina .....	28.79	2	2 p. m.	29.17	11	2 p. m.	28.19
New Lisbon (a) .....	28.56	2	7 a. m.	<i>j</i> 28.92	11	2 p. m.	28.03
Northwood .....	28.74	2	7 a. m.	<i>j</i> 29.12	11	7 a. m.	28.24
Ripley .....	29.31	22	7 a. m.	29.65	11	7 a. m.	28.80
Savannah .....	28.80	2	2 p. m.	29.25	11	2 p. m.	28.28

*a* Not corrected for temperature.*b* Same height at 2 p. m. on the 3d.*c* Same height at 2 p. m. on the 6th.*d* Same height at 2 p. m. on the 11th.*e* Same height at 7 a. m. and 2 p. m. on the 11th.*f* Aneroid.*g* Same height at 2 p. m. on the 13th.*h* Same height at 9 p. m. on the 7th, and at 7 a. m. and 2 p. m. on the 13th and 21st.*i* Same height at 2 p. m. on the 29th.*j* Same height at 2 p. m. on the 2d.



## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			
			DATE.		HEIGHT.	DATE.		HEIGHT.	
Day.	Hour.	Day.	Hour.						
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>	
Ohio.....	Urbana .....	28.80	2	7 a. m.	29.17	11	2 p. m.	28.31	
	Westerville .....	28.80	2	7 a. m.	<i>a</i> 29.14	11	7 a. m.	28.29	
Michigan .....	Battle Creek .....	29.04	2	7 a. m.	29.49	25	9 p. m.	28.60	
	Detroit .....	28.84	2	2 p. m.	<i>a</i> 29.28	26	7 a. m.	28.46	
Indiana .....	Marquette .....	29.34	2	7 a. m.	29.94	31	7 a. m.	28.85	
	New Buffalo .....	29.23	2	1 p. m.	29.64	25	1 p. m.	28.84	
	Cannelton .....	29.55	21	7 a. m.	29.91	10	9 p. m.	29.01	
	Evansville .....	28.72	21	7 a. m.	29.09	10	9 p. m.	28.21	
	Madison .....	29.39	2	7 a. m.	<i>b</i> 29.73	11	7 a. m.	28.84	
	Michigan City .....	29.19	2	2 p. m.	29.59	25	9 p. m.	28.87	
	New Harmony .....	29.58	21	7 a. m.	29.92	10	9 p. m.	29.04	
	Richmond .....	28.90	2	7 a. m.	29.26	11	7 a. m.	28.32	
Illinois.....	Athens .....	29.31	21	7 a. m.	29.66	25	2 p. m.	28.93	
	Batavia .....	29.12	2	9 p. m.	29.53	30	9 p. m.	28.74	
	Manchester .....	28.73	21	7 a. m.	29.05	25	7 a. m.	28.44	
	West Urbana .....	29.12	2	7 a. m.	29.45	25	9 p. m.	28.74	
	Wheaton .....	29.15	2	7 a. m.	29.62	30	9 p. m.	28.72	
Missouri.....	St. Louis .....	29.45	21	7 a. m.	29.80	25	2 p. m.	29.08	
Wisconsin .....	Appleton .....	28.90	2	7 a. m.	29.48	31	7 a. m.	28.54	
	Beloit .....	29.09	2	7 a. m.	29.59	30	9 p. m.	28.68	
	Kenosha ( <i>c</i> ) .....	29.42	2	7 a. m.	29.90	30	9 p. m.	28.98	
	Madison .....	28.98	2	7 a. m.	29.47	23	2 p. m.	28.60	
	Manitowoc ( <i>d</i> ) .....	29.69	2	7 a. m.	30.28	30	9 p. m.	29.22	
	Milwaukee, [Winkler] .....	29.22	2	7 a. m.	29.73	30	9 p. m.	28.80	
	Waukesha .....	29.08	3	7 a. m.	29.63	30	9 p. m.	28.66	
	Iowa .....	Dubuque .....	29.25	2	7 a. m.	29.77	30	9 p. m.	28.77
	Fairfield .....	29.11	2	7 a. m.	29.49	30	9 p. m.	28.69	
Minnesota.....	Muscatine .....	29.43	2	7 a. m.	29.77	30	9 p. m.	28.91	
	Wabashaw .....	29.07 ?	2	7 a. m.	29.64	30	9 p. m.	28.68	
Kansas.....	Lawrence .....	29.00	20	7 a. m.	29.43	30	2 p. m.	28.53	
	Leavenworth City, [McCarty] .....	28.58	20	7 a. m.	28.92	30	2 p. m.	28.31	
Mexico.....	Cordova .....	27.07	11	9 p. m.	27.26	1	3 p. m.	26.88	
	Minatitlan .....	29.88	12	7 a. m.	30.03	1	7 a. m.	29.74	
	Mirador .....	22.76							
	Vera Cruz .....	29.90	11	10 p. m.	30.11	1	3 p. m.	29.69	
California .....	Sacramento .....	29.97	16	7 a. m.	30.16	31	9 p. m.	29.76	
	San Francisco .....	29.91	16	9 p. m.	30.11	30	9 p. m.	29.73	
West Indies.....	Nassau, Bahamas ( <i>f</i> ) .....	30.09	13		<i>g</i> 30.16	27		29.98	
Central America .....	Guatemala .....	25.22			25.32			25.12	
South America .....	Catharina Sophia, Surinam ( <i>h</i> ) .....	29.83	28	2 p. m.	29.88	1	6 p. m.	<i>i</i> 29.80	
	Catharina Sophia, Surinam .....	29.87	3	6 a. m.	<i>j</i> 29.92	12	6 p. m.	<i>k</i> 29.75	

*a* Same height at 9 p. m. on the 2d.*b* Same height at 7 a. m. on the 21st.*c* Imperfect.*d* Not corrected for temperature.*e* Same height at 2 p. m. on the 2d.*f* Mean obtained from daily maximum and minimum.*g* Same height on the 17th.*h* Aneroid.*i* Same height at 9 p. m. on the 17th, and at 2 p. m. on the 24th.*j* Same height at 6 a. m. on the 9th, 24th, and 29th.*k* Same height at 6 p. m. on the 22d.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.66	8	9 a. m.	29.93	10	9 a. m.	29.36
Montreal .....	29.89	3	7 a. m.	30.18	10	9 p. m.	29.25
Rigolet (a) .....	29.80	3	Sunset.	30.15	30	Sunset.	29.30
St. John's .....	29.34	2	7 a. m.	29.83	19	7 a. m.	28.52
St. Martin .....	29.77	3	7 a. m.	30.00	10	9 p. m.	29.34
Toronto .....	29.60	8	6 a. m.	29.87	10	2 p. m.	29.15
Windsor .....	29.90	23	7 a. m.	30.13	11	7 a. m.	29.49
Maine .....	29.80	9	7 a. m.	30.02	11	7 a. m.	29.44
Gardiner .....	29.91	27	7 a. m.	30.41	11	7 a. m.	29.48
Perry .....	29.89	9	7 a. m.	30.11	11	7 a. m.	29.53
Portland .....	29.59	8	7 a. m.	29.86	10	9 p. m.	29.26
New Hampshire .. Concord .....	29.76	3	7 a. m.	29.97	11	7 a. m.	29.40
Shelburne .....	29.58	2	7 a. m.	29.80	10	9 p. m.	29.13
Vermont .....	29.59	9	7 a. m.	29.78	18	9 p. m.	29.44
Burlington .....	29.35	23	7 a. m.	29.35	10	9 p. m.	28.95
Norwich (d) .....	29.59	23	7 a. m.	29.86	10	9 p. m.	29.35
St. Johnsbury .....	29.59	23	7 a. m.	29.86	10	9 p. m.	29.35
Massachusetts .. Amherst .....	29.77	23	7 a. m.	30.02	11	7 a. m.	29.50
Bridgewater .....	29.93	23	7 a. m.	30.16	11	7 a. m.	29.62
Cambridge .....	29.85	23	7 a. m.	30.10	11	7 a. m.	29.56
Lawrence .....	30.00	23	7 a. m.	30.24	11	7 a. m.	29.77
Nantucket .....	29.89	23	7 a. m.	30.13	11	7 a. m.	29.64
New Bedford .....	29.96	23	7 a. m.	30.18	11	7 a. m.	29.62
Newburyport .....	29.84	23	7 a. m.	30.22	11	7 a. m.	29.58
Westfield .....	29.25	23	7 a. m.	29.51	10	9 p. m.	28.96
Williamstown .....	29.43	23	7 a. m.	29.65	6	9 p. m.	29.12
Worcester .....	29.77	23	6 a. m.	30.10	11	6 a. m.	29.63
Rhode Island .. Providence .....	29.36	23	7 a. m.	29.62	11	7 a. m.	29.11
Connecticut .....	29.86	23	7 a. m.	30.13	11	7 a. m.	29.60
Wallingford .....	29.24	23	7 a. m.	29.46	11	2 p. m.	29.08
New York .....	29.33	8	8 a. m.	29.58	10	2 p. m.	28.94
Bellport .....	29.38	2	7 a. m.	29.62	4	9 p. m.	29.03
Buffalo .....	28.59	2	7 a. m.	28.80	10	9 p. m.	28.29
Canton .....	30.27	23	7 a. m.	30.52	11	7 a. m.	30.03
Fishkill Landing (a) .....	29.89	23	7 a. m.	30.16	11	7 a. m.	29.67
Flatbush .....	29.77	25	2 p. m.	30.11	27	7 a. m.	29.21
Fort Edward .....	30.11	23	9 p. m.	30.42	10	2 p. m.	29.81
New York city .....	29.42	2	7 a. m.	29.68	10	2 p. m.	29.04
Rochester .....	29.66	23	7 a. m.	29.91	29	2 p. m.	29.47
Sag Harbor .....	29.91	23	7 a. m.	30.13	11	7 a. m.	29.63
Waterford .....	29.87	23	7 a. m.	30.15	12	2 p. m.	29.59
New Jersey .....	29.98	23	7 a. m.	30.16	12	9 p. m.	29.76
Bloomfield .....	29.90	22	2 p. m.	30.12	10	2 p. m.	29.70
Lambertville .....	29.09	2	7 a. m.	29.31	10	9 p. m.	28.87
Pennsylvania .. Bedford .....	29.33	23	7 a. m.	29.58	10	9 p. m.	29.08
Berwick (a) .....	28.78	2	7 a. m.	29.00	10	9 p. m.	28.56
Cannonsburg .....	29.46	23	7 a. m.	29.73	11	2 p. m.	29.25
Easton .....	29.44	23	7 a. m.	29.65	12	2 p. m.	29.21
Gettysburg .....	29.73	23	2 p. m.	29.96	10	9 p. m.	29.50
Harrisburg, [Heisely] .....	29.68	23	7 a. m.	29.93	11	2 p. m.	29.43
Harrisburg, [Hickok] .....	28.63	2	7 a. m.	28.83	10	9 p. m.	28.40
Indiana .....	29.52	17	7 a. m.	29.79	10	9 p. m.	29.26
Lewisburg .....	29.98	27	7 a. m.	30.27	11	2 p. m.	29.77
Morrisville .....	29.68	23	7 a. m.	29.92	13	2 p. m.	29.47
Mount Joy (a) .....	28.83	2	7 a. m.	29.02	12	2 p. m.	28.58
Murrysville .....	29.88	23	7 a. m.	30.13	10	9 p. m.	29.65
Norristown .....	29.81	23	2 p. m.	30.04	11	2 p. m.	29.60
Philadelphia .....	28.93	2	7 a. m.	29.13	10	9 p. m.	28.66
Pittsburg .....	28.97	2	2 p. m.	29.18	11	7 a. m.	28.75
Pittsburg, [Wilson] (a) .....							

\* For hours of observation, &amp;c., see thermometer tables.

a Not corrected for temperature.

b Same height at 7 a. m. on the 11th.

c Same height at 7 a. m. on the 28d.

d Incomplete.

e Same height at 2 p. m. on the 23d.



## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Somerset.....	27.65	2	9 p. m.	27.78	12	9 p. m.	27.44
Westtown.....	29.39	23	2 p. m.	29.60	13	2 p. m.	29.17
Delaware.....Milford.....	29.63	23	7 a. m.	29.82	12	2 p. m.	29.36
Maryland.....Annapolis.....	29.98	23	7 a. m.	<i>a</i> 30.19	12	2 p. m.	29.66
Baltimore.....	29.90	23	7 a. m.	30.15	12	2 p. m.	29.57
Chestertown.....	29.94	23	2 p. m.	30.29	12	2 p. m.	29.64
Frederick.....	29.71	23	9 p. m.	29.98	12	2 p. m.	29.43
Oakland.....	27.47	2	7 a. m.	<i>b</i> 27.72	12	2 p. m.	27.25
Dist. of Columbia.....Washington.....	29.96	11	9 p. m.	30.26	12	2 p. m.	29.58
Virginia.....Alexandria.....	29.96	23	7 a. m.	<i>c</i> 30.17	12	2 p. m.	29.72
Portsmouth.....	29.99	8	7 a. m.	<i>d</i> 30.16	12	2 p. m.	<i>e</i> 29.75
Rose Hill.....	29.93?						
Ruthven.....	29.59	8	7 a. m.	29.81	13	2 p. m.	29.40
North Carolina.....Ashville.....	27.84	7	7 a. m.	27.98	12	9 p. m.	27.61
Chapel Hill.....	29.55	7	7 a. m.	29.72	13	2 p. m.	29.34
Davidson College.....	29.18	7	7 a. m.	29.34	13	2 p. m.	28.92
Murfreesborough.....	29.13	3	7 a. m.	29.35	12	9 p. m.	28.93
South Carolina.....All Saints.....	30.00	7	2 p. m.	30.18	13	9 p. m.	<i>f</i> 29.75
Charleston, [Dawson].....				30.37			29.97
Charleston, [Johnson].....	30.08	7	2 p. m.	30.23	14	2 p. m.	29.83
Columbia.....	29.78	7	7 a. m.	<i>g</i> 29.93	14	2 p. m.	29.52
St. John's ( <i>h</i> ).....	30.19	7	2 p. m.	30.36	14	7 a. m.	29.92
Georgia.....Athens.....	29.30	5	7 a. m.	29.62	13	9 p. m.	<i>i</i> 29.07
Hillsborough.....	29.41	8	7 a. m.	29.56	14	2 p. m.	29.20
Savannah.....	30.04	7	7 a. m.	30.20	14	2 p. m.	29.78
Florida.....Atsena.....	29.86	8	7 a. m.	<i>j</i> 29.97	14	9 p. m.	29.62
Jacksonville.....	30.09	7	7 a. m.	30.24	14	2 p. m.	29.82
St. Augustine.....	30.13	7	7 a. m.	<i>k</i> 30.28	14	7 a. m.	<i>l</i> 29.87
Salt Ponds ( <i>m</i> ).....	29.66	7	2 p. m.	29.80	17	7 a. m.	29.44
Alabama.....Greensborough.....	29.61	8	7 a. m.	29.77	11	2 p. m.	29.48
Mississippi.....Columbus.....	29.80	7	7 a. m.	29.98	11	2 p. m.	29.62
Natchez.....	29.49	1	7 a. m.	<i>n</i> 29.70	11	2 p. m.	<i>o</i> 29.35
Paulding.....	29.68	7	7 a. m.	29.83	5	9 p. m.	29.39
Texas.....Goliad.....	29.94	19	7 a. m.	30.39	10	2 p. m.	<i>p</i> 29.80
New Braunfels ( <i>m</i> ).....	27.73	3	9 p. m.	<i>q</i> 28.08	26	9 p. m.	27.57
Washington.....	29.60	8	7 a. m.	29.76	10	2 p. m.	29.44
Tennessee.....Glenwood.....	29.54	8	7 a. m.	29.72	11	2 p. m.	29.33
Memphis.....	29.73	7	7 a. m.	29.89	9	2 p. m.	29.53
Kentucky.....Bardstown ( <i>h</i> ).....	30.04	8	7 a. m.	30.22	12	2 p. m.	29.81
Louisville.....	29.49	8	7 a. m.	29.69	10	3 p. m.	29.24
Millersburg.....	29.16	7	7 a. m.	<i>g</i> 29.32	10	9 p. m.	<i>r</i> 29.01
Paris.....	29.16	2	7 a. m.	29.32	12	7 a. m.	<i>s</i> 28.97
Springdale.....	29.40	8	7 a. m.	29.61	10	2 p. m.	29.18
Ohio.....Bowling Green.....	29.20	8	7 a. m.	29.45	10	2 p. m.	28.84
Cincinnati, [Harper].....	29.43	2	7 a. m.	<i>t</i> 29.63	10	2 p. m.	29.15
Cincinnati, [Hurtt].....	28.88	7	7 a. m.	29.26	10	2 p. m.	28.53
Cleveland.....	29.20	2	2 p. m.	29.36	10	2 p. m.	28.93
Dayton.....	29.07	2	2 p. m.	29.28	10	2 p. m.	28.77
Hillsborough.....	28.82	7	7 a. m.	29.02	10	2 p. m.	28.58
Lancaster ( <i>h</i> ).....	28.83	7	7 a. m.	29.03	10	2 p. m.	28.57
Medina.....	28.78	2	7 a. m.	29.03	10	2 p. m.	28.45
New Lisbon ( <i>m</i> ).....	28.64	2	7 a. m.	<i>u</i> 28.80	10	2 p. m.	28.37
Northwood.....	28.78	2	7 a. m.	29.01	10	2 p. m.	28.48

*a* Same height at 2 p. m. on the 23d.*b* Same height at 9 p. m. on the 1st and 2d.*c* Same height at 9 p. m. on the 23d.*d* Same height at 2 and 9 p. m. on the 7th.*e* Same height at 2 p. m. on the 13th.*f* Same height at 7 and 2 p. m. on the 14th.*g* Same height at 9 p. m. on the 7th.*h* Aneroid.*i* Same height at 2 p. m. on the 13th and 14th.*j* Same height at 2 p. m. on the 8th.*k* Same height at 2 p. m. on the 7th.*l* Same height at 2 and 9 p. m. on the 14th.*m* Not corrected for temperature.*n* Same height at 2 p. m. on the 1st.*o* Same height at 7 a. m., 2 and 9 p. m. on the 10th, and at 9 p. m. on

the 15th, and at 2 p. m. on the 30th.

*p* Same height at 9 p. m. on the 9th.*q* Same height at 9 p. m. on the 4th.*r* Same height at 7 a. m. and 2 p. m. on the 11th, and at 2 and 9 p. m.

on the 12th.

*s* Same height at 2 p. m. on the 12th.*t* Same height at 7 a. m. on the 7th.*u* Same height at 2 p. m. on the 2d, and at 7 a. m. on the 7th and 8th.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio.....	Ripley.....	29.37	2	7 a. m.	29.57	11	7 a. m.	29.17
	Savannah.....	28.88	2	7 a. m.	29.11	10	2 p. m.	28.54
	Urbana (a).....	28.85	2	7 a. m.	29.05	10	2 p. m.	28.57
	Westerville.....	28.86	2	7 a. m.	29.07	10	2 p. m.	28.58
Michigan.....	Battle Creek.....	29.08	2	7 a. m.	29.30	10	7 a. m.	28.66
	Detroit.....	28.84	29	9 p. m.	29.05	10	9 p. m.	28.33
	Forestville.....	29.31	8	6 a. m.	29.67	?	?	?
	Marquette.....	29.30	2	7 a. m.	29.58	4	7 a. m.	28.84
	New Buffalo.....	29.26	5	7 a. m.	29.50	10	7 a. m.	28.82
Indiana.....	Cannelton.....	29.62	8	7 a. m.	29.79	5	9 p. m.	29.38
	Evansville.....	28.81	1	2 p. m.	28.99	10	7 a. m.	28.58
	Madison.....	29.44	2	7 a. m.	<i>b</i> 29.62	10	2 p. m.	29.20
	Michigan City.....	29.23	5	2 p. m.	29.54	4	7 a. m.	28.92
	New Harmony.....	29.63	1	7 a. m.	29.81	10	7 a. m.	29.34
	Richmond.....	29.00	16	7 a. m.	29.16	10	2 p. m.	28.68
Illinois.....	Athens.....	29.35	1	7 a. m.	29.58	10	7 a. m.	29.01
	Batavia, [Capon] (c).....	29.07	1	2 p. m.	<i>d</i> 29.24	5	7 a. m.	28.69
	Batavia, [Mead].....	29.12	8	7 a. m.	29.33	4	7 a. m.	28.85
	Manchester.....	28.76	1	7 a. m.	29.00	10	7 a. m.	28.49
	Upper Alton.....	29.41	2	7 a. m.	29.83	10	7 a. m.	29.10
	West Urbana.....	29.19	5	9 p. m.	29.41	11	7 a. m.	28.82
	Wheaton.....	29.19	8	7 a. m.	29.42	10	7 a. m.	28.83
Missouri.....	St. Louis.....	29.49	1	7 a. m.	29.71	10	7 a. m.	29.19
Wisconsin.....	Appleton.....	28.89	8	7 a. m.	29.17	4	7 a. m.	<i>e</i> 28.54
	Beloit.....	29.13	8	7 a. m.	29.36	10	7 a. m.	28.84
	Kenosha (f).....	29.44	2	7 a. m.	<i>g</i> 29.66	4	7 a. m.	29.11
	Madison.....	28.97	8	7 a. m.	29.21	4	7 a. m.	28.62
	Manitowoc (h).....	29.69	8	7 a. m.	29.95	4	7 a. m.	29.29
	Milwaukee, [Winkler].....	29.23	2	7 a. m.	29.48	10	7 a. m.	28.86
	Waukesha.....	29.10	22	9 p. m.	29.65	9	9 p. m.	28.73
Iowa.....	Border Plains.....	28.63	7	2 p. m.	<i>i</i> 28.91	28	2 p. m.	? 28.14
	Dubuque.....	29.26	8	7 a. m.	29.51	3	9 p. m.	28.89
	Fairfield.....	29.10	8	7 a. m.	29.38	3	9 p. m.	28.85
	Muscatine.....	29.46	8	7 a. m.	29.69	10	7 a. m.	29.14
Minnesota.....	Wabashaw.....	29.10	4	9 p. m.	29.79?	3	9 p. m.	28.80
Kansas.....	Lawrence.....	29.00	2	7 a. m.	29.39	3	2 p. m.	28.66
	Leavenworth City, [McCarty].....	28.55	1	7 a. m.	28.79	9	9 p. m.	28.41
Mexico.....	Cordova.....	27.09	12	9 p. m.	27.20	26	3 p. m.	26.95
	Minatitlan.....	29.87	13	7 a. m.	29.99	26	3 p. m.	29.75
	Mirador.....	22.76						
California.....	Vera Cruz.....	29.92	13	11 p. m.	30.03	26	11 a. m.	29.83
	Sacramento.....	29.86	25	7 a. m.	30.04	16	2 p. m.	29.72
	San Francisco.....	29.82	26	7 a. m.	29.98	17	9 p. m.	29.68
West Indies.....	Nassau, Bahamas (j).....	30.13	7		<i>k</i> 30.20	15		29.95
Central America.....	Guatemala.....	25.20			25.29			25.09
South America.....	Catharina Sophia, Surinam (c).....	29.84	12	6 p. m.	<i>l</i> 29.89	8	6 p. m.	29.77
	Catharina Sophia, Surinam.....	29.89	13	6 a. m.	29.96	8	6 p. m.	29.82

*a* For the first 22 days of the month.*b* Same height at 7 a. m. on 7th and 8th.*c* Aneroid.*d* Same height at 9 p. m. on the 27th.*e* Same height at 9 p. m. on the 3d.*f* Imperfect.*g* Same height at 7 a. m. on the 7th.*h* Not corrected for temperature.*i* Same height at 9 p. m. on the 7th.*j* Mean obtained from daily maximum and minimum.*k* Same height on the 8th.*l* Same height at 6 p. m. on the 17th.



## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.70	7	9 a. m.	<i>a</i> 29.95	3	9 a. m.	29.35
Montreal .....	29.92	19	7 a. m.	30.22	2	7 a. m.	29.49
St. John's .....	29.38	13	7 a. m.	29.83	30	9 p. m.	28.92
St. Martin .....	29.79	18	9 p. m.	30.08	3	2 p. m.	29.39
Toronto .....	29.60	19	6 a. m.	29.92	3	2 p. m.	29.30
Windsor .....	29.95	19	9 p. m.	30.20	28	2 p. m.	29.62
Maine .....							
Gardiner .....	29.78	8	7 a. m.	30.07	4	7 a. m.	29.51
Perry .....	29.90	12	2 p. m.	30.19	1	2 p. m.	<i>b</i> 29.59
Portland .....	29.90	6	7 a. m.	30.26	4	7 a. m.	<i>c</i> 29.62
Steuben .....	29.89	6	7 a. m.	30.16	1	2 p. m.	<i>f</i> 29.56
New Hampshire .. Concord .....	29.60	6	7 a. m.	29.91	4	2 p. m.	<i>d</i> 29.34
Shelburne ( <i>e</i> ) .....	29.88	6	7 a. m.	30.17	4	7 a. m.	<i>f</i> 29.60
Vermont .....							
Burlington .....	29.59	6	7 a. m.	29.92	3	9 p. m.	29.24
Norwich ( <i>g</i> ) .....	29.65	6	7 a. m.	29.90	3	9 p. m.	29.35
St. Johnsbury .....	29.35	6	7 a. m.	29.69	22	2 p. m.	29.01
Massachusetts .....							
Amherst .....	29.60	6	7 a. m.	29.93	22	2 p. m.	29.26
Bridgewater .....	29.79	19	2 p. m.	30.25	4	7 a. m.	29.45
Cambridge .....	29.93	6	7 a. m.	30.26	4	7 a. m.	29.58
Lawrence .....	29.85	8	7 a. m.	30.19	22	7 a. m.	<i>f</i> 29.55
Nantucket .....	30.00	6	7 a. m.	30.32	4	7 a. m.	29.68
New Bedford .....	29.90	6	7 a. m.	30.21	4	7 a. m.	29.56
Newburyport .....	29.96	25	9 p. m.	30.15	4	7 a. m.	29.62
Westfield .....	29.85	6	7 a. m.	30.17	22	9 p. m.	29.52
Williamstown .....	29.27	19	2 p. m.	29.60	22	2 p. m.	28.95
Worcester .....	29.46	6	7 a. m.	29.73	22	2 p. m.	29.13
Rhode Island .. Providence .....	29.77	6	6 a. m.	<i>h</i> 30.18	4	6 a. m.	29.57
Connecticut .....							
Pomfret .....	29.38	6	7 a. m.	29.69	4	7 a. m.	29.06
Wallingford .....	29.86	6	7 a. m.	30.19	22	2 p. m.	29.52
New York .....							
Bellport .....	29.26	6	9 p. m.	29.46	22	2 p. m.	28.99
Buffalo .....	29.33	19	8 a. m.	29.63	3	2 p. m.	29.09
Cazenovia .....	28.60	6	7 a. m.	<i>i</i> 29.85	22	7 a. m.	<i>j</i> 28.34
Fishkill ( <i>e</i> ) .....	30.32	8	2 p. m.	30.65	4	2 p. m.	<i>k</i> 30.05
Flatbush .....	29.90	6	7 a. m.	30.22	22	2 p. m.	29.61
Fort Edward .....	29.84	6	7 a. m.	30.42	21	7 a. m.	29.59
New York city .....	30.14	6	9 p. m.	30.47	22	2 p. m.	29.78
Rochester .....	29.43	6	7 a. m.	29.70	21	2 p. m.	29.11
Sag Harbor .....	29.50	6	7 a. m.	<i>h</i> 29.97	4	7 a. m.	29.37
Spencertown .....	29.29	7	7 a. m.	29.60	22	7 a. m.	<i>f</i> 29.01
Waterford .....	29.92	6	7 a. m.	30.23	22	2 p. m.	29.63
New Jersey .....							
Bloomfield .....	29.91	8	9 p. m.	30.16	4	7 a. m.	29.61
Lambertville .....	29.99	6	2 p. m.	<i>l</i> 30.24	22	7 a. m.	<i>f</i> 29.73
Newark .....	29.91	6	7 a. m.	30.44	22	7 a. m.	29.64
Pennsylvania .....							
Bedford .....	29.09	6	7 a. m.	29.34	21	9 p. m.	28.88
Berwick ( <i>e</i> ) .....	29.41	6	2 p. m.	29.67	21	9 p. m.	<i>m</i> 29.08
Cannonsburg .....	29.79	8	9 p. m.	29.99	3	2 p. m.	<i>n</i> 29.62
Chambersburg .....	29.31	6	7 a. m.	29.62	22	7 a. m.	29.09
Easton .....	29.46	6	7 a. m.	29.77	30	2 p. m.	29.13
Gettysburg .....	29.43	8	7 a. m.	29.72	30	2 p. m.	29.19
Harrisburg, [Heisely] .....	29.72	6	7 a. m.	<i>h</i> 30.04	22	2 p. m.	<i>o</i> 29.49
Harrisburg, [Hickok] .....	29.68	6	7 a. m.	30.01	12	2 p. m.	28.42
Indiana .....	28.63	6	7 a. m.	28.85	21	9 p. m.	28.44
Lewisburg .....	29.52	6	7 a. m.	29.84	30	2 p. m.	29.28
Morrisville .....	29.98	6	2 p. m.	30.30	22	2 p. m.	29.73

\* For hours of observation, &amp;c., see thermometer tables.

- a* Same height at 9 a. m. on the 19th.  
*b* Same height at 9 p. m. on the 27th.  
*c* Same height at 7 a. m. on the 22d.  
*d* Same height at 2 p. m. on the 27th.  
*e* Not corrected for temperature.  
*f* Same height at 2 p. m. on the 22d.  
*g* Incomplete.  
*h* Same height at 2 p. m. on the 6th.

- i* Same height at 7 a. m. on the 19th.  
*j* Same height at 2 p. m. and 9 p. m. on the 3d, and at 9 p. m. on the 21st.  
*k* Same height at 7 a. m. and 9 p. m. on the 22d.  
*l* Same height at 9 p. m. on the 6th.  
*m* Same height at 2 p. m. on the 21st, 7 a. m. and 2 p. m. on the 22d, and 2 p. m. on the 30th.  
*n* Same height at 7 a. m. and 2 p. m. on the 12th, and at 9 p. m. on the 21st.  
*o* Same height at 2 p. m. on the 30th.





## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio	Savannah	28.91	19	7 a. m.	<i>a</i> 29.09	3	2 p. m.	28.68
	Urbana	28.87	6	7 a. m.	29.05	3	2 p. m.	28.70
	Westerville	28.87	6	7 a. m.	29.03	9	9 p. m.	28.66
Michigan	Battle Creek	29.11	19	7 a. m.	29.36	2	9 p. m.	28.87
	Detroit	28.94	18	9 p. m.	<i>b</i> 29.11	11	9 p. m.	28.42
	Forestville	29.35	18	9 a. m.	29.63	3	6 a. m.	29.06
	Marquette	29.38	18	2 p. m.	<i>c</i> 29.69	2	2 p. m.	29.08
	New Buffalo	29.30	19	7 a. m.	29.53	2	9 p. m.	29.07
Indiana	Cannelton	29.61	6	7 a. m.	29.79	23	7 a. m.	29.40
	Evansville	28.82	25	7 a. m.	28.98	23	7 a. m.	28.59
	Madison	29.45	6	7 a. m.	29.62	11	9 p. m.	29.24
	Michigan City	29.25	18	9 p. m.	29.47	2	9 p. m.	29.03
	New Harmony	29.63	6	7 a. m.	29.81	23	7 a. m.	29.39
	Richmond, [Moore]	28.98	6	9 p. m.	29.17	3	2 p. m.	28.83
Illinois	Athens	29.38	19	7 a. m.	29.58	8	2 p. m.	29.18
	Batavia, [Capon] ( <i>d</i> )	29.21	18	2 p. m.	29.45	2	9 p. m.	<i>e</i> 29.02
	Batavia, [Mead]	29.14	19	7 a. m.	29.36	2	2 p. m.	28.92
	Manchester	28.78	6	7 a. m.	28.95	2	1 p. m.	<i>f</i> 28.62
	Upper Alton	29.42	19	7 a. m.	29.58	22	9 p. m.	29.23
	West Urbana	29.21	19	7 a. m.	29.40	2	9 p. m.	29.03
	Wheaton	29.23	19	7 a. m.	29.48	2	9 p. m.	28.98
Missouri	St. Louis	29.51	9	7 a. m.	29.69	23	7 a. m.	29.31
Wisconsin	Appleton	28.94	18	9 p. m.	29.27	2	7 a. m.	<i>g</i> 28.72
	Beloit	29.20	19	7 a. m.	29.43	2	2 p. m.	28.95
	Kenosha ( <i>h</i> )	29.49	18	7 a. m.	29.76	2	9 p. m.	29.27
	Madison	29.09	18	7 a. m.	29.32	2	2 p. m.	28.78
	Manitowoc ( <i>i</i> )	29.76	18	2 p. m.	30.07	2	2 p. m.	29.50
	Milwaukee	29.27	18	2 p. m.	29.53	2	2 p. m.	29.00
	Waukesha	19.15	18	7 a. m.	<i>j</i> 29.41	2	9 p. m.	28.88
Iowa	Border Plains	28.72	11	7 a. m.	28.94	9	2 p. m.	28.46
	Dubuque	29.32	18	7 a. m.	29.56	2	2 p. m.	29.03
	Fairfield	29.05	18	7 a. m.	29.25	2	2 p. m.	28.86
	Muscatine	29.45	19	7 a. m.	29.66	2	9 p. m.	29.17
Minnesota	Wabashaw	29.16	7	9 p. m.	29.48	28	2 p. m.	28.86
Kansas	Lawrence	29.04	11	2 p. m.	29.22	8	9 p. m.	28.73
	Leavenworth City, [McCarty]	28.57	11	7 a. m.	28.74	2	2 p. m.	28.40
Mexico	Cordova	27.16	12	9 a. m.	27.28	9	6 p. m.	27.00
	Minatitlan	29.92	25	7 a. m.	30.05	2	7 a. m.	<i>k</i> 29.80
	Mirador	22.87						
	Vera Cruz	29.99	6	11 p. m.	30.09	9	5 p. m.	29.81
California	Sacramento	29.88	7	7 a. m.	30.02	12	9 p. m.	29.74
	San Francisco	29.85	7	2 p. m.	30.00	2	2 p. m.	29.72
West Indies	Nassau, Bahamas ( <i>l</i> )	30.16	29		30.25	8		30.08
Central America	Guatemala	25.26			25.36			25.16
South America	Catharina Sophia, Surinam ( <i>d</i> )	29.87	28	2 p. m.	29.96	8	6 a. m.	29.79
	Catharina Sophia, Surinam	29.92	29	6 a. m.	30.02	10	2 p. m.	29.84

*a* Same height at 2 p. on the 9th.*b* Same height at 7 a. m. and 2 p. m. on the 19th.*c* Same height at 7 a. m. on the 9th.*d* Aneroid.*e* Same height at 7 a. m. on the 5th and 6th, and at 2 p. m. on the 5th.*f* Same height at 9 p. m. on the 2d, and at 1 p. m. and 9 p. m. on the 8th.*g* Same height at 9 p. m. on the 28th.*h* Imperfect.*i* Not corrected for temperature.*j* Same height at 2 p. m. on the 18th.*k* Same height at 7 a. m. and 3 p. m. on the 1st.*l* Mean obtained from daily maximum and minimum.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.70	13	9 a. m.	29.99	28	9 p. m.	<i>a</i> 29.32
Montreal .....	29.93	13	7 a. m.	30.30	18	2 p. m.	29.55
St. John's .....	29.48	27	7 a. m.	<i>b</i> 29.74	20	7 a. m.	28.89
St. Martin .....	29.79	13	6 a. m.	30.14	29	2 p. m.	29.42
Toronto .....	29.62	13	6 a. m.	29.93	29	6 a. m.	29.24
Windsor .....	29.96	26	7 a. m.	30.30	19	2 p. m.	29.55
Wolfville .....	29.66	26	7 a. m.	30.16	19	2 p. m.	29.12
Maine .....	29.83	26	7 a. m.	30.19	19	7 a. m.	29.46
Gardiner .....	29.95	26	7 a. m.	30.31	19	7 a. m.	29.50
Perry .....	29.94	26	7 a. m.	30.29	19	7 a. m.	<i>c</i> 29.57
Portland .....	29.92	13	2 p. m.	30.33	19	2 p. m.	29.45
Steuben .....	29.63	13	9 p. m.	29.98	29	2 p. m.	29.25
New Hampshire .. Concord .....	29.80	14	7 a. m.	30.13	29	2 p. m.	29.44
Shelburne .....	29.62	13	7 a. m.	29.95	29	2 p. m.	29.27
Vermont .....	29.62	13	7 a. m.	29.95	29	2 p. m.	29.27
Burlington .....	29.62	13	7 a. m.	29.95	29	2 p. m.	29.27
Norwich ( <i>d</i> ) .....	29.36	13	7 a. m.	29.70	29	2 p. m.	29.01
St. Johnsbury .....	29.60			?			?
Massachusetts .. Amherst .....	29.96	26	7 a. m.	30.31	29	2 p. m.	29.60
Cambridge .....	29.89	13	2 p. m.	<i>e</i> 30.24	29	2 p. m.	29.55
Lawrence .....	30.01	26	7 a. m.	30.33	19	7 a. m.	29.71
Nantucket .....	29.91	26	7 a. m.	30.23	19	7 a. m.	29.59
New Bedford .....	29.99	13	2 p. m.	30.33	31	7 a. m.	29.61
Newburyport .....	29.88	13	9 p. m.	30.23	29	2 p. m.	29.56
Westfield .....	29.33	13	2 p. m.	29.65	19	7 a. m.	28.72
Williamstown .....	29.46	13	2 p. m.	29.78	29	7 a. m.	29.10
Worcester .....	29.80	13	1 p. m.	30.23	19	6 a. m.	<i>f</i> 29.60
Rhode Island .. Providence .....	29.40	26	7 a. m.	29.72	29	2 p. m.	29.08
Connecticut .. Pomfret .....	29.98	26	7 a. m.	30.21	28	9 p. m.	29.56
Wallingford .....	29.27	26	7 a. m.	29.53	29	2 p. m.	29.03
New York .....	29.34	13	2 p. m.	29.60	28	9 p. m.	29.00
Bellport .....	29.40	13	9 p. m.	29.73	29	7 a. m.	29.07
Buffalo .....	28.60	13	2 p. m.	28.88	28	9 p. m.	29.28
Canton .....	30.31	13	9 p. m.	<i>h</i> 30.60	29	7 a. m.	29.95
Cazenovia .....	29.92	26	7 a. m.	30.21	28	9 p. m.	29.60
Fishkill Landing ( <i>g</i> ) .....	29.81	13	7 a. m.	30.13	29	9 p. m.	29.35
Flatbush .....	30.16	13	9 p. m.	30.49	29	7 a. m.	29.88
Fort Edward .....	29.40	13	7 a. m.	<i>i</i> 29.69	28	2 p. m.	29.02
New York city .....	29.66	26	7 a. m.	29.99	29	2 p. m.	29.35
Rochester .....	29.93	14	7 a. m.	30.22	28	9 p. m.	29.69
Sag Harbor .....	29.94	26	7 a. m.	30.25	28	9 p. m.	29.63
Waterford .....	30.00	13	9 p. m.	<i>h</i> 30.25	29	7 a. m.	<i>j</i> 29.76
New Jersey .....	29.94	26	7 a. m.	30.23	28	6 p. m.	29.64
Bloomfield .....	29.10	14	7 a. m.	<i>k</i> 29.32	28	2 p. m.	28.85
Lambertville .....	29.33	26	7 a. m.	<i>l</i> 29.67	23	2 p. m.	<i>m</i> 29.00
Newark .....	28.82	23	7 a. m.	29.03	28	2 p. m.	28.56
Pennsylvania .. Bedford .....	29.35	13	9 p. m.	29.63	28	2 p. m.	29.01
Berwick ( <i>g</i> ) .....	29.51	26	7 a. m.	29.80	28	10 p. m.	29.21
Cannonsburg .....	29.44	14	7 a. m.	<i>h</i> 29.69	28	2 p. m.	29.12
Chambersburg .....	29.75	26	7 a. m.	30.02	28	2 p. m.	<i>m</i> 29.44
Easton .....	29.70	26	7 a. m.	29.97	28	2 p. m.	29.36
Gettysburg .....	28.64	14	7 a. m.	28.86	28	2 p. m.	28.35
Harrisburg, [Heisely] .....	29.54	14	7 a. m.	29.81	28	2 p. m.	29.20
Harrisburg, [Hickok] .....	30.00	25	7 a. m.	30.32	28	9 p. m.	29.70
Indiana .....	29.69	13	9 p. m.	29.96	28	2 p. m.	29.35
Lewisburg .....	28.84	23	7 a. m.	29.08	28	2 p. m.	28.53
Morrisville .....							
Mount Joy ( <i>g</i> ) .....							
Murrysville .....							

\* For hours of observation, &amp;c., see thermometer tables.

*a* Same height at 9 a. m. on the 29th.*b* Same height at 2 p. m. on the 27th.*c* Same height at 9 p. m. on the 18th, and at 2 p. m. on the 29th.*d* Incomplete.*e* Same height at 9 p. m. on the 13th.*f* Same height at 6 a. m. and at 1 p. m. on the 29th.*g* Not corrected for temperature.*h* Same height at 7 a. m. on the 26th.*i* Same height at 2 p. m. and 9 p. m. on the 19th.*j* Same height at 2 p. m. on the 29th.*k* Same height at 7 a. m. on the 24th.*l* Same height at 7 a. m. on the 14th, and at 2 p. m. and 9 p. m. on the 13th.*m* Same height at 9 p. m. on the 28th.



## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania							
Norristown	29.90	26	7 p. m.	30.30	28	9 p. m.	29.58
Philadelphia	29.83	26	7 a. m.	30.10	28	2 p. m.	29.55
Pittsburg, [Marine Hospital]	28.94	23	9 p. m.	29.22	28	2 p. m.	28.68
Pittsburg, [Oakland Observatory] (a)	29.00	25	2 p. m.	29.25	28	7 a. m.	<i>b</i> 28.72
Somerset	27.68	14	7 a. m.	27.86	28	2 p. m.	29.42
Westtown	29.39	26	7 a. m.	29.66	28	2 p. m.	29.09
Maryland							
Annapolis	30.00	26	7 a. m.	30.28	28	2 p. m.	29.70
Baltimore	29.91	13	9 p. m.	30.16	28	2 p. m.	29.58
Frederick	29.72	26	7 a. m.	29.99	28	2 p. m.	29.39
Dist. of Columbia	29.97	26	7 a. m.	30.24	28	2 p. m.	29.66
Virginia							
Portsmouth	29.97	25	9 p. m.	30.23	28	2 p. m.	29.65
Rose Hill	29.94			?			?
North Carolina							
Asheville	27.90	25	2 p. m.	<i>c</i> 28.04	28	7 a. m.	27.66
Chapel Hill	29.55	24	7 a. m.	29.78	27	9 p. m.	29.31
Davidson College	29.18	17	7 a. m.	29.31	19	2 p. m.	29.00
Murfreesborough	29.09	24	7 a. m.	29.43	28	2 p. m.	28.86
South Carolina							
All Saints	29.96	25	9 p. m.	<i>d</i> 30.10	30	7 a. m.	29.73
Charleston, [Dawson]				30.31			30.00
Charleston, [Johnson]	30.04	25	9 p. m.	30.18	29	2 p. m.	<i>e</i> 29.87
Columbia	29.65	17	7 a. m.	<i>f</i> 29.88	29	2 p. m.	29.10
St. John's (g)	30.16	25	9 p. m.	30.30	30	7 a. m.	29.92
Georgia							
Athens	29.32	20	7 a. m.	<i>h</i> 29.49	27	2 p. m.	29.07
Savannah	30.01	25	9 p. m.	30.13	28	2 p. m.	29.81
Florida							
Atsena	29.84	20	9 p. m.	29.95	30	7 a. m.	29.66
Jacksonville	30.05	15	7 a. m.	30.15	30	2 p. m.	29.86
St. Augustine	30.10	6	7 a. m.	<i>i</i> 30.21	30	2 p. m.	29.91
Salt Ponds (a)	29.69	6	2 p. m.	29.80	24	7 a. m.	29.55
Mississippi							
Columbus	29.81	25	7 a. m.	29.94	27	9 p. m.	29.65
Natchez	29.55	7	7 a. m.	<i>j</i> 29.65	27	9 p. m.	<i>k</i> 29.40
Paulding	29.69	?		?	28	2 p. m.	29.55
Texas							
Goliad	29.95	21	7 a. m.	<i>l</i> 30.05	28	2 p. m.	29.79
New Braunfels (a)	27.61	3	7 a. m.	<i>m</i> 27.70	15	2 p. m.	27.50
Tennessee							
Glenwood	29.56	23	7 a. m.	29.74	27	2 p. m.	29.32
Memphis	29.75	23	7 a. m.	29.91	20	7 a. m.	29.33
Kentucky							
Bardstown (g)	30.06	23	7 a. m.	30.25	27	9 p. m.	29.80
Louisville	29.51	24	7 a. m.	29.76	28	3 p. m.	29.25
Paris	29.19	23	7 a. m.	29.40	27	2 p. m.	28.93
Springdale	29.41	23	7 a. m.	29.65	27	2 p. m.	29.16
Ohio							
Bowling Green	29.24	23	7 a. m.	29.56	28	7 a. m.	28.93
Cincinnati, [Harper]	29.41	8	9 p. m.	<i>n</i> 29.53	27	7 a. m.	29.19
Cleveland (g)	29.22	15	9 p. m.	29.75	28	7 a. m.	28.92
Dayton	29.09	23	7 a. m.	29.35	28	7 a. m.	28.86
Hillsborough	28.85	23	7 a. m.	29.12	28	2 p. m.	28.50
Hudson	29.83	24	7 a. m.	29.09	29	7 a. m.	28.50
Lancaster (g)	28.85	23	7 a. m.	<i>o</i> 29.05	27	9 p. m.	<i>p</i> 28.57
Medina	28.81	25	7 a. m.	29.06	28	7 a. m.	28.48
New Lisbon (a)	28.66	23	7 a. m.	<i>q</i> 28.90	28	2 p. m.	28.35
Ripley	29.40	23	7 a. m.	29.66	28	7 a. m.	29.15
Savannah	28.90	23	7 a. m.	29.29	27	7 a. m.	28.58
Urbana	28.89	23	7 a. m.	29.16	28	7 a. m.	28.60
Westerville	28.88	23	7 a. m.	29.14	28	7 a. m.	28.60
Michigan							
Battle Creek	29.13	23	7 a. m.	29.45	26	9 p. m.	28.87
Detroit	28.88	23	2 p. m.	29.16	31	7 a. m.	28.54
Marquette	29.36	22	2 p. m.	<i>r</i> 29.68	3	9 p. m.	29.04

*a* Not corrected for temperature.*b* Same height at 2 p. m. on the 28th.*c* Same height at 9 p. m. on the 25th.*d* Same height at 2 p. m. on the 9th and 17th.*e* Same height at 7 a. m. and 2 p. m. on the 30th.*f* Same height at 9 p. m. on the 17th.*g* Aneroid.*h* Same height at 7 a. m. on the 24th.*i* Same height at 7 a. m. on the 17th.*j* Same height at — p. m. on the 7th, at 7 a. m., 2 p. m., and 9 p. m. on the 8th, and at 2 p. m. on the 21st.*k* Same height at 7 a. m. and at 2 p. m. on the 28th.*l* Same height at 7 a. m. on the 22d and 24th.*m* Same height at 7 a. m. on the 8th, 13th, 14th, 21st, 22d, 29th, and 30th.*n* Same height at 7 a. m. and 2 p. m. on the 8th.*o* Same height at 2 p. m. on the 23d, and at 7 a. m. on the 25th.*p* Same height at 9 p. m. on the 27th.*q* Same height at 2 p. m. on the 23d.*r* Same height at 9 p. m. on the 22d.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Michigan	New Buffalo	29.44	23	7 a. m.	29.78	27	7 a. m.	29.07
	Thunder Bay Island	29.42	23	9 a. m.	29.75	27	6 a. m.	28.97
Indiana	Cannelton	29.64	23	7 a. m.	29.87	27	2 p. m.	29.39
	Evansville	28.85	23	7 a. m.	29.08	27	2 p. m.	28.66
	Madison	29.59	23	7 a. m.	<i>a</i> 29.82	27	9 p. m.	29.34
	Michigan City	29.26	23	7 a. m.	29.59	27	2 p. m.	29.04
	New Harmony	29.64	23	7 a. m.	29.90	27	2 p. m.	29.44
	Richmond	29.00	13	7 a. m.	29.15	1	9 p. m.	<i>b</i> 28.84
Illinois	Athens	29.42	23	7 a. m.	29.73	1	2 p. m.	29.22
	Batavia, [Capon] ( <i>c</i> )	29.68	23	7 a. m.	29.50	27	7 a. m.	28.93
	Batavia, [Mead]	29.18	23	7 a. m.	29.48	1	9 p. m.	<i>d</i> 28.93
	Manchester	28.83	23	7 a. m.	29.13	1	1 p. m.	<i>e</i> 28.65
	Upper Alton	29.45	23	7 a. m.	29.74	2	2 p. m.	29.26
	West Urbana	29.25	23	7 a. m.	29.53	28	7 a. m.	29.02
	Wheaton	29.24	23	7 a. m.	29.61	27	7 a. m.	29.00
Missouri	St. Louis	29.56	23	7 a. m.	29.95	3	2 p. m.	<i>f</i> 29.50
Wisconsin	Appleton	28.97	23	7 a. m.	29.35	2	7 a. m.	28.67
	Beloit	29.22	23	7 a. m.	29.58	1	9 p. m.	28.95
	Kenosha	29.59	22	7 a. m.	29.77	2	7 a. m.	29.33
	Manitowoc ( <i>g</i> )	29.78	23	7 a. m.	30.14	1	9 p. m.	29.47
	Milwaukee, [Winkler]	29.29	23	7 a. m.	29.62	3	9 p. m.	28.99
	Waukesha	29.20	23	7 a. m.	29.53	27	7 a. m.	28.92
Iowa	Border Plains	28.77	23	9 p. m.	29.39	1	2 p. m.	28.51
	Dubuque	29.37	23	7 a. m.	29.72	1	2 p. m.	29.03
	Fairfield	28.99	23	7 a. m.	29.32	3	2 p. m.	28.78
	Muscatine	29.49	22	7 a. m.	29.82	2	7 a. m.	29.18
Minnesota	Wabashaw	29.18	22	7 a. m.	29.52	3	2 p. m.	28.85
Kansas	Lawrence	29.12	22	7 a. m.	29.41	2	9 p. m.	28.93
	Leavenworth City	28.64	22	7 a. m.	<i>h</i> 28.89	3	2 p. m.	28.48
Oregon	Fort Snyder	22.56						
Mexico	Cordova	27.16	21	9 a. m.	27.31	28	3 p. m.	26.99
	Minatitlan	29.92	8	7 a. m.	<i>i</i> 30.02	28	3 p. m.	29.76
	Mirador	22.87						
	Vera Cruz	30.10	21	11 p. m.	30.26	12	7 a. m.	29.98
California	Sacramento	29.89	27	7 a. m.	30.10	5	9 p. m.	<i>j</i> 29.75
	San Francisco	29.85	22	7 a. m.	30.06	24	7 a. m.	<i>k</i> 29.73
West Indies	Nassau, Bahamas	30.13	13		<i>l</i> 30.19	23		<i>m</i> 30.07
	St. George's, Bermuda	30.16						
	Turk's Island, Bahamas	29.91	21	Noon	30.00			
Central America	Guatemala	25.26			25.35			25.15
South America	Catharina Sophia, Surinam ( <i>c</i> )	29.84	1	2 p. m.	<i>n</i> 29.91	23	6 p. m.	29.78
	Catharina Sophia, Surinam	29.89	2	6 a. m.	29.96	23	6 p. m.	29.79

*a* Same height at 2 p. m. on the 23d.*b* Same height at 2 p. m. on the 2d.*c* Aneroid.*d* Same height at 2 p. m. on the 3d.*e* Same height at 1 p. m. and 9 p. m. on the 1st, and at 1 p. m. on the 2d.*f* Same height at 2 p. m. on the 27th.*g* Not corrected for temperature.*h* Same height at 7 a. m. on the 23d.*i* Same height at 3 p. m. on the 19th.*j* Same height at 2 p. m. on the 24th, and at 9 p. m. on the 31st.*k* Same height at 2 p. m. on the 24th.*l* Same height on the 21st.*m* Same height on the 24th and 28th.*n* Same height at 6 p. m. on the 2d.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton	29.72	19	9 a. m.	<i>a</i> 30.04	16	9 a. m.	29.30
Montreal	29.97	27	7 a. m.	30.36	16	9 p. m.	29.23
Moose Factory ( <i>b</i> )	29.66			30.45			28.90
St. John's	29.50	28	7 a. m.	29.98	23	7 a. m.	<i>c</i> 28.90
St. Martin	29.83	27	6 a. m.	30.25	16	10 p. m.	29.03
Toronto	29.65	27	6 a. m.	30.05	16	2 p. m.	29.17
Windsor	29.97	27	7 a. m.	30.38	17	2 p. m.	29.61
Wolfville	29.61	26	2 p. m.	30.19	17	2 p. m.	29.16
Maine—Gardiner	29.89	27	7 a. m.	30.29	16	9 p. m.	29.03
Perry	29.97	27	7 a. m.	30.42	16	9 p. m.	29.34
Portland	29.97	19	9 p. m.	30.36	17	7 a. m.	29.54
Steuben	29.97	19	9 p. m.	<i>d</i> 30.37	16	9 p. m.	29.29
New Hampshire—Concord	29.65	27	7 a. m.	30.06	16	9 p. m.	28.92
Shelburne	29.84	28	7 a. m.	30.21	16	2 p. m.	29.31
Vermont—Burlington	29.66	19	7 a. m.	<i>e</i> 30.07	16	2 p. m.	28.93
Norwich	29.68	19	7 a. m.	30.02	16	9 p. m.	28.96
St. Johnsbury	29.41	27	7 a. m.	29.82	16	9 p. m.	28.53
Massachusetts—Amherst	29.66	27	7 a. m.	30.03	16	2 p. m.	28.83
Bridgewater	29.89	19	7 p. m.	30.22	16	7 p. m.	29.07
Cambridge	30.02	19	9 p. m.	30.41	16	2 p. m.	29.28
Lawrence	29.94	19	2 p. m.	<i>d</i> 30.30	16	9 p. m.	29.23
Nantucket	30.07	19	2 p. m.	<i>f</i> 30.42	16	2 p. m.	29.42
New Bedford	29.97	19	9 p. m.	30.35	16	2 p. m.	29.20
Newburyport	30.03	27	9 p. m.	30.38	16	9 p. m.	29.34
Westfield	29.94	19	9 p. m.	30.31	16	2 p. m.	29.24
Williamstown	29.36	26	7 a. m.	29.71	16	2 p. m.	28.67
Worcester	29.54	19	9 p. m.	29.89	16	9 p. m.	28.68
Rhode Island—Providence	29.84	19	10 p. m.	30.33	16	1 p. m.	29.20
Connecticut—Middletown	29.87	19	9 p. m.	30.24	16	2 p. m.	29.94
Pomfret	29.45	19	9 p. m.	29.82	16	2 p. m.	28.64
Wallingford	29.96	19	9 p. m.	30.31	16	2 p. m.	29.01
New York—Bellport	29.34	19	2 p. m.	<i>g</i> 29.60	16	7 a. m.	28.84
Buffalo	29.40	18	8 a. m.	29.79	16	8 a. m.	28.93
Canton	29.36	18	7 a. m.	29.71	16	9 p. m.	28.81
Cazenovia	28.66	19	7 a. m.	<i>h</i> 28.96	16	2 p. m.	28.07
Fishkill Landing ( <i>i</i> )	30.36	19	2 p. m.	30.70	16	2 p. m.	29.55
Flatbush	29.98	19	9 p. m.	30.33	16	7 a. m.	29.20
Fort Edward	29.87	27	7 a. m.	30.26	16	2 p. m.	29.10
New York city ( <i>j</i> )	30.18	18	7 a. m.	30.57	16	7 a. m.	29.47
Rochester	29.43	19	7 a. m.	29.84	16	7 a. m.	28.95
Sag Harbor	29.75	19	9 p. m.	30.10	16	7 a. m.	29.10
Waterford	29.98	27	7 a. m.	30.33	16	2 p. m.	29.24
New Jersey—Bloomfield	30.03	19	9 p. m.	30.35	16	2 p. m.	29.20
Lambertville	30.08	19	9 p. m.	30.40	16	2 p. m.	29.40
Newark	30.01	19	9 p. m.	30.34	16	7 a. m.	29.31
Pennsylvania—Bedford	29.16	27	7 a. m.	29.47	16	2 p. m.	28.69
Berwick ( <i>i</i> )	29.46	19	7 a. m.	<i>k</i> 29.75	16	7 a. m.	<i>l</i> 28.83
Cannonsburg	28.87	19	7 a. m.	29.20	16	2 p. m.	28.45
Carlisle	29.23	20	7 a. m.	29.54	16	7 a. m.	28.62
Chambersburg	29.40	19	7 a. m.	29.76	16	7 a. m.	28.80
Easton	29.60	19	7 a. m.	<i>e</i> 29.91	16	2 p. m.	28.92
Gettysburg	29.54	19	7 a. m.	29.85	16	7 a. m.	28.90
Harrisburg, [Heisely]	29.82	19	9 p. m.	30.13	16	2 p. m.	29.20
Harrisburg, [Hickok]	29.78	19	7 a. m.	30.12	16	7 a. m.	<i>l</i> 29.15
Lewisburg	29.61	27	7 a. m.	29.96	16	2 p. m.	28.98
Morrisville	30.09	20	7 a. m.	30.42	16	2 p. m.	29.40
Mount Joy ( <i>i</i> )	29.76	20	7 a. m.	<i>f</i> 30.40	16	7 a. m.	29.10
Murrysville	28.89	19	7 a. m.	29.22	16	7 a. m.	28.45

\* For hours of observation, &amp;c., see thermometer tables.

*a* Same height at 9 a. m. on the 27th.*b* Maximum and minimum not corrected for temperature.*c* Same height at 2 p. m. on the 23d.*d* Same height at 9 p. m. on the 27th.*e* Same height at 7 a. m. on the 27th.*f* Same height at 9 p. m. on the 19th.*g* Same height at 7 a. m. on the 20th.*h* Same height at 2 p. m. on the 19th, and at 7 a. m. and 2 p. m. on the 27th.*i* Not corrected for temperature.*j* Observations omitted from the 19th to the 24th, inclusive.*k* Same height at 2 p. m. and 9 p. m. on the 19th.*l* Same height at 2 p. m. on the 16th.

## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Norristown.....	29.97	18	9 p. m.	30.39	16	2 p. m.	29.28
Philadelphia.....	29.92	20	7 a. m.	30.22	16	2 p. m.	29.34
Pittsburg, [Marine Hospital].....	29.01	19	7 a. m.	29.34	16	2 p. m.	28.60
Pittsburg, [Oakland Station].....	28.94	19	7 a. m.	29.26	16	7 a. m.	28.51
Somerset.....	27.73	20	7 a. m.	28.02	16	7 a. m.	27.28
Westtown.....	29.48	19	9 p. m.	29.79	16	2 p. m.	28.80
Maryland.....Annapolis.....	30.08	19	7 a. m.	30.40	16	7 a. m.	29.45
Baltimore.....	29.99	18	2 p. m.	30.38	16	7 a. m.	29.33
Chestertown.....	30.12	19	7 a. m.	30.46	16	7 a. m.	29.48
Frederick.....	29.80	19	7 a. m.	30.12	16	7 a. m.	29.17
Dist. of Columbia.....Washington.....	30.04	19	7 a. m.	30.36	16	7 a. m.	29.42
Virginia.....Portsmouth.....	30.07	18	9 p. m.	30.42	16	7 a. m.	29.38
North Carolina.....Ashville.....	27.97	19	7 a. m.	28.30	16	7 a. m.	27.56
Chapel Hill.....	29.64	18	7 a. m.	29.98	15	7 a. m.	29.11
Davidson College.....	29.19	19	7 a. m.	29.50	16	7 a. m.	28.73
Murfreesborough.....	29.24	19	7 a. m.	a 29.63	16	2 p. m.	28.77
South Carolina.....All Saints.....	30.04	19	2 p. m.	30.34	15	9 p. m.	29.44
Charleston, [Dawson].....				30.51			29.65
Columbia.....	28.85	19	7 a. m.	29.12	15	9 p. m.	28.48
St. John's (b).....	30.19	19	2 p. m.	30.52	15	9 p. m.	29.52
Georgia.....Athens.....	29.35	16	7 a. m.	29.68	15	9 p. m.	28.97
Augusta.....	29.98	20	9 p. m.	30.18	9	2 p. m.	29.65
Savannah.....	30.09	19	7 a. m.	30.37	15	9 p. m.	29.55
Florida.....Atsena.....	29.84	19	9 p. m.	30.03	15	11½ a. m.	29.40
Jacksonville.....	30.09	19	7 a. m.	30.33	15	2 p. m.	29.67
St. Augustine.....	30.16	18	2 p. m.	c 30.33	15	2 p. m.	29.76
Salt Ponds (d).....	29.67	24	2 p. m.	e 29.78	16	7 a. m.	29.54
Mississippi.....Columbus.....	29.87	19	7 a. m.	30.22	15	2 p. m.	29.62
Natchez.....	29.59	19	7 a. m.	f 29.85	15	7 a. m.	29.34
Paulding.....	29.73	18	9 p. m.	30.05	15	2 p. m.	29.50
Texas.....Goliad.....	30.02	19	7 a. m.	g 30.23	6	2 p. m.	29.81
New Braunfels (d).....	27.68	20	7 a. m.	27.85	2	2 p. m.	27.48
Tennessee.....Glenwood.....	29.62	19	7 a. m.	30.21	2	2 p. m.	h 29.35
Memphis.....	29.81	18	7 a. m.	30.14	2	9 p. m.	29.57
Kentucky.....Bardstown (b).....	30.10	20	7 a. m.	30.42	15	2 p. m.	29.81
Louisville.....	29.57	19	7 a. m.	a 29.91	15	3 p. m.	29.25
Paris.....	29.25	19	7 a. m.	29.58	15	9 p. m.	i 28.95
Springdale.....	29.48	18	7 a. m.	29.82	14	9 p. m.	29.18
Ohio.....Bowling Green.....	29.28	18	7 a. m.	29.59	2	9 p. m.	28.88
Cincinnati, [Harper].....	29.53	18	7 a. m.	a 29.86	15	2 p. m.	29.22
Cleveland (b).....	29.04	18	7 a. m.	j 29.31	16	7 a. m.	28.70
Dayton.....	29.14	18	7 a. m.	29.46	15	9 p. m.	28.85
Hillsborough.....	28.90	19	7 a. m.	29.24	2	2 p. m.	28.55
Lancaster (b).....	28.90	19	7 a. m.	29.21	16	7 a. m.	28.52
Medina.....	28.75	18	2 p. m.	29.03	16	9 p. m.	i 28.42
New Lisbon (d).....	28.70	18	7 a. m.	k 29.00	16	7 a. m.	28.30
Northwood.....	28.84						
Ripley.....	29.46	19	7 a. m.	29.80	15	9 p. m.	29.14
Savannah.....	28.95	19	7 a. m.	29.25	16	7 a. m.	28.59
Urbana.....	28.95	18	7 a. m.	29.26	15	2 p. m.	i 28.63
Westerville.....	28.93	18	7 a. m.	29.24	16	7 a. m.	28.60
Michigan.....Battle Creek.....	29.14	26	7 a. m.	29.14	4	2 p. m.	l 28.86
Detroit.....	28.92	18	7 a. m.	m 29.17	5	9 p. m.	28.54
Marquette.....	29.28	25	7 a. m.	29.66	2	7 a. m.	28.73
New Buffalo.....	29.33	26	7 a. m.	29.64	2	1 p. m.	29.02
Ottawa Point.....	29.48						
Thunder Bay Island.....	29.39	26	9 a. m.	29.78	4	3 p. m.	28.96

a Same height at 7 a. m. on the 20th.

b Aneroid.

c Same height at 9 p. m. on the 19th and 20th.

d Not corrected for temperature.

e Same height at 2 p. m. on the 27th.

f Same height at 9 p. m. on the 19th, and at 7 a. m. and 2 p. m. on the 20th.

g Same height at 9 p. m. on the 19th.

h Same height at 2 p. m. on the 15th.

i Same height at 7 a. m. on the 16th.

j Same height at 7 a. m. on the 19th and 27th.

k Same height at 7 a. m. and at 2 p. m. on the 19th.

l Same height at 9 p. m. on the 4th.

m Same height at 7 a. m. on the 26th and 27th.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Indiana.....	Cannelton.....	29.69	19 7 a. m.	30.04	15 2 p. m.		29.36
	Evansville.....	28.90	20 7 a. m.	29.21	2 9 p. m.		28.61
	Madison.....	29.53	18 7 a. m.	29.84	15 9 p. m.		29.24
	Michigan City.....	29.27	26 7 a. m.	29.54	2 2 p. m.		28.95
	New Harmony.....	29.72	19 7 a. m.	29.98	2 2 p. m.		29.44
Illinois.....	Athens.....	29.43	20 7 a. m.	29.74	2 7 a. m.		29.18
	Batavia, [Capon] (a).....	29.22	26 2 p. m.	29.49	2 7 a. m.		28.84
	Batavia, [Mead].....	29.15	25 7 a. m.	<i>b</i> 29.40	2 7 a. m.		28.85
	Manchester.....	28.85	20 7 a. m.	29.14	2 1 p. m.		28.58
	Upper Alton.....	29.48	20 7 a. m.	29.79	2 2 p. m.		29.22
	West Urbana.....	29.27	19 2 p. m.	29.69	2 9 p. m.		28.99
	Wheaton.....	29.25	21 7 a. m.	29.52	2 7 a. m.		28.90
Missouri.....	St. Louis.....	29.57	20 7 a. m.	30.18	2 2 p. m.	<i>c</i>	29.30
Wisconsin.....	Appleton.....	28.93	25 7 a. m.	29.28	15 2 p. m.		28.59
	Beloit.....	29.18	26 7 a. m.	29.50	2 7 a. m.		28.81
	Kenosha (d).....	29.58	24 7 a. m.	29.90	1 7 a. m.		29.21
	Manitowoc (e).....	29.73	26 7 a. m.	30.07	2 7 a. m.		29.33
	Milwaukee, [Winkler].....	29.30	25 7 a. m.	29.63	4 7 a. m.		28.97
	Waukesha.....	29.16	25 7 a. m.	29.47	5 2 p. m.		28.75
Iowa.....	Border Plains.....	28.75	21 7 a. m.	29.11	5 2 p. m.		28.44
	Dubuque.....	29.32	25 7 a. m.	29.68	2 7 a. m.		28.96
	Fairfield.....	28.72	10 2 p. m.	29.31	29 2 p. m.		28.21
	Muscatine.....	29.52	20 9 p. m.	29.85	2 7 a. m.		29.21
Kansas.....	Lawrence.....	29.11	20 7 a. m.	29.45	1 9 p. m.		28.78
	Leavenworth City, [McCarty].....	28.64	20 7 a. m.	<i>f</i> 28.89	2 2 p. m.		28.43
Utah.....	Great Salt Lake City.....	25.68		26.00			25.05
Mexico.....	Cordova.....	27.12	19 9 a. m.	27.29	5 6 p. m.		27.00
	Minatitlan.....	29.85	12 3 p. m.	29.96	26 3 p. m.		29.76
	Mirador.....	22.87					
	Vera Cruz.....	30.14	19 8 a. m.	30.41	6 4 p. m.		30.00
California.....	Sacramento.....	29.91	20 7 a. m.	30.12	5 9 p. m.		29.63
	San Francisco.....	29.85	26 7 a. m.	30.03	5 9 p. m.		29.63
West Indies.....	Centre Signal Station, Bermuda (g).....	29.98	25 Noon.	30.10	23 Noon.		29.65
	Nassau, Bahamas.....	30.09	18	<i>h</i> 30.16	15		<i>i</i> 30.03
	Turk's Island, Bahamas.....	29.89	5 Noon.	29.96	29 6 a. m.	<i>j</i>	29.80
Central America.....	Guatemala.....	25.24		25.32			25.15
South America.....	Catharina Sophia, Surinam (a).....	29.80	8 2 p. m.	29.90	24 6 p. m.		29.69
	Catharina Sophia, Surinam.....	29.91	9 6 a. m.	30.04	29 6 a. m.		29.80
Eastern Continent.....	Jerusalem, Palestine (a).....	27.50	26 7 a. m.	27.66	14 2 p. m.	<i>k</i>	27.42

*a* Aneroid.*b* Same height at 7 a. m. on the 26th.*c* Same height at 2 p. m. on the 30th.*d* Incomplete.*e* Not corrected for temperature.*f* Same height at 7 a. m. on the 21st.*g* For 21 days only.*h* Same height on the 24th.*i* Same height on the 16th and 17th.*j* Same height at 6 a. m. on the 19th, 20th, and 21st.*k* Same height at 9 p. m. on the 14th.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.71	16	9 a. m.	30.03	7	9 a. m.	29.05
Montreal .....	30.03	16	7 a. m.	30.47	7	7 a. m.	29.33
Moose Factory (a) .....	29.84			30.72			28.60
St. John's .....	29.42	18	2 p. m.	29.96	4	7 a. m.	<sup>b</sup> 28.85
St. Martin .....	29.98	28	10 p. m.	30.28	31	6 a. m.	29.17
Toronto .....	29.68	16	6 a. m.	30.01	7	2 p. m.	29.07
Windsor .....	29.94	17	9 p. m.	30.57	2	2 p. m.	29.22
Wolfville .....	29.42	18	2 p. m.	29.96	4	7 a. m.	<sup>b</sup> 28.85
Maine .....							
Gardiner .....	29.89	17	7 a. m.	<sup>c</sup> 30.42	4	7 a. m.	29.32
Perry .....	29.97	17	7 a. m.	30.63	8	7 a. m.	29.29
Portland .....	29.96	17	7 a. m.	30.55	4	2 p. m.	29.37
Stenben .....	29.97	17	7 a. m.	30.60	8	7 a. m.	29.27
New Hampshire .. Shelburne .....	29.85	17	7 a. m.	30.30	8	2 p. m.	29.28
Vermont .....							
Burlington .....	29.68	16	2 p. m.	<sup>d</sup> 30.12	7	2 p. m.	28.97
Norwich (e) .....	29.74	17	7 a. m.	30.15	7	7 a. m.	29.15
St. Johnsbury .....	29.44	17	7 a. m.	29.91	8	7 a. m.	28.82
Massachusetts .. Amherst .....	29.66	16	7 a. m.	30.07	1	2 p. m.	29.19
Bridgewater .....	29.87	17	7 a. m.	30.37	4	7 a. m.	29.37
Cambridge .....	30.01	17	7 a. m.	30.54	7	7 a. m.	29.39
Lawrence .....	29.93	17	7 a. m.	30.47	7	9 p. m.	29.33
Nantucket .....	30.05	17	7 a. m.	30.56	7	9 p. m.	29.35
New Bedford .....	29.96	17	7 a. m.	30.48	1	9 p. m.	29.41
Westfield .....	29.94	17	7 a. m.	30.48	7	9 p. m.	29.36
Williamstown .....	29.36	17	7 a. m.	29.74	7	2 p. m.	28.79
Worcester .....	29.51	17	9 p. m.	30.29	7	9 p. m.	28.91
Rhode Island .. Providence .....	29.95	17	6 a. m.	30.48	7	10 p. m.	29.38
Connecticut .....							
Middletown .....	29.90	17	7 a. m.	30.36	7	9 p. m.	29.30
Pomfret .....	29.44	17	7 a. m.	29.93	7	9 p. m.	28.86
Wallingford .....	29.95	17	7 a. m.	30.44	7	9 p. m.	29.36
New York .....							
Bellport .....	29.34	17	7 a. m.	29.72	7	9 p. m.	28.86
Buffalo .....	29.40	16	8 a. m.	29.75	7	8 a. m.	28.80
Cazenovia .....	28.64	18	7 a. m.	28.99	7	2 p. m.	28.03
Fishkill Landing (f) .....	30.34	17	7 a. m.	30.75	7	2 p. m.	<sup>g</sup> 29.80
Flatbush .....	29.98	17	7 a. m.	30.47	7	2 p. m.	29.43
Fort Edward .....	29.91	16	7 a. m.	30.32	7	2 p. m.	29.32
New York city .....	30.08	17	7 a. m.	30.52	7	2 p. m.	29.50
Rochester .....	29.42	16	7 a. m.	<sup>d</sup> 29.77	7	7 a. m.	28.78
Sag Harbor .....	29.75	17	7 a. m.	30.23	7	9 p. m.	29.20
Waterford .....	30.00	16	7 a. m.	30.40	7	2 p. m.	29.40
New Jersey .....							
Lambertville .....	30.08	17	7 a. m.	30.50	7	2 p. m.	29.58
Newark .....	30.02	17	7 a. m.	30.46	7	9 p. m.	29.49
Pennsylvania .. Bedford .....	29.18	18	7 a. m.	29.55	7	2 p. m.	28.72
Berwick (f) .....	29.40	17	7 a. m.	<sup>h</sup> 29.83	7	2 p. m.	28.83
Cannonsburg .....	28.86	17	7 a. m.	29.23	7	2 p. m.	28.44
Carlisle .....	29.29	17	7 a. m.	29.64	7	2 p. m.	28.72
Chambersburg .....	29.41	17	7 a. m.	29.80	7	2 p. m.	28.84
Easton .....	29.62	17	7 a. m.	30.05	7	2 p. m.	29.07
Gettysburg .....	29.54	17	7 a. m.	29.94	7	2 p. m.	28.99
Harrisburg, [Heisely] .....	29.82	18	7 a. m.	30.22	7	2 p. m.	29.27
Harrisburg, [Hickok] .....	29.78	18	7 a. m.	30.21	7	2 p. m.	29.19
Lewisburg .....	29.61	17	7 a. m.	30.01	7	2 p. m.	28.99
Morrisville .....	30.11	17	7 a. m.	30.55	7	9 p. m.	29.55
Mount Joy (f) .....	29.73	18	7 a. m.	30.13	7	2 p. m.	29.16
Murrysville .....	28.88	17	7 a. m.	29.26	7	7 a. m.	<sup>i</sup> 29.46
Norristown .....	29.98	18	7 a. m.	30.45	7	2 p. m.	29.39
Philadelphia .....	29.92	18	7 a. m.	30.32	7	2 p. m.	29.38
Pittsburg, [Marine Hospital] .....	29.00	17	7 a. m.	29.36	7	7 a. m.	28.59

\* For hours of observation, &amp;c., see thermometer tables.

<sup>a</sup> Maximum and minimum not corrected for temperature.<sup>b</sup> Same height at 9 p. m. on the 4th.<sup>c</sup> Same height at 2 p. m. on the 17th.<sup>d</sup> Same height at 9 p. m. on the 16th.<sup>e</sup> Incomplete.<sup>f</sup> Not corrected for temperature.<sup>g</sup> Same height at 9 p. m. on the 7th.<sup>h</sup> Same height at 7 a. m. on the 18th.<sup>i</sup> Same height at 2 p. m. on the 7th.



## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania . . . . . Somerset . . . . .	27.72	18	7 a. m.	28.08	7	2 p. m.	27.32
Westtown . . . . .	29.48	17	7 a. m.	a 29.91	1	2 p. m.	29.07
Maryland . . . . . Annapolis . . . . .	30.09	17	7 a. m.	a 30.51	7	2 p. m.	29.59
Baltimore . . . . .	30.01	17	7 a. m.	30.46	7	2 p. m.	29.46
Chestertown . . . . .	30.06	17	7 a. m.	a 30.50	7	2 p. m.	29.52
Frederick . . . . .	29.81	18	7 a. m.	30.24	7	2 p. m.	29.25
Dist. of Columbia. Washington . . . . .	30.06	17	7 a. m.	a 30.46	7	2 p. m.	29.52
Virginia . . . . . Portsmouth . . . . .	30.07	17	7 a. m.	30.48	7	9 p. m.	29.61
North Carolina. Asheville . . . . .	27.91	17	7 a. m.	b 28.20	8	9 p. m.	27.64
Chapel Hill . . . . .	29.60	18	7 a. m.	30.05	7	2 p. m.	29.28
Davidson College . . . . .	29.16	17	7 a. m.	29.55	7	2 p. m.	28.83
Goldsborough . . . . .	30.04	17	7 a. m.	30.46	7	9 p. m.	29.66
Murfreesborough . . . . .	29.33	17	7 a. m.	29.75	8	2 p. m.	28.86
South Carolina . . . . . All Saints . . . . .	30.03	17	2 p. m.	30.37	23	7 a. m.	29.77
Charleston, [Dawson] . . . . .				30.54			30.00
Charleston, [Johnson] . . . . .	30.12	17	7 a. m.	30.44	7	9 p. m.	29.87
Columbia . . . . .	28.86	17	7 a. m.	c 29.18	7	2 p. m.	28.61
St. John's (d) . . . . .	30.18	17	2 p. m.	30.56	8	9 p. m.	29.91
Georgia . . . . . Athens . . . . .	29.34			?	7	2 p. m.	29.12
Augusta . . . . .	30.09	10	2 p. m.	30.38	29	2 p. m.	29.80
Savannah . . . . .	30.08	16	7 a. m.	30.39	22	2 p. m.	29.76
Florida . . . . . Atsena . . . . .	29.89	16	9 p. m.	30.02	22	2 p. m.	29.58
Jacksonville . . . . .	30.08	17	7 a. m.	30.34	22	2 p. m.	29.87
St. Augustine . . . . .	30.12	17	7 a. m.	30.38	22	2 p. m.	29.84
Salt Ponds (e) . . . . .	29.65	29	2 p. m.	29.80	22	7 a. m.	29.44
Alabama . . . . . Greensborough . . . . .	29.67						
Mississippi . . . . . Columbus . . . . .	29.84	18	7 a. m.	30.16	25	2 p. m.	29.57
Natchez . . . . .	29.51	15	7 a. m.	f 29.75	27	7 a. m.	29.15
Paulding . . . . .	29.72	17	7 a. m.	30.20	24	2 p. m.	29.45
Texas . . . . . Goliad . . . . .	29.92	19	9 p. m.	g 30.09	26	2 p. m.	29.53
New Braunfels (e) . . . . .	27.68	19	9 p. m.	h 27.80	26	2 p. m.	27.49
Washington . . . . .	29.63	14	7 a. m.	i 29.79	18	9 p. m.	29.38
Tennessee . . . . . Glenwood . . . . .	29.58	17	7 a. m.	29.91	25	2 p. m.	29.29
Memphis . . . . .	29.81	17	9 p. m.	30.06	24	9 p. m.	29.40
Kentucky . . . . . Bardstown (d) . . . . .	30.05	17	7 a. m.	a 30.40	25	2 p. m.	a 29.85
Louisville . . . . .	29.55	17	7 a. m.	29.90	4	2 p. m.	29.31
Paris . . . . .	29.21	18	7 a. m.	29.57	8	2 p. m.	28.97
Springdale . . . . .	29.45	17	7 a. m.	a 29.78	4	2 p. m.	29.22
Ohio . . . . . Avon . . . . .	29.18	17	2 p. m.	29.39	28	7 a. m.	28.94
Bowling Green . . . . .	29.27	18	7 a. m.	29.56	7	7 a. m.	28.92
Cincinnati, [Harper] . . . . .	29.51	17	7 a. m.	a 29.85	6	9 p. m.	29.26
Cleveland (d) . . . . .	29.05	18	7 a. m.	29.34	7	7 a. m.	28.59
Dayton . . . . .	29.13	17	7 a. m.	29.45	6	9 p. m.	28.88
Hillsborough . . . . .	28.87	17	7 a. m.	29.24	6	9 p. m.	28.58
Hudson . . . . .	28.85	17	7 a. m.	29.20	8	7 a. m.	28.40
Lancaster (d) . . . . .	28.87	18	7 a. m.	29.25	8	2 p. m.	28.51
Medina . . . . .	28.74	10	7 a. m.	29.06	7	7 a. m.	28.27
Montville . . . . .	28.72	17	7 a. m.	29.07	23	7 a. m.	28.02
New Lisbon (e) . . . . .	28.68	18	7 a. m.	j 29.00	7	7 a. m.	28.28
Northwood . . . . .	28.80	17	7 a. m.	29.16	8	2 p. m.	28.41
Ripley . . . . .	29.44	17	7 a. m.	29.81	7	7 a. m.	29.20
Savannah . . . . .	28.93	18	7 a. m.	29.26	7	7 a. m.	28.49
Urbana . . . . .	28.94	17	7 a. m.	a 29.24	7	7 a. m.	28.66
Westerville . . . . .	28.92	18	7 a. m.	29.25	7	7 a. m.	28.58
Michigan . . . . . Battle Creek . . . . .	29.12	19	2 p. m.	29.35	3	2 p. m.	28.68
Detroit . . . . .	28.90	17	7 a. m.	29.13	7	2 p. m.	28.47
Fort Gratiot . . . . .	29.54						
Marquette . . . . .	29.38	24	7 a. m.	29.68	2	9 p. m.	28.62

a Same height at 7 a. m. on the 18th.

b Same height at 2 and 9 p. m. on the 17th, and at 7 a. m. on the 18th.

c Same height at 9 p. m. on the 16th.

d Aneroid.

e Not corrected for temperature.

f Same height at 7 a. m. and 9 p. m. on the 17th, and at 7 a. m. on the 18th.

g Same height at 7 a. m. on the 14th, 20th, and 29th.

h Same height at 7 a. m. on the 20th and 29th.

i Same height at 7 a. m. on the 15th.

j Same height at 7 a. m., 2 and 9 p. m. on the 17th.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Michigan	New Buffalo	29.32	19	1 p. m.	29.57	11	1 p. m.	28.99
	Ottawa Point	29.41	25	9 a. m.	29.68	7	6 a. m.	28.85
	Thunder Bay Island	29.39	27	6 p. m.	29.72	3	3 p. m.	28.62
Indiana	Cannelton	29.67	17	7 a. m.	30.02	25	2 p. m.	29.44
	Madison	29.51	17	7 a. m.	29.89	3	9 p. m.	29.28
	Michigan City	29.23	10	7 a. m.	29.45	3	2 p. m.	28.92
	New Harmony	29.68	17	7 a. m.	29.96	25	2 p. m.	29.38
	Richmond, [Moore] (a)	29.04	18	7 a. m.	29.30	13	2 p. m.	28.79
Illinois	Athens	29.39	19	7 a. m.	29.70	11	2 p. m.	29.06
	Batavia, [Capon] (b)	29.07	19	7 a. m.	29.35	8	7 a. m.	c 28.83
	Batavia, [Mead]	29.15	19	2 p. m.	29.39	2	9 p. m.	28.83
	Manchester	28.82	19	7 a. m.	29.10	11	9 p. m.	28.54
	Upper Alton	29.45	19	7 a. m.	29.72	25	7 a. m.	29.14
	West Urbana	29.23	19	7 a. m.	29.48	4	7 a. m.	29.01
	Wheaton	29.22	19	7 a. m.	29.51	3	2 p. m.	28.87
Missouri	St. Louis	29.55	19	7 a. m.	29.81	25	7 a. m.	29.26
Wisconsin	Appleton	28.94	19	7 a. m.	29.20	11	7 a. m.	d 28.51
	Beloit	29.18	19	7 a. m.	29.44	2	9 p. m.	28.81
	Kenosha (e)	29.53	19	7 a. m.	29.85	11	9 p. m.	29.23
	Madison	29.05	1	9 p. m.	29.44	1	9 p. m.	28.55
	Manitowoc (f)	29.72	19	2 p. m.	g 30.00	2	9 p. m.	29.22
	Milwaukee, [Winkler]	29.30	19	7 a. m.	29.57	2	9 p. m.	28.88
	Waukesha	29.15	19	7 a. m.	29.41	2	2 p. m.	28.72
Iowa	Border Plain	28.72	18	9 p. m.	29.02	2	2 p. m.	28.31
	Dubuque	29.32	19	7 a. m.	29.62	2	2 p. m.	d 28.90
	Fairfield	28.02	7	7 a. m.	28.64	28	9 p. m.	27.43
	Muscatine	29.45	19	7 a. m.	29.75	3	2 p. m.	29.15
Kansas	Lawrence	29.04	19	7 a. m.	29.41			?
	Leavenworth City, [McCarty]	28.54	5	7 a. m.	28.69	25	2 p. m.	28.41
Utah	Great Salt Lake City	25.87			26.24			25.00
Mexico	Cordova	27.11	14	9 p. m.	27.20	26	3 p. m.	26.88
	Minatitlan	29.84	15	7 a. m.	29.95	26	3 p. m.	h 29.70
	Mirador	22.91						
	Vera Cruz	30.13	15	8 a. m.	30.26	26	2 p. m.	29.88
California	Sacramento	29.99	18	7 a. m.	30.32	21	9 p. m.	29.63
	San Francisco	29.92	17	7 a. m.	30.20	21	9 p. m.	29.51
West Indies	Centre Signal Station, Bermuda	29.93	30	Noon.	30.20	24	Noon.	29.00
	Nassau, Bahamas (i)	30.05	28		j 30.25	22		29.65
	Turk's Island, Bahamas	29.81	29	Noon.	30.21	21	6 a. m.	k 29.41
Central America	Guatemala	25.22			25.33			25.09
South America	Catharina Sophia, Surinam (b)	29.76	5	6 p. m.	29.82	30	6 p. m.	29.64
	Catharina Sophia, Surinam	29.86	19	6 a. m.	l 29.94	30	6 p. m.	29.79
East'n Continent	Jerusalem, Palestine (b)	27.55	3	7 a. m.	m 27.61	15	2 p. m.	n 27.46

a For the last 29 days of the month.

b Aneroid.

c Same height at 9 p. m. on the 6th.

d Same height at 2 p. m. on the 3d.

e Incomplete.

f Not corrected for temperature.

g Same height at 2 p. m. on the 19th.

A Same height at 7 a. m. on the 27th.

i Mean obtained from daily maximum and minimum.

j Same height on the 29th.

k Same height at 6 p. m. on the 21st.

l Same height at 6 a. m. on the 21st.

m Same height at 7 a. m. on the 9th.

n Same height at 9 p. m. on the 13th and 14th.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America							
Hamilton	29.60	1	9 a. m.	<i>a</i> 29.93	29	9 p. m.	29.20
Montreal	29.90	2	7 a. m.	30.46	30	7 a. m.	29.53
Moose Factory ( <i>b</i> )	29.88			30.70			29.40
Rigolet ( <i>c</i> )	29.66	2	Sunset.	<i>d</i> 30.35	18	Sunrise	<i>e</i> 28.52
St. John's	29.25	4	7 a. m.	29.77	29	9 p. m.	28.77
St. Martin	29.78	2	6 a. m.	30.30	30	6 a. m.	29.42
Toronto	29.63	1	10 p. m.	29.97	29	10 p. m.	29.25
Windsor	29.72	4	7 a. m.	30.40	17	7 a. m.	29.18
Wolfville	29.62	3	7 a. m.	30.27	18	9 p. m.	29.08
Maine							
Gardiner	29.75	3	7 a. m.	30.31	17	7 a. m.	29.36
Perry	29.76	3	7 a. m.	30.35	17	7 a. m.	29.24
Portland	29.80	3	7 a. m.	30.39	16	9 p. m.	29.43
Steuben	29.78	3	9 p. m.	30.44	17	7 a. m.	29.29
New Hampshire							
Shelburne	29.67	3	7 a. m.	30.22	17	2 p. m.	29.33
Vermont							
Burlington	29.56	2	7 a. m.	30.06	30	7 a. m.	29.23
Norwich ( <i>f</i> )	29.56	2	7 a. m.	30.04	24	7 a. m.	29.27
Massachusetts							
Amherst	29.66	2	9 p. m.	30.14	23	2 p. m.	29.23
Bridgewater	29.70	2	7 p. m.	30.17	23	7 p. m.	29.24
Cambridge	29.85	2	9 p. m.	30.37	23	2 p. m.	29.44
Lawrence	29.76	2	9 p. m.	30.30	24	2 p. m.	<i>g</i> 29.41
Nantucket	29.86	2	7 a. m.	<i>h</i> 30.29	23	2 p. m.	29.25
New Bedford	29.79	3	7 a. m.	<i>h</i> 29.25	23	2 p. m.	29.28
Westfield	29.80	2	7 a. m.	<i>i</i> 30.25	23	2 p. m.	29.41
Williamstown	29.28	3	7 a. m.	29.61	23	2 p. m.	28.75
Worcester	29.34	2	9 p. m.	29.83	23	9 p. m.	28.98
Rhode Island							
Providence	29.77	2	Sunrise.	30.26	23	1 p. m.	29.30
Connecticut							
Middletown	29.73	2	9 p. m.	30.15	23	2 p. m.	29.22
Pomfret	29.26	2	9 p. m.	29.72	23	2 p. m.	28.77
Wallingford	29.81	2	7 a. m.	30.24	23	2 p. m.	29.27
New York							
Bellport	29.25	2	7 a. m.	<i>j</i> 29.52	23	2 p. m.	28.74
Buffalo	29.30	1	9 p. m.	29.64	23	2 p. m.	28.97
Cazenovia	28.50	2	7 a. m.	<i>k</i> 28.87	23	2 p. m.	28.21
Fishkill Landing ( <i>c</i> )	30.13	2	7 a. m.	<i>j</i> 30.50	23	2 p. m.	29.75
Flatbush	29.88	11	2 p. m.	30.24	23	7 a. m.	29.35
Fort Edward	29.74	2	7 a. m.	30.22	21	7 a. m.	29.32
New York city	29.92	2	9 p. m.	30.32	23	7 a. m.	29.44
Rochester	29.27	2	7 a. m.	29.58	13	2 p. m.	28.95
Sag Harbor	29.62	2	9 p. m.	30.00	28	9 p. m.	29.28
Waterford	29.88	2	7 a. m.	30.29	23	2 p. m.	29.54
New Jersey							
Lambertville	29.93	1	9 p. m.	30.26	23	7 a. m.	29.52
Newark	29.89	2	9 p. m.	30.21	23	7 a. m.	29.43
Pennsylvania							
Berwick ( <i>c</i> )	29.22	2	7 a. m.	<i>l</i> 29.58	23	7 a. m.	<i>m</i> 28.84
Cannonsburg	28.75	26	2 p. m.	<i>n</i> 29.06	28	2 p. m.	28.32
Carlisle	29.11	1	7 a. m.	29.42	28	9 p. m.	28.77
Chambersburg	29.28	1	2 p. m.	29.54	6	2 p. m.	29.02
Easton	29.47	2	7 a. m.	29.80	23	2 p. m.	29.08
Gettysburg	29.42	1	2 p. m.	<i>a</i> 29.67	28	9 p. m.	29.02
Harrisburg, [Heisely]	29.70	2	7 a. m.	<i>o</i> 29.97	28	9 p. m.	29.32
Harrisburg, [Hickok]	29.66	1	7 a. m.	29.94	28	9 p. m.	29.27
Lewisburg	29.48	1	7 a. m.	29.77	23	2 p. m.	29.13
Linden	29.48	27	7 a. m.	29.78	28	9 p. m.	29.09
Morrisville	29.99	11	7 a. m.	30.27	23	7 a. m.	29.50
Mount Joy ( <i>c</i> )	29.57	1	9 p. m.	29.88	28	9 p. m.	29.16
Murrysville	28.77	26	9 p. m.	29.08	28	2 p. m.	28.32
Norristown	29.86	1	9 p. m.	30.16	23	7 a. m.	29.44

\* For hours of observation, &amp;c., see thermometer tables.

- a* Same height at 9 p. m. on the 1st.  
*b* Maximum and minimum not corrected for temperature.  
*c* Not corrected for temperature.  
*d* Same height at sunrise on the 3d.  
*e* Same height at sunset on the 18th.  
*f* Incomplete.  
*g* Same height at 2 and 9 p. m. on the 23d.  
*h* Same height at 2 and 9 p. m. on the 2d.

- i* Same height at 9 p. m. on the 2d.  
*j* Same height at 2 p. m. on the 2d.  
*k* Same height at 7 a. m. on the 30th.  
*l* Same height at 7 a. m. and 2 and 9 p. m. on the 1st.  
*m* Same height at 9 p. m. on the 28th.  
*n* Same height at 9 p. m. on the 26th.  
*o* Same height at 7 a. m. and at 9 p. m. on the 1st.

## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
Pennsylvania . . . Philadelphia . . . . .	29.94	2	7 a. m.	23	7 a. m.
Pittsburg, [Marine Hospital] . . . . .	28.88	27	7 a. m.	28	2 p. m.
Somerset . . . . .	27.56	1	7 a. m.	28	9 p. m.
Westtown . . . . .	29.33	1	9 p. m.	23	7 a. m.
Maryland . . . . . Annapolis . . . . .	29.97	27	7 a. m.	28	9 p. m.
Baltimore . . . . .	29.88	27	7 a. m.	28	9 p. m.
Chestertown . . . . .	29.92	27	7 a. m.	29	9 p. m.
Frederick . . . . .	29.69	27	7 a. m.	28	9 p. m.
Leonardtown . . . . .	29.56	28	7 a. m.	24	7 a. m.
Dist. of Columbia . . . . . Washington . . . . .	29.95	27	7 a. m.	28	9 p. m.
Virginia . . . . . Portsmouth . . . . .	29.94	27	7 a. m.	29	7 a. m.
North Carolina . . . . . Chapel Hill . . . . .	29.52	26	9 p. m.	29	7 a. m.
Davidson College . . . . .	29.11	26	9 p. m.	28	9 p. m.
Goldsborough . . . . .	29.94	27	7 a. m.	29	7 a. m.
Murfreesborough . . . . .	29.32	27	7 a. m.	29	7 a. m.
South Carolina . . . . . All Saints . . . . .	29.96	27	7 a. m.	22	2 p. m.
Charleston, [Dawson] . . . . .					
Charleston, [Johnson] . . . . .	30.05	26	7 a. m.	22	9 p. m.
Columbia . . . . .	28.84	26	7 a. m.	28	9 p. m.
St. John's (e) . . . . .	30.05	26	2 p. m.	22	2 p. m.
Georgia . . . . . Savannah . . . . .	30.03	26	9 p. m.	22	2 p. m.
Florida . . . . . Atsena . . . . .	29.73	26	7 a. m.	30	7 a. m.
Jacksonville . . . . .	30.07	26	7 a. m.	22	7 a. m.
Salt Ponds (f) . . . . .	29.66	26	2 p. m.	21	7 a. m.
Alabama . . . . . Greensborough . . . . .	29.65	26	7 a. m.	22	7 a. m.
Mississippi . . . . . Columbus . . . . .	29.86	26	7 a. m.	21	9 p. m.
Natchez . . . . .	29.52	26	7 a. m.	21	2 p. m.
Paulding . . . . .	29.72	25	7 a. m.	21	9 p. m.
Texas . . . . . Goliad . . . . .	30.08	26	7 a. m.	21	7 a. m.
New Braunfels (f) . . . . .	27.81	8	9 p. m.	21	2 p. m.
Tennessee . . . . . Glenwood . . . . .	29.56	26	7 a. m.	22	7 a. m.
Memphis . . . . .	29.79	19	7 a. m.	22	7 a. m.
Kentucky . . . . . Bardstown (e) . . . . .	29.98	24	7 a. m.	20	2 p. m.
Louisville . . . . .	29.52	26	7 a. m.	22	2 p. m.
Paris . . . . .	29.16	26	7 a. m.	28	2 p. m.
Springdale . . . . .	29.39	26	7 a. m.	28	2 p. m.
Ohio . . . . . Avon . . . . .	29.03	26	9 p. m.	28	2 p. m.
Bowling Green . . . . .	29.21	26	9 p. m.	28	2 p. m.
Cincinnati, [Harper] . . . . .	29.45	26	2 p. m.	28	2 p. m.
Cleveland (e) . . . . .	28.95	26	2 p. m.	28	2 p. m.
College Hill . . . . .	28.84	19	2 p. m.	24	7 a. m.
Dayton . . . . .	29.12	26	7 a. m.	28	2 p. m.
Hillsborough . . . . .	28.78	26	7 a. m.	28	2 p. m.
Hudson . . . . .	28.76	26	2 p. m.	23	7 a. m.
Lancaster (e) . . . . .	28.76	26	9 p. m.	28	2 p. m.
Montville . . . . .	28.65	26	9 p. m.	28	2 p. m.
New Lisbon (f) . . . . .	28.56	26	9 p. m.	28	2 p. m.
Northwood . . . . .	28.78	19	2 p. m.	28	2 p. m.
Ripley . . . . .	29.37	30	9 p. m.	28	2 p. m.
Savannah . . . . .	28.85	26	9 p. m.	28	2 p. m.
Urbana . . . . .	28.84	26	9 p. m.	28	2 p. m.
Westerville . . . . .	28.84	26	2 p. m.	28	2 p. m.
Michigan . . . . . Battle Creek . . . . .	29.09	26	7 a. m.	22	9 p. m.
Detroit . . . . .	28.93	30	7 a. m.	23	7 a. m.
Lansing . . . . .	29.03	19	7 a. m.	23	7 a. m.
Marquette . . . . .	29.37	26	7 a. m.	29	7 a. m.
New Buffalo . . . . .	29.28	26	7 a. m.	28	7 a. m.

a Same height at 9 p. m. on the 28th.

b Same height at 2 p. m. on the 28th.

c Same height at 7 a. m. on the 27th.

d Same height at 2 p. m. on the 27th.

e Aneroid.

f Not corrected for temperature.

g Same height at 2 p. m. on the 26th.

h Same height at 9 p. m. on the 21st.

i Same height at 7 a. m. on the 28th.

j Same height at 9 p. m. on the 26th.

k Same height at 2 and 9 p. m. on the 26th.

l Same height at 2 p. m. on the 29th.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1858.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Michigan.....Ottawa Point.....	29.38	26	6 a. m.	<i>a</i> 29.73	29	6 p. m.	28.89
.....Thunder Bay Island.....	29.37	1	9 a. m.	<i>b</i> 29.71	29	6 p. m.	28.81
Indiana.....Cannelton.....	29.65	26	7 a. m.	29.65	22	2 p. m.	29.22
.....Madison.....	29.46	26	7 a. m.	29.84	28	2 p. m.	29.00
.....New Harmony.....	29.67	26	7 a. m.	30.06	28	7 a. m.	29.23
.....Notre Dame.....	29.20	26	7 a. m.	29.58	28	7 a. m.	28.78
.....Richmond, [Moore].....	28.95	26	7 a. m.	29.29	28	2 p. m.	28.50
Illinois.....Athens.....	29.40	18	9 p. m.	29.81	27	9 p. m.	29.00
.....Batavia, [Capon] ( <i>c</i> ).....	28.91	26	2 p. m.	29.33	28	7 a. m.	<i>d</i> 28.62
.....Batavia, [Mead].....	29.17	19	7 a. m.	29.53	28	7 a. m.	28.86
.....Manchester.....	28.82	19	7 a. m.	29.19	27	9 p. m.	28.47
.....Upper Alton.....	29.45	18	9 p. m.	29.82	2	7 a. m.	29.10
.....West Urbana.....	29.20	26	7 a. m.	29.57	12	9 p. m.	28.78
.....Wheaton.....	29.19	26	7 a. m.	29.57	28	7 a. m.	28.83
Missouri.....St. Louis.....	29.55	18	9 p. m.	29.24	2	7 a. m.	<i>e</i> 29.16
Wisconsin.....Appleton.....	29.00	26	7 a. m.	29.32	29	2 p. m.	28.57
.....Beloit.....	29.19	18	9 p. m.	29.55	28	7 a. m.	28.88
.....Kenosha ( <i>f</i> ).....	29.54	26	7 a. m.	29.93	28	7 a. m.	<i>g</i> 29.22
.....Madison.....	29.02	18	9 p. m.	29.39	29	7 a. m.	28.72
.....Manitowoc ( <i>h</i> ).....	29.74	18	9 p. m.	<i>i</i> 30.06	29	2 p. m.	29.28
.....Milwaukee, [Winkler].....	29.31	26	7 a. m.	29.67	29	2 p. m.	28.91
.....Waukesha.....	29.16	26	2 p. m.	29.45	12	9 p. m.	28.09
Iowa.....Border Plains.....	29.82	20	9 p. m.	29.50	18	9 p. m.	29.23
.....Dubuque.....	29.36	18	9 p. m.	29.75	28	7 a. m.	<i>j</i> 29.05
.....Fairfield.....	27.77	18	9 p. m.	28.22	2	2 p. m.	27.46
.....Muscatine.....	29.50	18	9 p. m.	29.87	28	2 p. m.	29.18
Minnesota.....Beaver Bay.....	29.23	15	9 p. m.	29.54	29	7 a. m.	28.57
.....Stillwater.....	29.32	18	9 p. m.	29.69	28	7 a. m.	28.93
Kansas.....Lawrence.....	29.14	18	7 a. m.	<i>k</i> 29.57	20	2 p. m.	28.79
.....Leavenworth City, [McCarty].....	28.69	18	7 a. m.	29.07	20	2 p. m.	28.44
Utah.....Great Salt Lake City.....	25.60						
Mexico.....Cordova.....	27.16	24	9 a. m.	27.39	21	3 p. m.	26.78
.....Minatitlan.....	29.91	24	7 a. m.	30.08	21	3 p. m.	29.60
.....Mirador.....	22.91						
.....Vera Cruz.....	30.24	25	9 a. m.	30.45	21	10 a. m.	29.92
California.....Sacramento.....	30.07	18	9 p. m.	30.26	30	2 p. m.	29.85
.....San Francisco.....	29.99	19	7 a. m.	30.17	30	2 p. m.	29.77
West Indies.....Central Signal Station, Bermuda ( <i>l</i> ).....	29.93	1	Noon.	<i>m</i> 30.15	12	Noon.	29.65
.....Nassau, Bahamas ( <i>n</i> ).....	30.11	27		30.28	16		29.97
.....Turk's Island, Bahamas.....	30.00	27	Noon.	30.14	17	6 a. m.	<i>o</i> 29.90
Central America.....Guatemala.....	25.26			25.38			25.09
South America.....Catharina Sophia, Surinam ( <i>c</i> ).....	29.69	2	6 a. m.	<i>p</i> 29.77	20	6 a. m.	29.60
.....Catharina Sophia, Surinam.....	29.85	11	6 a. m.	29.91	3	6 p. m.	<i>q</i> 29.79
.....Chanarcillo, Chili ( <i>f</i> ).....	26.13						
Eastern Continent.....Jerusalem, Palestine ( <i>c</i> ).....	27.66	21	2 p. m.	<i>r</i> 27.87	13	2 p. m.	27.44

*a* Same height at 9 a. m. on the 28th.*b* Same height at 3 p. m. on the 1st.*c* Aneroid.*d* Same height at 2 p. m. on the 28th.*e* Same height at 9 p. m. on the 1st.*f* Imperfect.*g* Same height at 2 p. m. on the 29th.*h* Not corrected for temperature.*i* Same height at 7 a. m. on the 26th.*j* Same height at 7 a. m. on the 29th.*k* Same height at 9 p. m. on the 18th.*l* For twenty-three days only.*m* Same height at noon on the 2d.*n* Mean obtained from daily maximum and minimum.*o* Same height at 6 a. m. and noon on the 16th, and 6 p. m. on the 15th and 16th.*p* Same height at 2 p. m. on the 10th.*q* Same height at 6 p. m. on the 26th.*r* Same height at 9 p. m. on the 21st, and at 2 and 9 p. m. on the 22d.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1858.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.68	25	9 a. m.	30.24	5	9 a. m.	29.08
Montreal .....	30.10	25	2 p. m.	30.73	22	7 a. m.	29.40
Moose Factory (a) .....	29.88			30.69			28.96
Rigolet (b) .....	29.76	30	Sunset.	30.42	23	Sunset.	28.50
St. John's .....	29.50	31	2 p. m.	30.12	28	9 p. m.	28.72
St. Martin .....	29.98	26	7 a. m.	30.55	22	7 a. m.	29.31
Toronto .....	29.69	25	6 a. m.	30.32	21	2 p. m.	29.01
Windsor .....	29.96	31	7 a. m.	30.62	22	2 p. m.	28.62
Wolfville .....	29.87	31	7 a. m.	30.65	22	2 p. m.	28.46
Maine .....							
Gardiner .....	29.91	25	9 p. m.	30.42	22	7 a. m.	28.97
Perry .....	29.98	13	7 a. m.	30.60	22	7 a. m.	28.85
Portland .....	30.02	12	9 p. m.	30.56	22	7 a. m.	29.07
Steuben .....	29.97	13	7 a. m.	30.58	22	7 a. m.	28.79
New Hampshire .. Shelburne .....	29.83	25	9 p. m.	30.28	22	2 p. m.	29.04
Vermont .....							
Burlington .....	29.74	25	2 p. m.	30.34	22	2 p. m.	29.23
Norwich (c) .....	29.77	12	9 p. m.	30.18	14	7 a. m.	29.27
St. Johnsbury .....	29.46	25	2 p. m.	30.06	22	7 a. m.	28.65
Massachusetts .. Amherst .....	29.88	25	9 p. m.	30.45	22	7 a. m.	29.03
Bridgewater .....	29.92	25	7 p. m.	30.43	22	7 a. m.	29.10
Cambridge .....	30.04	25	9 p. m.	30.63	22	9 p. m.	29.15
Danvers (b) .....	30.24	12	9 p. m.	30.72	22	7 a. m.	29.43
Lawrence .....	29.96	25	2 p. m.	d 30.50	22	7 a. m.	28.99
Nantucket .....	30.11	25	9 p. m.	30.61	22	7 a. m.	29.24
New Bedford .....	30.03	25	9 p. m.	30.56	22	7 a. m.	29.11
Westfield .....	30.01	25	9 p. m.	30.53	21	9 p. m.	29.31
Williamstown .....	29.34	25	9 p. m.	29.82	22	2 p. m.	28.70
Worcester .....	29.54	25	9 p. m.	30.09	22	7 a. m.	28.66
Rhode Island .. Providence .....	29.96	25	10 p. m.	30.48	21	10 p. m.	e 29.10
Connecticut .....							
Middletown .....	29.95	25	9 p. m.	30.50	21	9 p. m.	29.12
Pomfret .....	29.47	25	9 p. m.	30.00	22	7 a. m.	28.63
Wallingford .....	30.01	25	9 p. m.	30.58	21	9 p. m.	29.15
New York .....							
Bellport .....	29.42	25	2 p. m.	29.83	21	9 p. m.	28.73
Buffalo .....	29.39	25	8 a. m.	30.01	21	2 p. m.	28.75
Cazenovia .....	28.64	25	2 p. m.	29.14	21	9 p. m.	27.96
Fishkill Landing (b) .....	30.32	25	9 p. m.	30.85	21	9 p. m.	29.60
Flatbush .....	30.07	25	9 p. m.	30.61	21	9 p. m.	29.20
Fort Edward .....	29.95	25	2 p. m.	30.55	21	9 p. m.	29.21
New York city .....	30.13	25	2 p. m.	30.69	15	7 a. m.	29.65
Rochester .....	29.45	25	7 a. m.	30.07	21	7 a. m.	28.77
Sag Harbor .....	29.82	25	9 p. m.	30.32	21	9 p. m.	28.98
Waterford .....	30.08	25	7 a. m.	30.64	22	7 a. m.	29.39
New Jersey .....							
Lambertville .....	30.11	25	9 p. m.	30.67	21	9 p. m.	29.34
Newark .....	30.07	25	6 p. m.	30.61	21	6 p. m.	29.37
Pennsylvania .. Berwick (b) .....	29.38	25	2 p. m.	30.00	21	9 p. m.	28.67
Carlisle .....	29.26	10	7 a. m.	29.66	21	9 p. m.	28.54
Cannonsburg .....	28.86	25	7 a. m.	29.37	21	2 p. m.	28.21
Chambersburg .....	29.44	25	2 p. m.	29.97	21	9 p. m.	28.75
Easton .....	29.66	25	9 p. m.	30.19	21	9 p. m.	28.85
Gettysburg .....	29.60	25	2 p. m.	d 30.10	21	9 p. m.	28.84
Harrisburg, [Heisely] .....	29.86	25	9 p. m.	30.38	23	9 p. m.	29.12
Harrisburg, [Hickok] .....	29.84	25	7 a. m.	30.40	21	9 p. m.	29.06
Lewisburg .....	29.64	25	7 a. m.	30.20	21	9 p. m.	28.89
Linden .....	29.65	1	7 a. m.	30.02	21	9 p. m.	28.92
Morrisville .....	30.22	25	9 p. m.	30.72	21	9 p. m.	29.37
Mount Joy (b) .....	29.75	25	9 p. m.	30.24	21	9 p. m.	29.00
Murrysville .....	28.88	9	9 p. m.	29.45	21	2 p. m.	28.20
Norristown .....	30.02	25	9 p. m.	30.62	21	9 p. m.	29.18
Philadelphia .....	29.97	25	9 p. m.	30.46	21	9 p. m.	29.21
Pittsburg, [Marine Hospital] .....	28.99	25	2 p. m.	29.48	21	2 p. m.	28.34
Somerset .....	27.68	25	7 a. m.	28.06	21	2 p. m.	27.11
Westtown .....	29.53	25	9 p. m.	30.05	21	9 p. m.	28.77

\* For hours of observation, &amp;c., see thermometer tables.

a Maximum and minimum not corrected for temperature.

b Not corrected for temperature.

c Incomplete.

d Same height at 9 p. m. on the 25th.

e Same height at sunrise on the 22d.



## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Maryland	Annapolis	30.15	25	9 p. m.	30.66	21	2 p. m.	29.44
	Baltimore	29.86	10	7 a. m.	30.53	21	2 p. m.	29.30
	Chestertown	30.14	26	7 a. m.	30.77	21	2 p. m.	29.41
	Frederick	29.86	25	9 p. m.	30.39	21	2 p. m.	29.11
	Leonardtown (a)	29.71	25	9 p. m.	30.10	21	9 p. m.	29.05
Dist. of Columbia	Washington	30.12	25	9 p. m.	30.64	21	9 p. m.	29.39
Virginia	Point Pleasant (a)	29.36	9	7 a. m.	b 30.00	1	9 p. m.	c 29.00
	Portsmouth	30.13	25	9 p. m.	30.57	21	2 p. m.	29.35
North Carolina	Chapel Hill	29.68	25	9 p. m.	30.17	21	2 p. m.	28.97
	Davidson College	29.22	25	9 p. m.	29.67	21	2 p. m.	28.53
	Goldsborough	30.13	25	9 p. m.	30.60	21	2 p. m.	29.46
	Murfreesborough	29.46	10	7 a. m.	29.99	21	2 p. m.	28.75
South Carolina	All Saints	30.11	25	9 p. m.	30.52	21	2 p. m.	29.54
	Charleston, [Dawson]				30.67			29.81
	Charleston, [Johnson]	30.21	25	9 p. m.	30.59	21	2 p. m.	29.71
	Columbia	28.97	10	7 a. m.	d 29.30	21	2 p. m.	28.47
	St. John's (e)	30.25	25	2 p. m.	30.62	21	2 p. m.	29.74
Georgia	Savannah	30.15	10	7 a. m.	30.52	21	2 p. m.	29.67
Florida	Atsena	29.85	9	9 p. m.	f 30.05	29	2 p. m.	29.60
	Jacksonville	30.21	10	7 a. m.	f 30.46	21	2 p. m.	29.83
	St. Augustine	30.03	25	9 p. m.	30.25	21	2 p. m.	29.67
	Salt Ponds	29.77	26	2 p. m.	29.87	29	7 a. m.	29.60
Alabama	Greensborough	29.72			?			?
Mississippi	Columbus	29.92	9	7 a. m.	30.41	30	2 p. m.	29.42
	Natchez	29.57	9	2 p. m.	g 30.05	30	2 p. m.	29.12
	Paulding	29.82	9	9 p. m.	30.21	30	2 p. m.	h 29.54
Texas	Goliad	30.05	9	7 a. m.	30.61	29	2 p. m.	i 29.70
	New Braunfels (a)	27.81	9	7 a. m.	j 28.10	29	9 p. m.	27.63
	Washington	29.72	9	7 a. m.	30.31	29	9 p. m.	29.31
Tennessee	Glenwood	29.63	9	7 a. m.	30.17	30	2 p. m.	29.09
	Memphis	29.83	9	7 a. m.	30.42	30	2 p. m.	29.30
Kentucky	Bardstown (e)	30.02	9	7 a. m.	30.62	14	9 p. m.	29.00
	Louisville	29.59	9	7 a. m.	30.15	30	3 p. m.	29.04
	Paris	29.24	9	7 a. m.	29.76	21	7 a. m.	28.71
	Springdale	29.48	9	7 a. m.	30.01	30	9 p. m.	28.93
Ohio	Avon	29.11	7	7 a. m.	29.99	5	7 a. m.	28.59
	Bowling Green	29.28	25	7 a. m.	29.80	30	9 p. m.	28.69
	Cincinnati, [Harper]	29.57	9	2 p. m.	30.08	21	7 a. m.	29.00
	Cleveland (e)	29.03	25	7 a. m.	29.51	21	7 a. m.	28.52
	Hillsborough	28.86	9	7 a. m.	29.35	21	2 p. m.	28.31
	Hudson	28.86	25	7 a. m.	29.33	21	2 p. m.	28.27
	Lancaster (e)	28.85	25	7 a. m.	29.31	21	7 a. m.	28.31
	Montville	28.70	1	7 a. m.	29.50	21	2 p. m.	28.14
	New Lisbon (a)	28.67	25	7 a. m.	29.12	21	2 p. m.	28.10
	Northwood	28.80	25	7 a. m.	29.29	30	9 p. m.	28.32
	Ripley	29.48	9	7 a. m.	29.99	21	7 a. m.	28.91
	Savannah	28.91	24	9 p. m.	k 29.42	21	7 a. m.	l 28.34
	Urbana	28.92	9	2 p. m.	29.40	21	2 p. m.	28.41
	Westerville	28.91	25	7 a. m.	29.38	21	7 a. m.	28.36
Michigan	Battle Creek	29.12	9	2 p. m.	29.59	30	2 p. m.	28.57
	Detroit	29.03	25	7 a. m.	29.40	5	7 a. m.	28.46
	Lansing	29.04	9	2 p. m.	m 29.51	5	7 a. m.	28.44
	Marquette	29.30	24	7 a. m.	29.71	13	7 a. m.	28.66
	New Buffalo	29.32	24	9 p. m.	29.87	30	2 p. m.	28.64
	Ottawa Point	29.41	24	6 p. m.	29.94	5	9 a. m.	28.75
	Thunder Bay Island	29.39	24	3 p. m.	29.89	5	9 a. m.	28.67

a Not corrected for temperature.

b Same height at 2 and 9 p. m. on the 9th.

c Same height occurred 15 times during the month.

d Same height at 7 a. m. and 2 p. m. on the 25th.

e Aneroid.

f Same height at 9 p. m. on the 25th.

g Same height at 9 p. m. on the 9th.

h Same height at 9 p. m. on the 30th.

i Same height at 9 p. m. on the 29th.

j Same height at 2 p. m. on the 9th.

k Same height at 7 a. m. on the 25th.

l Same height at 2 p. m. on the 21st.

m Same height at 8 p. m. on the 9th.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Indiana	Cannelton	29.72	9	7 a. m.	30.31	30	2 p. m.	29.14
	Madison	29.53	5	2 p. m.	30.07	21	7 a. m.	29.00
	New Harmony	29.72	9	7 a. m.	30.30	30	2 p. m.	29.12
	Richmond, [Moore]	29.01	9	7 a. m.	29.47	20	7 a. m.	<sup>a</sup> 28.41
Illinois	Athens	29.43	5	7 a. m.	30.01	29	2 p. m.	28.95
	Batavia, [Capon] ( <i>b</i> )	28.95	24	2 p. m.	29.41	30	2 p. m.	28.47
	Batavia, [Mead]	29.19	9	7 a. m.	29.79	30	2 p. m.	28.53
	Manchester	28.84	9	7 a. m.	29.42	30	1 p. m.	28.29
	Upper Alton	29.47	8	7 a. m.	30.03	30	7 a. m.	28.52
	West Urbana	29.25	9	7 a. m.	29.77	30	2 p. m.	28.61
	Wheaton	29.21	9	7 a. m.	29.78	30	2 p. m.	28.45
	St. Louis	29.57	9	7 a. m.	30.17	30	7 a. m.	28.99
Missouri	St. Louis	29.57	9	7 a. m.	30.17	30	7 a. m.	28.99
Wisconsin	Appleton	29.00	9	7 a. m.	29.53	31	7 a. m.	28.61
	Beloit	29.19	9	7 a. m.	29.72	30	2 p. m.	28.36
	Kenosha ( <i>c</i> )	29.54	9	2 p. m.	30.07	30	2 p. m.	28.92
	Madison	29.02	9	7 a. m.	29.58	30	9 p. m.	28.22
	Manitowoc ( <i>d</i> )	29.71	9	2 p. m.	30.26	30	9 p. m.	28.89
	Milwaukee, [Winkler]	29.29	9	2 p. m.	29.83	30	2 p. m.	28.61
	Waukesha	29.13	9	7 a. m.	29.68	29	7 a. m.	<sup>e</sup> 28.81
	Border Plains	28.77	9	7 a. m.	29.29	12	2 p. m.	28.21
Iowa	Dubuque	29.33	9	7 a. m.	29.97	30	2 p. m.	28.61
	Fairfield	27.80	5	7 a. m.	28.37	29	2 p. m.	27.29
	Muscatine	29.56	9	7 a. m.	30.04	30	2 p. m.	28.97
	Beaver Bay	29.13	5	7 a. m.	29.61	30	9 p. m.	28.60
Minnesota	Beaver Bay	29.13	5	7 a. m.	29.61	30	9 p. m.	28.60
Nebraska	Gilbert's Trading Post	22.78	17	7 a. m.	23.13	5	2 p. m.	22.47
Kansas	Lawrence	29.11	9	7 a. m.	29.71	29	2 p. m.	28.68
	Leavenworth City	28.69	9	7 a. m.	29.15	12	2 p. m.	28.37
Mexico	Cordova	27.16	9	9 p. m.	27.41	30	3 p. m.	26.87
	Minatitlan	29.89	10	7 a. m.	30.10	30	3 p. m.	29.70
	Mirador	22.91						
	Vera Cruz	30.15	9	11 p. m.	30.48	30	1½ p. m.	29.72
California	Sacramento	30.11	7	9 p. m.	<sup>f</sup> 30.36	11	2 p. m.	29.79
	San Francisco	30.01	7	7 a. m.	30.26	11	2 p. m.	29.68
West Indies	Central Signal Station, Bermuda	30.08	14	Noon.	30.30	22	Noon.	29.80
	Nassau, Bahamas ( <i>g</i> )	30.19	6		30.27	28		30.06
	Turk's Island, Bahamas	30.10	10	Noon.	30.15	29	Noon.	<sup>h</sup> 30.03
Central America	Guatemala	25.26			25.38			25.12
South America	Catharina Sophia, Surinam ( <i>b</i> )	29.66	1	2 p. m.	29.73	4	6 p. m.	<sup>i</sup> 29.60
	Catharina Sophia, Surinam	29.86	26	6 a. m.	29.95	5	6 p. m.	<sup>j</sup> 29.79
	Chanarcillo, Chili ( <i>c</i> )	26.07						
Eastern Continent	Jerusalem, Palestine	27.65	26	2 p. m.	<sup>k</sup> 27.89	17	9 p. m.	27.39

<sup>a</sup> Same height at 7 a. m. on the 21st.<sup>b</sup> Aneroid.<sup>c</sup> Imperfect.<sup>d</sup> Not corrected for temperature.<sup>e</sup> Same height at 2 p. m. on the 30th.<sup>f</sup> Same height at 7 a. m. on the 8th.<sup>g</sup> Mean obtained from daily maximum and minimum.<sup>h</sup> Same height at 6 p. m. on the 29th.<sup>i</sup> Same height at 6 p. m. on the 5th.<sup>j</sup> Same height at 6 p. m. on the 4th.<sup>k</sup> Same height at 9 p. m. on the 26th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
BRITISH AMERICA—	°	°	°	°	°	°	°	°	°	°	°	°	
Fort Simpson (a).....	-----	-----	-----	-23.87	31	10	31	5.00	17	-46	17	-42.00	-----
Hamilton.....	31.90	-----	32.54	32.22	11	b 48	26	46.50	31	16	31	18.00	-----
Montreal.....	15.31	21.94	19.05	18.77	26	43	26	40.63	23	-13	23	-1.06	5.7
Moose Factory (c).....	-----	-----	-----	-9.00	-----	-----	-----	-----	-----	-----	-----	-----	-----
Red River Settlement.....	0.19	11.31	4.66	5.39	23	40	23	33.67	13	-21	13	-13.00	4.8
Rigolet (d).....	-2.45	-----	0.58	0.93	31	33	31	31.50	4	-25 e	8	-23.00	-----
St. John's.....	23.42	26.71	23.32	24.52	30	40	30	36.67	23	-7	23	-3.00	-----
St. Martin.....	7.19	21.53	12.96	13.89	26	43	26	38.30	23	-19	23	-7.70	4.5
Stanbridge.....	15.00	24.52	19.23	19.58	11	44	26	41.67	8	-13	8	-5.67	6.3
Toronto (f).....	29.00	33.35	28.47	30.27	26	46	26	42.82	31	7	30	17.37	6.1
Windsor.....	21.59	28.98	24.61	25.06	12	49	12	43.30	23	0	8	6.70	5.5
Wolfville.....	22.85	28.11	25.11	25.36	12	52	12	43.53	23	0	8	5.33	5.0
MAINE—													
Cornish, [Guptill].....	19.87	28.22	23.32	23.80	26	46	26	42.67	8	-2	8	3.33	4.8
Cornish, [West].....	17.90	25.74	21.23	21.62	4	g 42	26	40.33	8	-7	8	-1.00	4.3
East Exeter.....	12.90	24.71	18.90	18.84	27	45	26	36.67	8	-15	8	-5.00	4.8
Gardiner.....	16.10	27.34	21.97	21.80	27	45	26	36.67	8	-24	8	2.67	4.7
Monson.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.0
Perry.....	18.97	27.00	22.48	22.82	12	b 43	26	39.33	8	0	8	3.67	4.5
Portland.....	22.93	30.60	26.63	26.72	11	46	26	40.33	8	3	8	7.83	5.0
Steuben.....	17.81	27.52	23.06	22.80	27	48	26	38.33	8	0 e	8	3.33	5.8
NEW HAMPSHIRE—													
Claremont.....	19.06	31.63	24.19	24.96	4	48	26	39.33	8	-4	8	?	5.3
Concord.....	20.20	33.97	26.71	26.96	26	h 48	26	41.67	0	-6	8	8.00	4.6
Francestown, [Bixby].....	22.77	31.07	27.19	27.01	25	48	26	43.33	8	-4	31	11.67	4.5
Shelburne.....	17.39	30.23	23.61	23.74	4	49	4	41.00	23	-9	31	2.33	5.1
West Enfield.....	19.13	27.35	21.71	22.73	26	47	26	43.00	23	-4	8	4.00	5.3
VERMONT—													
Bradford.....	17.58	28.16	23.10	22.95	4	48	4	40.67	23	-6	23	j 3.33	-----
Brandon.....	20.51	28.63	23.68	24.27	26	47	26	43.67	8	-10	8	0.00	5.8
Burlington.....	20.21	25.73	23.74	23.23	26	48	26	44.67	22	-2	22	-0.33	5.5
Craftsbury.....	15.26	23.90	18.52	19.23	26	46	26	42.00	23	-9	31	-4.00	6.0
Rupert.....	25.23	31.60	27.81	28.21	4	46	11	42.00	8	-4	22	9.33	6.0
St. Johnsbury.....	13.16	24.65	17.00	18.27	4	43	26	37.67	8	-16	8	-4.00	6.0
MASSACHUSETTS—													
Amherst.....	24.53	33.86	28.40	28.93	25	51	26	44.30	8	0	8	6.90	4.9
Bridgewater (k).....	31.90	37.94	33.31	34.38	16	53	16	50.75	0	5	8	11.42	5.2
Cambridge.....	26.68	36.71	30.94	31.44	26	57	26	49.00	8	4	8	9.00	4.8
Canton.....	24.84	36.52	29.61	30.32	16	56	16	47.67	8	2	8	7.33	5.2
Florida.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.2
Lawrence.....	24.69	33.53	28.89	29.04	11	54	26	46.00	9	2	8	7.00	4.1
Mendon.....	26.38	33.61	28.61	29.53	27	48	26	45.33	8	4	8	8.67	4.2
Nantucket.....	35.74	40.59	36.85	37.73	16	54	16	50.17	8	18	8	20.50	4.8
New Bedford.....	30.76	38.58	33.03	34.12	16	54	26	47.80	8	8	8	16.67	5.8
Newburyport (l).....	28.42	38.75	31.69	32.95	27	57	26	51.50	8	8 m	8	11.00	?
Richmond.....	23.90	32.87	26.71	27.83	26	50	26	47.33	8	-2	8	5.00	5.7
Westfield.....	26.26	34.71	28.81	29.93	26	50	4	43.00	8	0	8	10.00	4.8
Williamstown.....	25.06	31.22	26.70	27.66	26	48	26	44.30	8	-2	8	4.00	5.8
Worcester.....	28.33	36.77	30.33	31.91	25	54	25	47.67	8	7	8	10.67	5.0
RHODE ISLAND—													
Providence (n).....	29.40	38.30	31.70	33.13	26	57	26	49.00	8	6	8	10.67	4.5
CONNECTICUT—													
Columbia.....	28.16	37.48	28.36	31.33	11	o 52	26	47.00	8	0	8	10.00	5.5
New London.....	30.84	39.65	32.87	34.45	11	52	11	47.00	8	14	31	20.00	5.8
Norwich.....	27.94	38.65	32.97	33.19	26	56	16	50.00	23	4	8	10.67	3.9

a Register thermometer.

b Same temperature on the 26th.

c Observations taken at sunrise, 2 p. m., and 10 p. m.

d Observations taken at sunrise and sunset.

e Same temperature on the 23d.

f Observations taken at 6 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 26th and 27th.

h Same temperature on the 27th.

i Same temperature on the 4th.

j Same temperature on the 31st.

k Observations taken at 7 a. m., 2 p. m., and 7 p. m.

l Incomplete.

m Same temperature on the 9th.

n Observations taken at sunrise, 1 p. m., and 10 p. m.

o Same temperature on the 16th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	°		°		°	°	°	°	°	
Pomfret .....	26.67	33.70	28.84	29.74	16	52	26	46.00	8	5	8	10.50	4.8
Saybrook .....	31.10	37.23	32.81	33.71	11	49	11	46.33	8	10	8	15.33	5.4
Wallingford .....	27.18	38.39	30.85	32.14	11	52	11	44.33	8	3	8	12.00	4.8
NEW YORK—													
Baldwinsville .....	27.10	33.23	30.29	30.21	26	48	26	45.67	8	3	8	13.67	6.8
Bellport .....	32.69	38.71	33.52	34.97	27	50	11	46.33	23	14	8	16.33	4.4
Beverly .....	29.14	37.38	33.16	33.23	11	55	11	48.33	23	9	8	15.33	5.3
Buffalo (a) .....	32.67	37.26	34.06	34.66	25	55	25	50.33	31	20	31	22.22	6.2
Canton .....	12.77	28.19	22.10	21.02	11	b 52	26	47.00	8	—16	8	5.33	5.7
Cazenovia .....	24.84	30.74	27.74	27.77	11	48	26	43.33	8	8 c	31	11.00	7.0
Clinton .....	27.48	37.10	27.58	30.72	25	55	25	47.33	8	—3	8	8.00	6.8
Covert .....	26.45	34.55	28.77	29.92	4	d 48	26	44.33	31	8	31	11.00	7.0
Fishkill Landing .....	29.84	38.65	32.71	33.73	11	54	11	48.67	23	9	8	15.67	4.9
Flatbush .....	32.19	40.30	34.99	35.83	11	53	26	48.60	23	17	8	21.70	5.3
Fort Edward .....	19.35	28.16	23.35	23.62	4	e 42	4	40.00	8	—11	22	7.67	5.5
Madrid .....	18.52	28.17	23.90	23.53	16	48	26	44.57	8	—18	8	?	6.0
Morrisania .....	32.10	42.48	34.48	36.35	25	59	11	50.33	23	13	8	c 21.67	1.9
New York city .....	35.83	42.35	38.82	38.99	16	59	26	53.70	23	19	8	24.20	4.7
Nichols .....	26.10	36.68	26.55	29.78	25	54	11	44.01	8	0	8	13.67	6.6
Oswego .....	26.84	33.03	29.19	29.69	4	49	26	43.67	8	8	8	11.67	7.0
Ovid .....	29.39	34.48	31.45	31.77	11	54	25	47.33	8	15 c	31	17.33	6.6
Pompey .....	24.27	29.13	26.84	26.75	11	48	11	43.67	8	4 c	8	8.67	6.5
Rochester .....	30.74	35.74	32.08	32.85	25	57	25	51.00	31	16	31	18.17	6.4
Sag Harbor .....	33.29	42.78	35.42	37.16	25	58	26	50.33	8	13	8	18.33	5.0
Saratoga .....	21.13	32.42	24.16	29.23	4	f 45	4	40.00	8	—12	8	0.33	4.6
Waterford .....	23.90	34.71	27.34	28.65	26	49	26	45.00	8	—7	8	3.33	5.5
Wellsville .....	26.81	38.29	30.23	31.78	25	62	25	49.67	8	—12 g	31	17.67	7.3
NEW JERSEY—													
Bloomfield .....	32.79	41.47	34.85	36.37	11	57	11	50.83	8	15 h	8	20.67	4.5
Burlington .....	33.84	43.74	36.80	38.13	11	60	11	55.67	8	20 h	8	22.67	5.3
Freehold .....	32.97	43.60	36.63	37.73	11	f 59	11	55.67	8	18 h	8	22.00	---
Lambertville .....	30.18	44.22	35.48	36.63	11	60			23	12.5		---	---
Newark (i) .....				36.15	26	b 54	27	47.38	23	16	8	24.87	---
Sergeantsville .....	30.08	47.52	36.71	38.10	25	68	26	54.33	23	11	23	26.00	4.6
PENNSYLVANIA—													
Bedford .....	32.38	42.77	36.50	37.22	26	64	26	55.00	8	16	8	j 25.67	6.1
Berwick .....	31.39	41.29	34.42	35.70	11	58	11	51.00	31	15	8	21.00	4.7
Cannonsburg .....	35.61	41.71	38.26	38.53	11	61	25	53.33	8	26	30	c 29.67	6.9
Chromedale .....	33.90	42.99	36.53	37.81	11	59	11	54.50	8	19	8	21.50	5.4
Easton .....	29.42	38.47	32.94	33.61	11	56	11	50.67	23	11	8	19.20	5.7
Fleming .....	29.48	39.67	32.51	33.89	25	f 53	25	f 43.00	8	10	8	16.67	5.9
Gettysburg .....	31.58	42.84	32.32	35.58	26	59	26	52.33	8	18	8	24.00	5.5
Harrisburg, [Heisely] .....	36.00	42.80	39.39	39.40	26	58	26	53.33	23	22	8	28.00	6.0
Harrisburg, [Hickok] .....	33.37	41.55	36.46	37.13	26	60	26	53.83	23	19	8	25.33	6.1
Lewisburg .....	29.01	38.85	32.44	33.43	26	55	26	48.47	8	10	8	17.50	6.5
Meadville .....	24.48	39.45	31.77	31.90	25	63	25	55.33	8	8	8	19.67	6.3
Morrisville .....	32.19	43.26	35.65	37.03	11	57	26	51.33	23	18	8	23.33	4.1
Mount Joy .....	33.39	45.48	38.29	39.05	11	61	11	54.00	23	19	8	24.00	4.5
Murrysville .....	31.19	40.63	33.81	35.21	11	65	11	54.33	8	14	31	22.33	6.8
Norristown .....	34.22	42.61	36.95	37.93	11	59	26	52.80	23	19	8	22.30	5.5
North Whitehall (k) .....	30.03	40.16	36.45	35.55	11	56	11	47.00	23	12	8	24.00	?
Paradise .....				28.00									
Philadelphia .....	36.65	45.44	40.34	40.81	11	61	11	57.33	23	22	8	27.67	5.8
Pittsburg, [Martin] .....	34.52	41.13	36.81	37.49	11	63	11	53.00	8	21	31	26.00	6.9
Pittsburg, [Wilson] .....	34.03	41.74	36.00	37.26	11	l 62	25	53.67	31	23		---	---
Pocopson .....	33.03	43.84	36.71	37.86	11	62	11	57.67	8	18	8	23.00	5.8
Pottsville .....	32.11	41.61	33.87	35.86	4	58	11	48.00	23	15	8	21.67	6.3

a Observations taken at 8 a. m., 3 p. m., and 9 p. m.

b Same temperature on the 27th.

c Same temperature on the 31st.

d Same temperature on the 11th.

e Same temperature on the 26th and 27th.

f Same temperature on the 26th.

g Same temperature on the 21st and 31st.

h Same temperature on the 23d.

i Observations taken at 7 a. m. and 6 p. m.

j Same temperature on the 30th.

k Observations taken at sunrise, noon, and sunset.

l Same temperature on the 25th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
PENNSYLVANIA—Continued.	°	°	°	°		°		°		°			
Shamokin .....	30.43	39.27	36.03	35.24	11	56	11	50.67	21	16 <i>a</i>	8	21.67	6.0
Somerset .....	29.86	39.11	33.00	33.99	25	61	25	51.33	8	9	8	19.67	7.6
Tarentum .....	32.35	42.71	35.52	36.86	25	68	25	54.33	8	12	8	22.33	6.4
West Haverford .....	35.52	44.71	-----	40.11	11	60	11	57.00	23	18	8	24.00	5.5
Westtown .....	32.43	41.00	36.13	36.52	11	59	11	53.90	8	16	8	18.00	5.4
DELAWARE—													
Georgetown ( <i>b</i> ) .....	39.61	49.35	43.03	44.00	25	67	25	60.67	8	25	8	29.67	-----
Milford .....	34.04	42.71	35.27	37.34	11	58	16	50.67	21	15	8	23.67	3.8
Newark .....	35.70	47.38	39.21	40.76	11	<i>c</i> 60	11	54.00	8	20	31	32.00	5.7
MARYLAND—													
Annapolis .....	35.60	44.66	41.71	40.66	26	58	26	54.83	21	25	8	28.83	6.0
Baltimore .....	36.13	44.35	39.97	40.15	26	59	26	53.75	23	24	8	28.50	7.0
Bladensburg .....	32.67	44.37	34.33	37.12	26	58	26	54.33	8	19 <i>a</i>	?	?	7.2
Chestertown .....	35.16	43.47	38.33	38.95	11	62	11	56.67	8	22	8	25.00	5.5
Frederick .....	35.48	43.95	38.22	39.22	26	60	26	54.10	23	25	8	28.83	5.3
Leonardtown .....	39.52	47.94	41.16	42.87	11	63	11	58.67	31	27	8	30.67	5.6
Oakland .....	30.29	35.19	30.23	31.90	25	60	26	51.67	30	14	30	15.00	-----
Sykesville .....	32.16	44.23	36.35	37.58	11	<i>d</i> 60	11	57.67	8	18 <i>a</i>	8	25.33	5.3
DISTRICT OF COLUMBIA—													
Washington .....	36.37	44.79	39.28	40.15	26	60	26	56.33	23	24	9	28.67	7.1
VIRGINIA—													
Alexandria .....	37.77	47.97	41.94	42.56	26	64	26	61.00	23	26	8	31.00	5.6
Ashland .....	36.41	48.58	40.00	41.66	11	66	11	58.00	8	24 <i>e</i>	31	32.33	5.2
Crichton's Store ( <i>f</i> ) .....	42.23	50.50	52.29	48.34	11	67	11	65.00	31	30	8	33.67	5.5
Hartwood .....	37.58	49.32	40.68	42.53	26	64	26	59.00	8	26 <i>g</i>	8	29.33	-----
Lewisburg .....	32.03	42.90	35.16	36.36	11	60	26	53.33	21	20	8	<i>h</i> 28.00	5.9
Meadow Dale .....	30.65	41.06	37.81	36.51	26	58	26	54.00	8	15	8	23.67	-----
Montross .....	38.55	47.00	40.42	41.92	11	<i>d</i> 64	11	61.00	8	26	24	28.67	5.5
Mossy Creek .....	30.06	46.42	33.79	36.76	26	62	26	53.67	8	16	8	22.67	5.6
Poplar Grove .....	38.56	51.81	41.18	43.85	11	71	26	63.00	19	25	31	34.67	6.4
Portsmouth .....	42.29	53.61	44.97	46.96	26	68	11	64.00	19	30 <i>i</i>	8	<i>h</i> 35.33	4.0
Rose Hill .....	40.16	48.55	45.47	44.73	11	62	11	60.67	7	31	31	35.00	6.4
Rougmont ( <i>j</i> ) .....	35.96	49.05	35.25	40.09	1	64	1	<i>k</i> 51.00	8	23	8	28.00	5.4
Ruthven ( <i>l</i> ) .....	37.68	50.25	40.96	42.96	11	63	?	?	19	25 <i>h</i>	?	?	3.4
Salem .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.2
Smithfield .....	38.90	53.05	45.19	45.71	11	<i>m</i> 69	11	64.50	30	25	8	33.33	5.7
Winchester .....	37.58	45.97	40.94	41.50	26	64	26	58.00	8	28	8	30.67	4.7
Wirt Court-House .....	34.42	45.23	38.23	39.29	11	66	25	57.67	21	22	30	30.00	6.3
NORTH CAROLINA—													
Ashville .....	35.31	42.73	39.35	39.13	11	<i>d</i> 58	11	53.33	19	26 <i>n</i>	30	27.67	-----
Chapel Hill .....	39.19	52.03	42.16	44.46	26	64	26	58.00	8	28	8	33.67	4.8
Davidson College .....	40.01	53.20	43.80	45.67	27	64	26	58.00	9	31 <i>o</i>	9	33.67	5.0
Gaston .....	38.10	50.74	41.94	43.59	26	64	11	60.00	30	22	8	33.00	-----
Marlborough ( <i>p</i> ) .....	41.68	55.68	46.96	48.11	28	70	17	65.00	21	30	31	39.67	4.4
Murfreesborough .....	41.63	51.66	45.64	46.61	11	64	11	62.67	30	30	8	33.33	4.3
SOUTH CAROLINA—													
Aiken .....	43.00	57.56	47.03	49.20	25	66	11	60.00	18	29	8	40.00	4.8
All Saints .....	47.35	58.19	50.87	52.14	26	69	16	65.00	4	35 <i>q</i>	30	42.00	5.2
Charleston, [Dawson] .....	52.00	59.48	55.87	55.78	-----	67	-----	-----	-----	41	-----	-----	-----
Charleston, [Johnson] .....	52.00	59.48	55.87	55.78	26	<i>r</i> 67	11	64.00	30	41	30	47.67	-----
GEORGIA—													
Athens .....	39.55	52.04	45.27	45.62	11	64.5	11	57.47	1	29.5	29	39.83	5.4
Hillsborough .....	43.33	54.52	48.61	48.82	11	65	11	59.43	30	32	8	40.02	6.1
Savannah .....	50.10	60.90	55.10	55.37	14	71	11	65.17	30	38	30	45.07	6.0
Sparta .....	44.23	56.81	49.74	50.26	5	<i>k</i> 67	11	61.00	30	32	23	40.00	5.7

<sup>a</sup> Same temperature on the 23d.<sup>b</sup> Observations taken at 8 a. m., and 1 and 6 p. m.<sup>c</sup> Same temperature on the 25th and 26th.<sup>d</sup> Same temperature on the 26th.<sup>e</sup> Same temperature on the 21st.<sup>f</sup> Observations taken at 9 a. m., noon, and 4 p. m.<sup>g</sup> Same temperature on the 23d and 31st.<sup>h</sup> Same temperature on the 30th.<sup>i</sup> Same temperature on the 22d.<sup>j</sup> Observations interrupted from the 21st to the 28th.<sup>k</sup> Same temperature on the 11th.<sup>l</sup> Incomplete.<sup>m</sup> Same temperature on the 25th.<sup>n</sup> Same temperature on the 30th and 31st.<sup>o</sup> Same temperature on the 18th.<sup>p</sup> For the last 22 days of the month.<sup>q</sup> Same temperature on the 29th and 30th.<sup>r</sup> Same temperature on the 27th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Minn.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp	Date.	Temp.	Date.	Mean temp.	
GEORGIA—Continued.	°	°	°	°		°		°		°		°	
Whitemarsh Island .....	49.65	60.26	54.03	54.65	14	70	15	64.00	18	39 <sup>a</sup>	8	44.33	6.0
Zebulon .....	49.07	57.24	54.54	53.62	26	74	26	66.00	16	38 <sup>a</sup>	30	43.33	5.7
FLORIDA—													
Alachua County .....	53.03	67.13	57.79	59.32	13	79	11	70.33	18	36	18	47.67	3.6
Alligator .....	51.78	65.29	57.10	58.06	27	78	14	73.00	30	38	30	46.00	5.9
Atsena .....	57.23	64.87	61.61	61.24	12	72	15	70.00	18	44	30	50.33	4.9
Belair .....	52.45	66.13	58.07	58.88	27	80	13	69.00	18	37	31	50.00	5.1
Hibernia .....	53.97	67.74	57.84	59.85	11	79	11	71.33	18	39	30	48.33	---
Jacksonville .....	55.16	65.77	57.42	59.45	14	77	15	70.67	18	38	30	43.67	5.1
St. Augustine .....	62.10	67.94	61.77	63.94	13	80	11	74.00	30	48	30	51.67	5.1
Salt Ponds .....	71.32	77.06	---	74.19	2	83	11	80.00	30	63	30	64.00	3.1
Warrington .....	50.77	68.71	50.23	56.57	13	79	14	69.67	21	40 <sup>e</sup>	21	47.00	3.6
ALABAMA—													
Auburn .....	46.32	57.55	51.23	51.70	15	68	15	60.67	18	33	31	40.67	5.6
Carlowville .....	49.81	60.87	53.48	54.72	15	77	4	66.67	17	37	18	44.33	5.6
Greene Springs .....	44.63	56.92	48.77	50.11	25	68	25	65.00	18	31	18	41.33	5.7
Greensborough .....	44.23	58.50	49.13	50.62	25	68	25	61.83	18	32 <sup>h</sup>	30	42.60	5.5
MISSISSIPPI—													
Columbus .....	43.57	55.22	48.47	49.09	25	62	25	59.63	18	32	29	41.30	5.0
LOUISIANA—													
Black River .....	48.52	61.48	53.87	54.62	1	72	24	66.33	17	36	31	46.67	6.7
New Orleans (i) .....	57.74	64.45	65.10	62.45	14	79	14	75.69	17	46 <sup>h</sup>	17	51.33	---
TEXAS—													
Austin, [Van Nostrand] .....	46.78	60.31	52.57	53.22	24	72	23	65.83	16	33	16	41.00	6.5
Austin, [Swante Palm] .....	47.52	60.23	51.97	53.24	27	71	23	65.00	16	37	2	41.33	4.6
Goliad .....	52.90	60.82	57.42	57.05	14	72	24	68.33	3	40 <sup>l</sup>	3	41.33	7.2
Larissa (m) .....	47.50	60.61	51.82	53.31	12	70	24	61.33	16	31	16	44.00	5.3
Union Hill .....	49.65	60.26	54.87	54.93	10	71	10	65.00	3	35 <sup>o</sup>	3	39.33	6.7
Washington .....	49.33	63.50	52.48	55.10	12	74	23	67.33	16	40 <sup>p</sup>	3	46.00	6.3
TENNESSEE—													
Glenwood .....	38.93	50.45	42.88	44.08	21	62	25	57.55	18	28	30	34.90	5.8
Memphis, [Tuck] .....	42.52	53.10	46.77	47.46	21	62	25	55.33	3	33 <sup>a</sup>	3	39.33	5.0
KENTUCKY—													
Bardstown .....	36.39	47.73	40.55	41.56	22	61	25	58.00	19	23	17	32.33	6.2
Danville .....	39.55	51.84	42.19	44.53	10	63	10	57.00	17	26	17	35.67	5.3
Paris .....	36.32	45.03	39.57	40.31	25	58	25	55.00	3	25	7	33.00	6.4
Springdale (t) .....	35.47	46.89	43.16	41.84	22	62	25	55.83	3	21	29	33.00	6.2
OHIO—													
Bellefontaine .....	34.11	42.87	35.21	37.40	25	57	25	54.33	8	19	30	29.00	6.1
Bowling Green (u) .....	32.55	41.60	34.81	36.32	25	60	25	54.83	8	16	8	25.00	---
Cincinnati, [Harper] .....	38.77	46.94	40.90	42.20	23	61	25	58.00	3	28	7	35.33	5.9
Cincinnati, [Hurt] .....	35.26	45.38	38.71	39.78	25	58	25	55.00	3	19	8	31.33	5.1
Cleveland .....	32.68	39.76	34.24	35.56	25	61	25	55.67	8	18	31	23.00	6.7
Cleveland, [near] .....	---	---	---	40.00	---	---	---	---	---	---	---	---	---
Collingwood .....	33.68	39.45	31.94	36.02	4	56	25	55.00	20	21	30	26.00	---
Edinburg .....	30.16	39.26	32.77	34.06	25	62	25	56.67	8	13	31	22.67	6.2
Hillsborough .....	35.26	41.19	37.92	38.12	25	58	25	53.67	8	23	31	29.00	6.0
Hiram .....	31.84	38.61	33.26	34.57	25	59	25	53.33	8	16	8	23.67	6.9
Jackson, Jackson county .....	35.39	48.81	40.65	41.62	25	63	25	56.67	3	21	8	30.33	6.0
Jackson, Monroe county .....	34.95	45.20	37.57	39.24	25	62	25	53.67	8	23	8	29.17	6.1
Jefferson .....	32.23	37.87	32.23	34.11	13	60	25	52.67	8	20 <sup>v</sup>	31	22.67	8.3
Madison, [Atkins] .....	32.72	39.38	33.10	35.07	13	62	25	54.67	31	18	31	22.33	6.0
Madison, [Cunningham] .....	31.61	38.87	30.90	33.79	25	60	11	47.33	31	16	31	21.33	6.7

<sup>a</sup> Same temperature on the 30th.<sup>b</sup> Same temperature on the 15th.<sup>c</sup> Same temperature on the 13th, 14th, and 15th.<sup>d</sup> Same temperature on the 5th, 10th, 11th, 12th, 13th, and 14th.<sup>e</sup> Same temperature on the 22d and 25th.<sup>f</sup> Same temperature on the 25th.<sup>g</sup> Same temperature on the 19th.<sup>h</sup> Same temperature on the 20th.<sup>i</sup> Observations taken at 9 a. m., noon, and 3 p. m.<sup>j</sup> Same temperature on the 3d and 7th.<sup>k</sup> Same temperature on the 23d.<sup>l</sup> Same temperature on the 5th.<sup>m</sup> For the last 23 days of the month.<sup>n</sup> Same temperature on the 12th.<sup>o</sup> Same temperature on the 16th.<sup>p</sup> Same temperature on the 21st.<sup>q</sup> Same temperature on the 22d.<sup>r</sup> Same temperature on the 16th and 29th.<sup>s</sup> Same temperature on the 17th.<sup>t</sup> Observations taken at 7 a. m., 2 p. m., and 5 p. m.<sup>u</sup> Observations taken at sunrise, 2 p. m., and 9 p. m.<sup>v</sup> Same temperature on the 31st.<sup>w</sup> Same temperature on the 26th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
	°	°	°	°		°		°		°		°	
OHIO—Continued													
Medina	33.61	39.58	33.90	35.70	25	59	25	50.50	8	17	31	23.00	75.5
Mount Union	35.22		37.56	36.39	25	60	25	57.00	8	18	8	25.00	6.3
New Lisbon	36.83	47.25	38.29	40.79	26	69	25	59.67	8	20	8	28.33	4.2
Northwood	34.08	41.75	35.12	36.98	25	56	25	53.67	8	20	8	25.33?	76.5
Perrysburg (a)	35.94	43.42	36.16	38.51	25	65	25	60.33	2	b 24	31	27.00	
Portsmouth (c)	38.77	47.10	41.84	42.57	11	62	25	d 57.67	4	25	19	33.33	7.0
Ripley (e)	35.90	42.55	39.34	39.26	11	f 55	25	51.00?	8	25	8	29.00?	7.0
Savannah	31.68	41.10	32.58	35.12	25	60	25	54.00	8	17	8	24.00	6.7
Urbana	31.93	42.68	35.06	36.56	25	60	25	54.33	20	18	7	26.33	6.6
Welchfield	30.48	38.48	31.64	33.53	25	60	25	54.00	8	13	8	21.00	5.0
Westerville	33.74	43.10	35.68	37.51	25	58	25	54.67	20	15	20	27.17	6.7
Windham	31.97	40.58	34.35	35.63	25	57	25	52.67	8	16	8	25.67	
MICHIGAN—													
Battle Creek	30.23	39.35	32.52	34.03	23	57	25	53.67	8	10	8	23.67	5.1
Cooper	31.48	38.78	32.58	34.28	25	56	25	52.00	8	16	27	25.33	2.5
Grand Rapids, [Currier]	28.50	35.84	30.58	31.64	25	56	25	53.33	8	5	7	g 21.67	4.9
Grand Rapids, [Streng]	26.48	37.51	30.40	31.46	25	56	25	52.67	8	2	2	18.33	5.6
Marquette	23.39	30.13	23.97	25.83	25	45	24	41.13	7	— 3	7	8.50	6.4
Monroe													6.2
New Buffalo (a)	30.60	40.36	32.40	34.45	25	58	25	54.67	8	13	7	23.67?	6.8
Port Huron	26.51	34.42	29.22	30.05	25	57	25	52.33	8	4	30	19.00	5.9
INDIANA—													
Evansville	37.55	50.32	40.45	42.77	9	64	25	55.00	7	h 28	7	32.00	4.8
Logansport (i)	32.00	43.00	36.00	37.00		58				20			
Madison	35.73	41.98	37.42	38.38	25	56	25	53.33	3	25	8	30.67	5.9
Michigan City	30.55	40.51	32.05	34.37	25	58	25	52.00	2	14	2	23.00	5.7
New Harmony	36.78	46.00	39.58	40.79	22	59	25	55.00	3	23	6	31.00	5.8
Richmond, [Moore]	34.40	41.77	37.45	37.87	25	56	25	53.80	11	23	7	28.30	5.9
ILLINOIS—													
Athens	23.39	43.71	33.77	35.62	22	61	25	52.33	7	13	7	20.67	5.0
Angusta	30.00	42.38	35.61	36.00	22	60	25	50.33	7	11	7	20.00	3.9
Aurora	29.97	40.45	33.00	34.47	25	59	25	52.67	7	14	7	18.67	5.3
Batavia	26.16	41.00	29.48	32.21	22	61	25	50.67	2	8	7	17.33	5.4
Brighton	31.00	41.58	37.45	36.68	23	65	23	61.00	30	19	28	21.33	4.3
Edgar County (j)	33.42			33.42									
Edgington	27.74	40.42	30.23	32.80	22	59	25	49.33	7	k 10	7	18.00	5.1
Elgin	26.45	38.16	30.10	31.57	25	58	25	51.33	2	l 8	7	12.33	5.7
Fremont Centre	28.74	38.48	31.93	33.05	23	50	24	44.67	1	10	7	19.33	5.1
Manchester (a)	31.00	43.45	34.03	36.16	22	59	25	50.33	7	14	7	21.33	5.0
Marengo	29.61	38.97	30.68	33.09	25	54	25	49.33	7	10	7	17.33	5.1
Ottawa	29.80	39.71	33.96	34.49	25	57	25	51.67	2	10	7	20.33	4.7
Pekin	28.52	40.48	33.29	34.10	25	59	25	53.33	7	k 10	7	18.00	4.2
Peoria	30.03	42.16	34.73	35.64	22	f 59	25	54.87	7	13	7	20.75	4.8
Riley	26.51	37.42	28.45	30.79	25	56	25	50.67	2	0	2	13.33	4.7
South Pass	35.48	49.93	39.87	41.76	20	m 64	24	53.33	3	22	7	33.67	5.8
Warsaw	25.81	40.65	30.87	32.44	22	64	22	46.33	7	— 2	7	9.33	5.5
Waynesville (n)	28.78		37.88	33.33	25	57	25	55.50	7	k 12	7	18.50	
West Salem	34.84	47.26	39.29	40.46	22	64	25	57.00	3	21	7	27.00	5.6
West Urbana	31.52	41.03	35.72	36.09	25	59	25	53.00	7	16	7	22.00	5.8
Wheaton	28.57	38.62	31.92	33.04	25	58	25	50.90	2	10	7	17.30	6.2
Winnebago	27.00	38.90	31.50	32.47	25	58	25	50.33	7	9	7	14.33	5.5
MISSOURI—													
Cape Girardeau (o)	37.35	48.89	41.79	42.68	21	61	25	49.00	3	21	3	21.00	5.2
St. Joseph's (p)	30.16	43.72	34.20	36.03	22	57	24	52.62	7	11	7	18.50	5.5

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 31st.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Same temperature on the 26th.

e Only 9 observations at 2 p. m.

f Same temperature on the 25th.

g Same temperature on the 8th.

h Same temperature on the 18th and 19th.

i Observations taken at sunrise, noon, and sunset.

j Observations taken at sunrise.

k Same temperature on the 18th.

l Same temperature on the 7th.

m Same temperature on the 21st.

n Observations taken at sunrise and sunset.

o Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 39.50.

p Observations taken at sunrise, 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 33.16.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
MISSOURI—Continued.	°	°	°	°		°		°		°		°	
St. Louis	35.30	46.60	39.50	40.47	21	a 62	25	53.33	7	24	7	27.17	5.4
Springfield (b)	33.45	46.84	37.50	39.26	20	62	23	52.67	3	22 c	7	30.00	7.1
WISCONSIN—													
Appleton	24.08	33.94	29.53	29.18	23	d 49	25	45.00	8	— 7	7	14.00	5.8
Bay City	16.84	27.10	21.39	32.78	23	48	23	42.67	8	— 8	7	— 2.00	6.0
Beloit	27.70	37.45	31.45	32.20	25	56	25	50.33	1	7	7	15.00	4.4
East Danemord (e)	18.43	33.37	26.21	26.00	4	50	25	42.67	7	— 4 f	7	3.67	—
Janesville	28.97	38.71	31.84	33.17	25	58	25	50.33	1	10 g	7	17.33	6.0
Kenosha	29.73	37.14	32.48	33.12	25	52	25	47.00	7	12	7	17.67	5.6
Madison, [Sterling]	27.00	35.00	30.00	30.67	25	54	24	55.67	7	0	7	13.00	5.8
Manitowoc	27.36	37.06	31.94	32.12	4	48	25	44.67	8	5 h	7	15.33	6.0
Menasha	22.48	33.23	24.61	26.77	4	48	25	41.00	8	— 12	6	6.67	5.6
Milwaukee, [Lapham]				26.39	25	40			8	8			
Milwaukee, [Pomeroy]	28.00	35.19	29.16	30.78	25	48	25	41.33	8	8	7	13.67	6.7
Milwaukee, [Winkler]	27.74	35.06	29.90	30.90	23	52	23	43.67	1	8	8	14.33	4.7
New London	20.35	30.51	23.80	24.89	23	46	25	40.00	8	12	7	2.33	5.8
Platteville	25.90	35.97	29.55	30.47	25	55	25	47.67	7	4	7	13.33	5.3
Racine	29.77	35.52	32.37	32.55	4	45	25	42.00	1	14	7	18.62	5.1
St. Croix	16.32	27.20	21.29	21.60	3	45	25	40.33	7	— 18	7	— 5.33	6.7
Waukesha	28.13	36.58	31.29	32.00	22	51	25	46.67	6	10 i	7	13.67	5.7
IOWA—													
Bellevue	25.51	38.26	29.32	31.03	25	54	25	46.67	1	8 h	7	13.33	5.8
Border Plains	24.03	36.16	27.39	29.19	27	52	24	45.33	16	— 8	16	13.00	4.8
Camanche	27.71	39.29	30.42	32.47	25	52	25	46.67	7	8	7	18.00	5.2
Dubuque	26.19	36.61	30.42	31.07	25	51	25	45.00	7	8	7	14.33	4.7
Fairfield	28.59	42.01	32.86	34.79	22	59	24	48.00	7	8	7	15.00	5.0
Fort Madison (j)	29.32	39.48	34.83	34.54	25	57	25	50.00	7	11	7	18.00	4.3
Franklin	23.97	36.06	27.74	29.26	22	k 51	25	47.00	18	— 2	18	11.33	4.2
Iowa City	26.65	37.71	30.48	31.61	25	50	24	d 44.67	18	7	18	18.67	4.7
Muscatine	24.74	36.26	28.35	29.78	25	52	24	d 46.00	7	8 l	7	17.67	2.5
Pleasant Plain	27.22	40.51	31.55	33.09	22	58	24	48.00	7	9	7	16.33	4.2
Rossville	21.89	33.05	26.13	27.02	3	44	25	41.90	18	— 1.5	7	9.03	5.0
Sioux City	21.93	34.55	26.11	27.53	3	51	24	45.33	7	0	7	10.50	4.3
MINNESOTA—													
Buchanan (m)	16.00	29.81	20.55	22.12	4	47	23	n 37.50	7	— 16	7	1.50	—
Burlington	16.52	28.71	24.55	23.26	4	46	4	38.33	7	— 11	7	1.67	—
Hazlewood	16.03	27.41	20.90	21.45	23	n 45	23	42.33	7	— 12	15	0.00	4.0
Lapham (o)	11.10	23.93	15.81	16.95	23	42	23	39.00	0	— 12	15	— 4.00	—
Princeton	14.35	27.77	18.23	20.12	3	41	23	39.33	7	— 24	7	— 10.00	5.1
Wabashaw	15.00	28.97	20.77	21.58	4	d 44	24	40.33	18	— 21	7	— 10.00	4.5
NEBRASKA—													
Bellevue	27.35	39.60	31.10	32.68	3	p 53	24	49.33	7	8	7	16.67	3.7
Omaha													3.2
KANSAS—													
Council City	28.61	44.97	33.52	35.70	21	60	24	52.67	7	14	7	19.33	3.5
Lawrence	30.87	47.87	37.10	38.61	21	60	24	52.00	7	17	7	29.67	3.3
Leavenworth City, [McCarty]	31.65	43.29	34.81	36.58	22	60	24	52.33	7	14	7	21.33	4.4
Manhattan				38.31									
Mapleton	32.42	48.52	35.71	38.88	21	65	24	52.33	16	20	2	28.67	3.7
Topeka (q)	31.80	47.53	35.40	38.24	21	n 56	24	53.00	30	18	30	29.00	3.3
DACOTAH—													
Fort Union	10.20	25.00	16.70	17.30	3	42	3	36.30	15	— 12	12	— 4.70	—
OREGON—													
Fort Thompson	7.56	16.39	8.06	10.67	4	38	11	28.33	7	— 18	7	— 6.33	—

a Same temperature on the 22d.

f Observations taken at sunrise, 3 p. m., and 9 p. m.

c Same temperature on the 28th.

d Same temperature on the 25th.

e Observations taken at 6 a. m., noon, and 6 p. m.

f Same temperature on the 19th.

g Same temperature on the 2d.

h Same temperature on the 7th.

i Same temperature on the 7th and 8th.

j Observations taken at 6 a. m., noon, and 7 p. m.

k Same temperature on the 27th.

l Same temperature on the 18th.

m Observations taken at 7 a. m., noon, 3 p. m., and 9 p. m. Mean at 3 p. m., 27.84.

n Same temperature on the 24th.

o Observations taken at 7 a. m., 2 p. m., and 5 p. m.

p Same temperature on the 21st.

q For the last 15 days of the month.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MEXICO—	□	○	○	○		□		○		○			
Cordova ( <i>a</i> )	64.87	68.29	65.41	66.65	15	<i>b</i> 73.40			21	<i>c</i> 62.15			
Mirador ( <i>d</i> )	60.44	68.23	61.41	63.36	10	75.56	10	67.75	18	52.84	17	57.07	
Vera Cruz ( <i>e</i> )	72.23		72.40	72.31									
CALIFORNIA—													
Sacramento	41.42	48.39	45.29	45.03	1	57	21	50.33	7	33	7	39.33	6.0
San Francisco	45.74	53.03	49.26	49.34	1	63	1	58.67	7	<i>f</i> 40	14	44.67	4.1
Marysville	41.74	50.90	45.05	45.90	2	60	14	50.00	6	31	6	39.67	5.8
WEST INDIES—													
Centre Signal Station ( <i>g</i> )				67.00									
Nassau, Bahamas				76.30			1	80.50			21	70.00	
St. George's, Bermuda ( <i>h</i> )				64.18									
CENTRAL AMERICA—													
Guatemala ( <i>j</i> )	52.88	71.06	57.92	62.89	?	86.4			?	48.0			
SOUTH AMERICA—													
Catharina Sophia, Surinam ( <i>k</i> )	74.90	83.80	78.80	79.17	24	87	11	81.00	3	173	27	75.67	?

*a* Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 67.25, at 6 p. m., 67.43.

*b* Same temperature on the 10th.*c* Same temperature on the 1st.*d* Observations taken at 7 a. m., 2 p. m., and 8 p. m.*e* Observations taken at 7 a. m. to 9 a. m., and at 9 p. m. to 11 p. m.*f* Same temperature on the 14th.*g* Observations taken at noon, for 17 days only.*h* Same temperature on the 2d, 3d, 4th and 15th.*i* Observations taken at 9.30 a. m. and 3.30 p. m.*j* Observations taken at 6 a. m., 9 a. m., 12 m., 3 p. m., and 9 p. m.

Mean at 9 a. m., 62.60; mean at noon, 69.98.

*k* Observations taken at 6 a. m., 2 p. m., and 6 p. m.*l* Same temperature on the 10th, 15th, 23d, 25th, and 28th.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Fort Simpson (a).....	-----	-----	-----	-8.53	24	30	24	18.50	19	-38	20	-30.50	-----
Hamilton (b).....	19.32	-----	20.64	19.98	27	42	27	41.00	17	-4	17	1.50	-----
Montreal.....	5.77	14.47	12.11	10.78	27	39	28	33.30	11	-17	10	-6.67	5.3
Moose Factory (c).....	-----	-----	-----	-10.90	-----	-----	-----	-----	-----	-----	-----	-----	-----
Red River Settlement.....	-6.86	3.18	7.04?	1.13	26	40	-----	?	15	-35	15	-25.33	4.3
Rigolet (d).....	2.14	-----	5.96	4.05	28	30	28	26.50	10	-22	10	-18.00	-----
St. John's.....	18.96	23.89	18.54	20.46	3	36	3	31.67	12	11	12	6.33	-----
St. Martin.....	-2.30	16.60	7.23	7.18	26	59	28	32.80	13	-30	13	-16.20	4.4
Stanbridge.....	3.25	26.71	9.46	13.14	28	42	28	37.33	13	-27	13	-13.67	5.4
Toronto (e).....	13.42	20.92	16.54	16.96	27	41	27	38.07	17	-7	17	1.60	6.9
Windsor.....	12.10	21.70	16.20	16.67	28	43	28	36.20	11	-6	11	4.00	5.5
Wolfville.....	13.07	21.26	17.21	17.18	28	42	28	37.67	11	-7.5	11	2.00	3.7
MAINE—													
Cornish, [Guptill].....	10.36	21.35	14.50	15.40	28	48	28	37.33	12	-7	11	-3.33	3.3
Cornish, [West].....	7.07	19.57	12.46	13.03	28	46	28	36.67	12	-13	11	-4.67	3.3
East Exeter.....	3.18	21.36	13.46	12.67	28	52	28	33.33	24	-20	23	-8.33	4.6
Gardiner.....	8.50	22.32	15.24	15.35	28	46	28	36.33	23	-12	11	-0.67	4.3
Monson.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.6
Perry.....	10.86	21.50	16.82	16.39	28	44	28	35.00	12	-3	11	1.33	2.8
Portland.....	12.54	24.05	19.15	18.58	28	42	27	37.33	12	-6	11	2.33	4.6
Steuben.....	11.07	21.96	15.96	16.33	28	41	28	36.00	12	-10	11	-1.00	4.3
NEW HAMPSHIRE—													
Concord.....	10.11	28.50	18.89	19.17	28	56	28	40.67	12	-18	12	3.00	4.5
Francestown, [Bixby].....	14.23	23.37	17.21	18.27	28	49	28	39.67	12	-7.5	11	3.33	4.8
Shelburne.....	6.61	24.93	14.39	15.31	28	45	28	35.00	24	-12	11	-3.33	4.9
West Enfield.....	8.61	19.46	13.29	13.79	28	45	27	37.00	13	-10	11	-4.33	4.8
VERMONT—													
Bradford.....	6.36	21.68	13.07	13.70	28	50	28	40.33	12	f-23	12	-9.00	-----
Brandon.....	9.24	22.10	15.20	15.51	28	49	28	39.33	16	-13	13	-3.33	5.6
Burlington.....	8.16	17.30	13.25	12.90	28	44	28	38.33	12	g-14	13	-9.33	4.3
Craftsbury.....	4.57	17.50	10.50	10.86	28	47	28	40.00	12	-18	11	-10.00	5.2
Rupert.....	15.29	25.64	22.29	21.07	28	58	28	49.33	23	-4	13	6.00	6.0
St. Johnsbury.....	2.57	18.96	9.68	10.40	28	51	28	40.00	12	-31	12	-12.67	5.2
MASSACHUSETTS—													
Amherst.....	15.27	26.36	20.14	20.59	28	47	28	38.50	24	-5	11	5.70	4.6
Bridgewater (h).....	19.56	29.45	24.01	24.37	28	47	28	41.50	24	-2	11	10.50	4.6
Cambridge.....	17.57	28.14	21.75	22.49	28	47	28	41.00	19	1	11	7.67	4.1
Florida.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.4
Lawrence.....	16.04	27.36	20.36	21.25	28	55	28	43.00	12	-2	11	6.00	4.6
Mendon.....	18.50	27.03	20.36	21.96	28	40	28	38.67	23	2	11	7.00	3.2
Nantucket.....	26.55	33.32	28.82	29.56	2	49	2	45.17	17	11	11	17.83	4.4
New Bedford.....	20.80	30.43	23.70	24.98	2	i 45	2	41.70	19	3.5	11	10.50	5.4
Newburyport.....	17.90	27.82	23.53	23.08	28	50	28	42.90	19	1.5	10	8.00	?
Richmond.....	12.64	24.36	17.86	18.29	28	42	28	36.00	24	-7	11	0.67	4.8
Westfield.....	16.00	26.43	20.79	21.07	28	46	28	38.00	24	-3	12	7.00	5.1
Williamstown.....	12.69	21.99	17.83	17.50	28	45	28	38.80	24	-8.5	24	-----	5.8
Worcester (j).....	18.78	28.85	21.64	23.09	3	k 41	3	37.67	12	l 5	11	10.67	4.8
RHODE ISLAND—													
Providence (m).....	20.10	30.30	23.10	24.50	18	47	2	42.00	23	3	23	11.33	4.0
CONNECTICUT—													
Columbia.....	17.61	30.28	20.04	22.64	28	49	28	40.33	24	-1	11	8.33	5.2
New London.....	20.36	30.00	23.89	24.75	28	46	28	40.33	24	7	11	n 13.67	4.5
Norwich.....	17.50	29.54	23.29	23.44	28	48	2	41.00	21	-10	11	n 8.67	3.8
Pomfret.....	16.49	25.89	20.17	20.85	28	44	28	36.90	23	3	11	6.00	4.7
Saybrook.....	22.21	29.61	24.29	25.37	11	44	28	37.67	17	16	17	12.67	4.7
Wallingford.....	17.39	29.11	22.27	22.92	30	47	28	39.00	24	-2	11	10.50	4.2

a Register thermometer.

b Observations taken at 9 a. m. and 9 p. m.

c Observations taken at sunrise, 2 and 10 p. m.

d Observations taken at sunrise and sunset.

e Observations taken at 6 a. m., 2 and 10 p. m.

f Same temperature on the 19th.

g Same temperature on the 13th.

A Observations taken at 7 a. m., 2 and 7 p. m.

i Same temperature on the 28th.

j Incomplete.

k Same temperature on the 25th.

l Same temperature on the 17th.

m Observations taken at sunrise, 1 and 10 a. m.

n Same temperature on the 23d.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—	°	°	°	°		°		°		°			
Bellport .....	24.39	28.68	24.20	25.76	28	45	28	41.00	23	8	11	11.67	4.3
Buffalo (a) .....	20.53	23.82	21.54	21.96	27	40	27	37.00	11	4	11	b 9.33	7.4
Canton .....	7.18	19.79	12.50	13.16	27	46	27	37.67	19	—22	11	—10.00	5.7
Clinton .....	14.11	25.86	17.50	19.16	27	47	28	38.67	19	—12	18	4.33	7.1
Fishkill .....	18.54	31.04	22.93	24.17	28	45	28	38.67	24	—4	23	8.67	4.6
Flatbush .....	22.34	30.84	25.50	26.23	9	43	2	39.30	23	10	19	13.80	5.3
Fort Edward .....	8.68	23.39	16.64	16.24	28	45	28	37.33	12	—18	14	—2.67	5.7
Nichols .....	16.21	26.00	18.29	20.17	28	50	28	40.67	24	—13	11	4.33	7.1
Rochester .....	17.85	25.75	21.07	21.56	27	48	27	41.00	19	2	11	8.33	8.4
Sag Harbor .....	24.32	34.32	26.51	28.38	28	53	2	44.00	23	6	11	16.00	4.8
Waterford .....	12.64	26.34	18.84	19.27	28	44	28	40.34	23	—13	23	2.00	5.6
Wellsville .....	16.39	28.50	20.61	21.83	27	54	27	43.00	24	—4	17	2.67	8.5
NEW JERSEY—													
Bloomfield .....	20.71	31.39	24.21	25.44	9	46	2	39.67	23	4	17	12.17	4.0
Burlington .....	21.97	30.72	27.36	26.68	28	51	9	40.67	24	—3	23	c 15.00	5.3
Freehold .....	22.20	33.12	27.09	27.47	27	d 50	28	43.00	24	3	17	13.17	---
Lambertville .....	17.99	34.33	25.01	25.78	28	53			24	—8.7			---
Newark (e) .....				26.47		46	3	39.00	24	—0.5	24	15.00	---
Sergeantsville .....	19.36	34.64	25.04	26.35	28	55	9	40.00	24	—3	17	12.67	4.3
PENNSYLVANIA—													
Bedford .....	17.36	29.08	22.16	22.87	28	50	28	35.00	24	—4	17	7.33	5.2
Berwick .....	18.96	32.36	24.17	25.16	28	50	28	39.67	24	—2	17	10.67	5.0
Cannonsburg .....	22.14	30.42	27.53	26.70	27	50	27	41.33	23	c 0	23	12.67	7.3
Chromedale .....	20.40	30.26	25.41	25.36	28	f 48	2	40.40	24	—6	23	10.00	5.0
Easton .....	18.17	28.66	23.23	23.35	28	44½	28	36.83	24	—5	19	10.00	5.9
Fleming .....	18.00	31.17	23.52	24.23	27	51	28	37.00	24	—6	11	10.00	5.9
Gettysburg .....	18.61	33.32	23.75	25.23	28	51	28	38.33	24	—8	24	11.33	5.0
Harrisburg, [Heisely] .....	24.39	33.04	29.79	29.07	9	47	9	40.00	23	4	23	17.67	5.2
Harrisburg, [Hickok] .....	21.36	31.00	27.70	26.69	28	44	9	38.17	25	2	17	13.33	6.0
Lewisburg .....	17.49	30.14	23.71	23.78	28	48	28	38.57	24	—6	17	9.53	6.9
Meadville .....	15.43	27.71	18.86	20.67	27	52	27	39.33	23	—8	17	1.67	7.1
Morrisville .....	19.25	33.54	24.71	25.83	28	51	28	38.00	24	—2	19	11.67	4.2
Mount Joy .....	20.37	34.95	26.59	27.30	27	51	28	40.33	24	—7.5	24	12.00	4.4
Murrysville .....	18.25	30.12	21.57	23.31	27	47	28	39.33	22	—14	22	1.67	6.6
Norristown .....	19.00	30.80	24.30	24.70	9	47	9	39.80	24	—10	24	8.80	4.8
North Whitehall (g) .....	18.68	30.68	27.96	25.77	28	46	28	39.00	25	—5	18	11.00	4.2
Paradise .....				30.00									
Philadelphia .....	24.84	34.95	30.52	30.10	28	51	28	44.00	17	11	17	17.20	5.6
Pittsburg .....	20.75	30.17	24.50	26.47	27	45	9	d 36.33	23	—2	23	9.67	6.8
Pittsburg, [Wilson] .....	20.57	29.00	25.64	25.07	27	48	27	41.33	23	—2	11	8.67	---
Pocopson .....	18.59	33.43	25.54	25.85	9	d 48	2	39.67	24	—9	23	10.33	5.7
Reading .....	22.03	31.75	27.16	26.98	9	d 43	0	37.83	24	1	17	14.67	5.2
Shamokin .....	17.25	27.82	24.71	23.26	28	50	28	43.00	25	—8	11	7.33	5.3
Somerseset .....	18.57	29.25	21.54	23.12	27	49	28	40.33	11	—1	11	8.00	7.4
Tarentum .....	19.50	32.93	24.52	25.65	27	54	27	38.67	23	—5 c	17	9.67	6.5
West Haverford .....	24.11	33.75		27.93	28	57	2	46.00	17	8	17	h 13.00	5.5
Westtown .....	19.61	31.59	24.82	25.34	2	i 47	2	40.50	24	—8	24	11.00	5.4
DELAWARE—													
Georgetown (j) .....	28.61	37.54	34.77	33.65	28	61	28	52.67	17	14	17	19.00	---
Milford .....	28.68	38.82	32.36	33.29	9	d 56	0	46.67	24	15	23	20.33	4.0
Newark .....	23.56	39.16	28.88	30.53	28	60		?	24	2	23	17.33	5.3
MARYLAND—													
Annapolis .....	25.60	35.70	32.90	31.40	28	49	28	43.83	21	12	17	20.67	4.5
Baltimore .....	25.79	34.85	30.77	30.47	28	50	28	42.33	24	5	24	11.50	6.7
Bladensburg .....	21.58	34.61	27.33	27.84	28	54	28	43.67	24	5		?	5.5
Chestertown .....	24.21	33.17	28.59	28.66	28	54	28	45.33	24	7	17	14.83	5.5
Frederick .....	23.87	33.80	28.30	28.66	28	47	0	39.67	24	5	24	16.83	5.3

a Observations taken at 8 a. m., 2 p. m., and 9 p. m.

b Same temperature on the 17th.

c Same temperature on the 24th.

d Same temperature on the 28th.

e Observations taken at 7 a. m. and 6 p. m.

f Same temperature on the 9th.

g Observations taken at sunrise, noon, and sunset.

h Same temperature on the 19th.

i Same temperature on the 9th and 28th.

j Observations taken at 8 a. m., 1 p. m., and 6 p. m.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—Continued.	°	°	°	■		°		°		°			
Oakland.....	14.85	25.07	17.89	19.27	27	49	0	36.00	23	—19	11	3.67	----
Sykesville.....	19.71	35.57	27.11	27.46	28	54	28	44.00	24	0	17	11.67	4.5
DISTRICT OF COLUMBIA—													
Washington.....	25.86	35.93	31.25	31.01	28	53	28	45.67	24	13	17	19.00	5.3
VIRGINIA—													
Alexandria.....	27.07	38.82	32.43	32.77	28	59	28	48.33	24	12	17	19.33	4.6
Crichton's Store (a).....	33.08	39.44	43.76	38.76	27	54	.....	?	11	b 22	23	29.33	5.7
Hartwood.....	25.89	38.68	31.61	32.06	28	60	28	51.67	24	10	23	19.00	----
Lewisburg.....	21.54	35.68	27.54	28.25	27	52	10	37.00	6	c 6	11	16.00	6.0
Meadow Dale.....	20.21	34.85	28.64	27.90	27	53	28	44.00	23	1	11	13.67	----
Montross.....	27.43	38.11	32.11	32.55	28	60	28	48.67	11	d 16	23	21.00	5.1
Mossy Creek.....	19.07	38.93	24.10	27.37	28	63	28	45.33	21	— 2	23	14.33	4.5
Poplar Grove.....	24.29	41.29	31.82	32.47	27	66	10	49.00	23	4	23	18.67	6.6
Portsmouth.....	34.00	45.14	37.96	39.03	28	64	28	53.00	11	e 24	23	28.00	4.7
Rose Hill.....	31.61	38.65	35.26	35.17	28	61	28	53.50	23	21	23	24.17	6.1
Rougemont.....	25.61	40.86	30.61	32.36	28	63	28	51.33	23	11	23	17.33	5.9
Rathven.....	28.50	39.26	33.36	33.71	27	f 54	.....	?	6	19	23	24.00	3.6
Salem.....	37.09	41.85	41.85	36.93	28	55	28	50.67	11	24	11	28.00	5.7
Smithfield.....	29.85	44.73	38.37	37.65	28	65	28	54.80	16	20	16	26.60	5.6
Winchester.....	26.36	36.07	30.79	31.07	28	52	28	44.67	24	12	17	18.67	4.7
Wirt Court-House.....	21.57	34.25	26.79	27.54	27	55	27	37.67	23	— 6	23	11.00	6.1
NORTH CAROLINA—													
Ashville.....	28.31	38.73	34.15	33.73	19	50	19	45.00	0	12	20	23.67	----
Chapel Hill.....	31.14	43.68	35.54	36.79	28	60	28	51.00	11	g 22	23	26.33	6.0
Davidson College.....	32.23	42.44	37.50	37.39	28	58	28	54.83	11	21	13	26.63	5.4
Gaston.....	29.36	42.14	33.86	35.12	28	64	28	48.67	23	19	23	22.33	----
Marlborough.....	35.11	46.14	41.62	40.96	27	61	20	53.67	23	26	23	28.33	6.0
Murfreesborough.....	33.41	42.92	38.62	38.32	28	62	28	51.67	23	25	23	27.00	4.9
SOUTH CAROLINA—													
Aiken.....	38.39	51.55	43.36	44.43	16	d 66	28	56.33	24	26	24	29.00	5.3
All Saints.....	40.50	51.07	45.11	45.56	22	71	22	62.00	23	32	23	34.00	4.6
Charleston, [Dawson].....	41.46	52.82	46.13	46.80	.....	64	.....	.....	.....	35	.....	.....	----
Charleston, [Johnson].....	45.04	52.82	49.71	49.19	22	65	22	61.00	23	35	23	36.33	----
St. John's.....	34.69	61.96	40.04	45.56	16	78	19	55.67	15	h 24	.....	?	5.0
GEORGIA—													
Athens.....	30.92	49.82	41.88	40.87	17	64	29	53.50	12	24	12	31.90	5.4
Hillsborough.....	37.70	51.50	44.20	44.47	20	66	29	56.67	12	26	25	32.73	5.6
Savannah.....	43.80	56.60	50.10	50.17	22	74	22	63.57	15	i 35	24	36.40	4.9
Sparta.....	38.36	53.50	44.79	45.55	17	68	1	55.00	.....	28	24	33.00	5.1
Whitemarsh Island.....	44.29	55.44	48.46	49.40	17	j 69	22	62.33	15	34	24	36.33	4.7
Zebulon.....	43.53	52.33	47.90	47.92	21	68	21	62.83	24	30	5	31.50	4.6
FLORIDA—													
Alachua County.....	50.39	66.27	55.78	57.48	22	76	13	67.00	.....	34	.....	?	3.8
Alligator.....	47.11	65.11	53.39	55.20	12	82	12	68.00	27	30	24	39.67	4.6
Atsena.....	54.79	62.00	59.50	58.76	23	71	22	67.00	6	43	25	50.33	4.5
Belair.....	47.86	65.36	55.57	56.26	22	79	22	67.67	7	35	24	41.67	4.2
Jacksonville.....	52.98	64.71	54.68	57.46	22	77	22	68.67	6	38	24	42.33	4.4
St. Augustine.....	58.07	66.11	58.71	60.96	13	82	22	71.67	24	45	24	47.67	4.3
Salt Ponds.....	69.61	73.79	.....	71.70	13	83	13	73.00	27	59	27	61.00	4.9
ALABAMA—													
Carlownville.....	42.64	53.82	46.39	47.62	21	69	17	59.00	23	25	5	28.67	4.6
Greensborough.....	38.32	54.18	44.11	45.54	21	h 70	21	61.17	23	22	22	g 31.50	4.5
Greene Springs.....	37.50	52.11	41.62	43.74	21	71	21	62.33	23	22	22	31.00	4.5
MISSISSIPPI—													
Columbus.....	36.80	50.19	42.26	43.08	21	69	27	57.03	23	19	22	26.70	4.5
Paulding.....	42.62	57.07	49.20	49.63	27	d 76	21	66.60	23	22	22	32.33	4.8

a Observations taken at 8 a. m., noon, and 5 p. m.

b Same temperature on the 23d and 24th.

c Same temperature on the 11th and 24th.

d Same temperature on the 21st.

e Same temperature on the 20th.

f Same temperature on the 28th.

g Same temperature on the 23d.

h Same temperature on the 27th.

i Same temperature on the 24th.

j Same temperature on the 22d.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
LOUISIANA—	°	°	°	■		°		■		°		°	
Black River .....	41.57	59.96	50.11	50.55	21	79	21	70.33	23	25	22	33.00	4.6
New Orleans (a).....	52.53	60.68	62.50	58.57	21	80	12	75.33	23	34	23	39.33	---
Trinity .....	45.00	60.33	54.15	53.16	21	78	21	71.67	23	28	22	36.33	4.0
TEXAS—													
Austin, [Swante Palm].....	44.89	61.07	48.39	51.45	26	84	26	69.33	22	b 28	22	35.67	3.4
Austin, [Van Nostrand].....	42.39	59.95	49.50	50.61	26	82	20	68.08	23	26	27	35.50	4.5
Goliad .....	47.23	62.11	54.41	54.58	26	78	20	69.33	23	30	22	39.50	4.6
Larissa .....	40.61	56.67	45.86	47.71	26	77	26	63.33	23	21	22	31.33	4.1
Union Hill .....	44.96	55.64	51.04	50.55	26	72	19	c 63.33	23	26	22	34.00	4.9
Washington .....	42.67	61.87	47.50	50.68	26	80	20	66.33	23	24	22	34.33	4.0
TENNESSEE—													
Glenwood .....	28.67	40.36	33.33	34.12	27	68	27	55.73	23	8	22	15.60	5.9
Memphis .....	34.50	44.46	39.18	39.38	27	68	27	59.67	23	16	22	22.33	4.9
KENTUCKY—													
Bardstown .....	22.75	34.33	29.37	28.82	9	c 57	---	?	23	—10	23	8.67	6.3
Danville .....	27.29	41.43	31.75	33.49	9	64	27	49.67	23	—5	23	11.33	5.2
Millersburg .....	25.93	32.75	30.70	29.79	10	54	28	49.00	24	—4	24	1.33	4.6
Paris .....	24.36	33.71	27.31	28.46	9	c 53	27	45.00	23	—11	23	6.00	6.2
Springdale .....	22.50	36.77	31.46	30.24	27	62	27	51.17	23	—10	23	12.17	5.5
OHIO—													
Bellefontaine .....	18.25	33.85	23.98	25.36	27	54	27	43.20	23	—8	10	8.33	5.9
Bowling Green (d).....	16.00	29.62	22.30	22.64	27	53	27	44.33	11	—8	---	?	---
Cincinnati, [Harper].....	24.93	36.25	30.25	30.48	27	63	27	50.00	23	1	10	16.67	5.5
Cincinnati, [Hurt].....	22.70	34.30	27.11	28.04	27	59	27	44.33	23	—6	23	10.00	5.6
Cleveland .....	18.45	27.75	21.86	22.69	27	51	27	43.33	23	—8.5	11	8.50	8.4
Cleveland, (near) .....				28.00									
Collingwood .....	17.07	25.93	22.14	21.71	27	50	27	43.67	11	—6	10	5.67	---
Edinburgh .....	17.11	28.86	20.36	22.11	8	41	27	34.00	23	—12	23	4.67	6.6
Hillsborough .....	21.45	28.66	26.05	25.39	27	49	27	43.70	11	2	11	11.80	5.3
Hiram .....	18.14	27.07	23.91	23.04	27	49	27	40.67	11	—5	11	6.00	7.2
Jackson, Jackson county .....	23.86	37.18	28.29	29.78	27	66	27	43.33	23	—8	23	9.00	5.4
Jackson, Monroe county .....	22.25	33.79	26.82	27.62	27	55	27	37.67	23	1.5	23	12.83	6.1
Jefferson .....	17.46	24.64	22.21	21.44	27	52	27	40.67	23	—10	23	4.67	8.7
Madison, [Atkins].....	17.32	27.32	19.96	21.53	27	52	27	42.33	23	—6	11	b 6.33	6.9
Madison, [King].....	18.11	29.83	18.52	22.15	27	54	27	44.00	23	—12	23	4.00	7.1
Medina .....	17.14	26.39	20.59	21.37	27	48	27	40.67	22	—10	22	3.50	6.3
Mount Union .....	20.89	---	24.20	22.54	28	44	27	c 38.00	11	—2.5	23	4.50	6.2
New Lisbon .....	23.17	36.31	27.42	28.97	27	58	27	44.00	23	—12	23	9.33	5.4
Northwood .....	15.31	29.64	19.96	21.64	27	48	?	?	23	—9	22	4.67	?
Perrysburg (f).....	18.18	31.54	23.25	24.32	27	60	27	47.67	11	—5	22	8.33	---
Portsmouth (g) .....	24.93	35.21	30.68	30.27	27	61	27	47.67	23	—1	23	12.67	6.4
Ripley .....	24.04	---	28.71	26.37	28	47	27	42.33	23	—1	---	?	6.0
Savannah .....	15.32	27.89	19.14	20.78	27	53	27	42.33	23	—14	22	2.00	7.0
Urbana .....	16.31	30.57	21.00	22.63	27	54	27	40.67	23	—12	22	4.33	5.9
Welchfield .....	16.57	29.92	18.91	21.80	27	53	27	41.33	11	—6	11	4.33	6.3
Westerville .....	17.54	29.50	23.71	23.58	27	52	27	39.67	23	—10	23	6.67	6.1
Windham .....	19.32	30.39	21.89	23.87	27	44	27	37.67	23	—12	11	9.33	---
MICHIGAN—													
Battle Creek.....	15.50	28.00	19.46	20.99	27	51	27	40.33	22	—15	10	4.33	7.1
Cooper .....	19.64	26.71	19.93	22.09	27	e 44	27	41.33	10	—4	10	4.00	6.0
Grand Rapids, [Currier].....	13.18	24.88	19.21	19.09	26	44	27	38.33	22	—11	10	3.33	6.8
Grand Rapids, [Streng].....	11.18	25.93	19.14	18.75	27	48	27	41.00	22	—16	22	2.67	7.3
Marquette .....	9.35	19.26	9.97	12.86	26	49	26	39.40	11	—12	10	7.83	5.8
New Buffalo .....	17.15	26.85?	18.39	20.80	2	44	27	36.00?	11	—14	10	0.67	7.4
Port Huron .....	11.82	26.14	18.11	18.69	27	49	27	41.00	11	—13	11	0.67	6.6
INDIANA—													
Evansville .....	28.00	36.15	30.17	31.44	27	52	27	47.00	11	8	11	15.33	5.2
Logansport (h).....	16.00	30.00	24.00	23.00	---	55	---	---	---	—10	---	---	---

a Observations taken at 9 a. m., noon, and 3 p. m.

b Same temperature on the 23d.

c Same temperature on the 27th.

d Observations taken at sunrise, 2 p. m., and 9 p. m.

e Same temperature on the 28th.

f Observations taken at 7 a. m., 1 p. m., and 9 p. m.

g Observations taken at 7 a. m., 1 p. m., and 9 p. m.

h Observations taken at sunrise, noon, and sunset.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—Continued.	°	°	°	°	□	°	°	°	°	°	°	°	
Madison .....	22.86	30.89	26.00	26.58	27	50	27	41.00	23	2	22	11.33	6.1
Michigan City .....	15.21	28.61	17.57	20.46	28	46	27	39.16	11	—17	10	—1.83	6.7
New Harmony .....	24.57	34.68	28.14	29.13	27	60	27	49.67	23	2	10	13.00	6.0
Richmond, [Moore] .....	17.72	30.09	24.80	24.20	27	53	27	43.13	23	—8	10	8.30	5.6
ILLINOIS—													
Athens .....	14.75	28.75	17.93	20.48	26	52	26	39.67	23	—17	10	—8.33	5.7
Augusta .....	12.03	24.89	18.53	18.48	26	48	26	41.33	11	—23	19	—11.00	4.7
Aurora .....	12.29	24.61	17.79	18.23	27	41	27	36.00	11	—15	10	—6.67	5.3
Batavia .....	6.71	26.10	13.21	15.34	26	41	27	33.00	23	—23	10	—11.67	5.2
Brighton .....	17.93	27.07	24.14	23.05	24	44	22	36.67	15	0	15	6.33	6.1
Edgar County (b) .....	17.25			17.25									
Edgington .....	12.64	24.43	17.00	18.02	26	c 43	26	37.00	10	—17	10	—10.67	5.7
Elgin .....	6.39	21.71	12.86	13.65	26	c 40	27	37.00	23	—26	10	—12.00	5.6
Evanston .....	13.96	24.11	16.18	18.08	27	40	27	34.67	11	—19	10	—7.67	6.4
Fremont Centre .....	12.68	26.14	16.71	18.51	25	45	27	37.67	11	—20	10	—7.67	5.3
Hillsborough .....	21.45	28.66	23.05	25.39	27	49	27	43.70	11	2.5	11	11.80	5.3
Jacksonville (d) .....	17.25	31.07	24.45	24.26	27	58	27	45.00	10	—8	10	—4.00	---
Manchester (e) .....	16.18	31.36	18.71	22.08	26	c 49	26	38.33	10	—11	10	—5.67	6.0
Marengo .....	12.14	25.89	17.00	18.34	27	46	27	40.67	11	—14a	11	—9.33	5.4
Ottawa .....	13.25	23.21	18.00	18.15	27	42	27	38.00	23	—12	10	—9.67	5.0
Pekin .....	10.61	25.79	16.47	17.62	24	f 44	27	35.00	11	—16	10	—7.00	5.1
Peoria .....	13.07	27.13	18.66	19.62	26	c 47	26	36.88	11	—15	10	—8.50	5.5
Riley .....	8.14	22.89	13.07	14.70	26	c 36	27	34.67	23	—22	10	—13.33	4.3
South Pass .....	23.93	37.93	29.46	30.44	27	69	27	53.33	23	—3	22	13.00	5.6
Warsaw .....	14.46	29.71	19.93	21.37	26	54	26	42.67	11	—15	10	—3.67	---
Waynesville (g) .....	11.36	23.36	20.61	18.44	27	44	27	38.00	23	—18	10	—10.00	5.1
West Salem .....	21.96	35.50	26.00	27.82	27	64	27	48.67	23	—1	10	—10.00	6.0
West Urbana .....	15.46	26.29	19.82	20.52	27	46	27	37.67	23	—11	10	—5.00	6.2
Wheaton .....	9.80	21.60	15.20	15.53	27	39	27	36.20	11	—22	10	—11.50	6.0
Winnebago .....	9.26	24.25	15.24	16.25	25	44	27	35.33	10	—14	10	—8.83	5.0
MISSOURI—													
St. Louis .....	22.40	32.40	26.70	27.17	27	55	27	44.67	23	0	10	6.33	6.0
Springfield (h) .....	24.96	38.60	30.03	31.20	27	66	8	50.00	23	—9	22	7.00	6.7
WISCONSIN—													
Appleton .....	10.11	22.94	17.91	16.99	26	44	27	38.83	10	—13	10	—7.00	4.6
Bay City .....	3.25	16.07	8.79	9.37	26	54	26	44.00	10	—24	10	—14.00	4.4
Beloit .....	9.25	24.82	16.21	16.76	26	42	27	35.00	22	—16	10	—8.33	4.3
Janesville .....	12.54	25.68	18.75	18.99	26	45	27	37.00	11	—12	10	—4.67	5.8
Kenosha .....	13.98	23.26	18.39	18.54	26	39	---	?	11	—14	10	—7.33	4.7
Lind .....													5.0
Madison, [Sterling] .....	11.96	21.08	15.57	16.20	26	39	26	36.33	10	—13	10	—6.33	5.1
Manitowoc .....	13.07	26.71	20.72	20.17	26	48	27	41.67	10	—11	10	—4.00	5.8
Menasha .....	8.54	23.68	11.29	14.50	26	45	27	37.33	10	—15	19	—10.33	4.7
Milwaukee, [Lapham] .....									10	—11			---
Milwaukee, [Pomeroy] .....	12.21	25.14	16.39	17.91	26	43	27	35.67	10	—12 i	10	0.33	6.9
Milwaukee, [Winkler] .....	11.54	23.16	15.79	16.83	26	42	27	37.33	10	—14	9	—9.00	5.0
New Danemora (j) .....	5.07	23.30	14.55	14.31	26	50	26	37.50	22	—23	10	—8.33	---
New London .....	6.96	21.75	13.93	14.21	26	45	26	c 35.33	11	—24	11	—13.00	4.6
Platteville .....	9.39	23.14	14.11	15.55	26	50	26	39.00	10	—19	10	—11.67	4.6
Racine .....	14.80	24.34	17.98	19.04	2	40	25	35.33	11	10	10	—4.33	5.9
St. Croix .....	2.17	20.06	10.79	11.01	26	45	---	?	10	—23 k	---	?	?
IOWA—													
Bellevue .....	10.71	24.60	15.89	17.07	27	46	27	36.00	23	—12	10	—8.33	4.6
Border Plains .....	10.64	23.25	13.25	15.71	24	46	25	35.67f	22	—14	15	—3.00	4.6
Camanche .....	11.96	24.57	16.07	17.53	26	46	27	36.00	10	—15	22	—7.00	4.1
Dubuque .....	11.54	22.50	16.54	16.86	26	49	26	40.00	10	—14	10	—8.00	4.3
Fairfield .....	12.39	24.63	15.96	17.66	26	52	26	40.67	22	—15	10	—7.67	6.0

a Same temperature on the 24th.

b Observation taken at sunrise.

c Same temperature on the 27th.

d Observations taken at sunrise, 1 p. m., and sunset.

e Observations taken at 7 a. m., 1 p. m., and 9 p. m.

f Same temperature on the 26th.

g Observations taken at sunrise, noon, and sunset.

h Observations taken at sunrise, 3 p. m., and 9 p. m.

i Same temperature on the 11th.

j Observations taken at 6 a. m., noon, and 6 p. m.

k Same temperature on the 22d.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
IOWA—Continued.	□	○	○	○		○		○		○		○	
Fort Madison (a) -----	12.46	23.82	18.93	18.40	26	46	26	39.00	10	—16	10	—10.00	5.3
Franklin -----	11.68	24.54	14.89	17.04	26	55	26	40.00	10	—16	10	—6.33	4.7
Iowa City -----	12.00	24.39	16.57	17.65	26	50	26	36.67	10	—13	10	—9.67	5.4
Muscatine -----	10.89	22.11	15.18	16.06	26	46	26	36.33	10	—22	10	—15.00	2.0
Pleasant Plain -----	11.35	26.57	16.46	18.13	26	50	26	39.33	10	—16	10	—10.00	5.0
Poultney -----	7.68	23.46	12.85	14.66	26	49	26	36.00	10	—22	10	—12.67	5.5
Rossville -----	8.80	21.21	13.18	14.40	26	47	26	36.83	10	—17	10	—6.93	5.0
Sioux City -----	9.75	19.18	11.77	13.57	26	52	26	39.67	10	—20	10	—8.00	5.2
MINNESOTA—													
Buchanan (b) -----	0.71	23.82	6.96	10.50	24	60	26	44.00	10	—33	10	—11.50	----
Burlington -----	4.50	19.04	12.32	11.95	26	56	26	39.00	10	—26	10	—13.67	----
Hazlewood -----	5.46	17.80	10.72	11.33	26	50	26	39.33	9	—18	9	—7.67	4.6
Lapham -----	1.65	9.62	3.85	5.04	26	42	26	33.67	22	—24	15	—17.67	----
Princeton -----	3.21	19.11	8.57	10.30	26	54	26	40.67	22	—26	10	—11.00	3.6
Wabashaw -----	5.18	19.36	9.32	11.29	26	50	26	39.33	10	—25	10	—13.00	3.5
NEBRASKA—													
Bellevue -----	13.00	23.73	15.13	17.29	26	60	26	44.33	10	—18	10	—5.33	?
Omaha -----													4.4
KANSAS—													
Burlingame -----	18.57	32.39	23.93	24.96	26	68	26	48.00	22	—3	10	8.00	5.6
Lawrence -----	20.68	33.29	25.71	26.56	26	64	26	51.33	15	—2	15	6.33	4.9
Leavenworth City, [McCarty] -----	19.39	30.64	23.14	24.39	26	65	26	47.00	10	—3 c	10	5.00	6.3
Manhattan -----	18.43	36.39	23.57	26.13	26	71	26	50.33	10	—1 d	13	13.00	4.7
Topeka -----	17.39	31.32	22.71	23.81	26	64	26	49.33	10	—6	15	3.00	5.1
MEXICO—													
Cordova (e) -----	63.77	66.90	64.06	65.16	12	74.84	-----	-----	23	57.20	-----	-----	----
Mirador (f) -----	62.39	68.49	61.07	63.98	28	80.96	12	71.53	23	49.64	23	50.72	----
Vera Cruz (g) -----	72.14	-----	70.18	71.16	-----	-----	-----	-----	-----	-----	-----	-----	----
CALIFORNIA—													
Marysville -----	47.50	62.26	53.95	54.57	28	73	28	61.67	0	h 37	8	h 47.00	3.8
Sacramento -----	47.25	56.25	53.21	52.24	26	i 64	26	59.00	10	36	11	43.33	3.5
San Francisco -----	50.54	61.03	53.00	54.86	26	71	26	62.00	10	42	8	47.67	3.5
WEST INDIES—													
Central Signal Station (j) -----	-----	-----	-----	67.33	-----	-----	-----	-----	-----	-----	-----	-----	----
Nassau, Bahamas (k) -----	-----	-----	-----	74.64	-----	-----	5	80.50	-----	-----	26	68.50	----
St. George's, Bermuda (l) -----	-----	-----	-----	64.02	-----	-----	-----	-----	-----	-----	-----	-----	----
CENTRAL AMERICA—													
Guatemala (m) -----	52.88	74.84	59.54	65.55	?	84.7	-----	-----	?	45.5	-----	-----	----
SOUTH AMERICA—													
Catharina Sophia, Surinam (n) -----	74.60	85.00	79.40	79.67	25	i 87	19	o 81.00	3	70	3	p 78.00	4.4

- a Observations taken at 6 a. m., noon, and 7 p. m.  
b Observations taken at 7 a. m., noon, 3 p. m., and 9 p. m. Mean at noon, 22.50.  
c Same temperature on the 15th.  
d Same temperature on the 22d.  
e Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m. Mean at 12 m., 65.57; at 6 p. m., 65.52.  
f Observations taken at 7 a. m., 2 p. m., and 8 p. m.  
g Observations taken at 7 a. m., to 9 a. m., and at 9 p. m. to 11 p. m.  
h Same temperature on the 10th.

- i Same temperature on the 27th.  
j Observations taken at noon for the first 21 days only.  
k Mean obtained from daily maximum and minimum.  
l Observations taken at 3½ and 9½ a. m., and 3½ and 9 p. m.  
m Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m. Mean at 9 a. m., 66.20; mean at noon, 74.30.  
n Observations taken at 6 a. m., 2 p. m., and 6 p. m.  
o Same temperature on the 20th.  
p Same temperature on the 5th.

## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Fort Simpson (a).....				9. 27	15	b 35	29	28. 50	5	—18	3	—22. 00	---
Hamilton (c).....	31. 93		32. 42	32. 15	17	d 55	17	55. 00	5	4	5	5. 50	---
Montreal.....	21. 22	31. 42	25. 47	26. 04	17	53	17	46. 06	4	— 8	4	1. 83	5. 1
Moose Factory (e).....				6. 80									---
Red River Settlement.....	23. 35	32. 74	24. 70	26. 93	14	56	14	43. 33	1	—19	1	—13. 33	5. 5
Rigolet (f).....	20. 45		23. 06	21. 75	22	38	26	33. 50	15	—11	15	— 6. 00	---
St. John's.....	31. 35	34. 00	28. 84	31. 40	30	44	30	40. 67	14	17	14	g 19. 67	---
St. Martin.....	15. 05	33. 56	22. 21	23. 61	31	62	31	44. 00	4	—22	3	— 3. 00	4. 0
Stanbridge.....	19. 58	30. 61	22. 68	24. 29	17	56	17	46. 33	4	—22	4	27. 00	5. 1
Toronto (h).....	24. 09	33. 54	27. 19	28. 27	17	54	17	46. 70	5	— 5	5	2. 12	5. 0
Windsor.....	26. 87	34. 31	29. 75	30. 31	2	52	2	44. 60	14	3	13	17. 70	7. 3
Wolfville.....	27. 62	36. 10	29. 16	30. 96	2	55	2	43. 40	14	9	13	18. 77	6. 7
MAINE—													
Cornish, [Guptill].....	23. 61	33. 90	25. 71	27. 74	29	i 51	18	45. 33	4	j 1	4	8. 00	4. 5
Cornish, [West].....	21. 81	32. 52	24. 87	26. 40	17	k 50	17	45. 00	4	j —4	4	5. 00	4. 0
Gardiner.....	22. 00	34. 24	27. 32	27. 85	18	55	18	43. 67	6	—10	6	6. 00	4. 9
Monson.....													5. 2
Perry.....	24. 19	36. 06	27. 81	29. 35	18	52	18	42. 67	14	8	7	17. 67	5. 4
Portland.....	24. 61	35. 82	28. 27	29. 57	29	m 50	18	44. 67	6	8	6	12. 50	5. 0
Steuben.....	23. 84	33. 77	27. 29	28. 30	28	n 49	28	41. 00	3	o 9	7	13. 67	4. 9
NEW HAMPSHIRE—													
Concord, [Colby].....	25. 63	45. 42	36. 18	35. 74	30	60	27	n 47. 00	4	— 5	6	19. 33	4. 1
Concord, [Sawyer] (p).....	24. 55	39. 59	29. 92	31. 35	28	q 26	18	46. 67	4	— 6	5	7. 33	3. 1
Francestown, [Bixby] (r).....	27. 53	32. 77	24. 62	28. 31	17	54	?	?	4	j 0	5	5. 33	4. 8
North Barnstead.....													4. 5
Shelburne.....	19. 52	36. 22	25. 81	27. 18	31	57	31	44. 67	4	— 4	5	5. 33	4. 9
West Enfield.....	18. 65	31. 61	23. 90	24. 72	17	58	17	50. 67	5	—18	5	— 4. 00	4. 7
VERMONT—													
Bradford.....	18. 30	35. 35	24. 52	26. 06	31	59	18	46. 00	4	—21	4	— 2. 67	---
Brandon.....	21. 60	33. 11	25. 85	26. 85	17	58	17	49. 00	4	— 8	4	1. 00	5. 1
Burlington.....	20. 86	30. 95	26. 61	26. 14	17	53	17	49. 67	4	—13	4	— 1. 66	4. 9
Craftsbury.....	18. 74	29. 10	22. 81	23. 55	17	55	17	48. 00	5	— 6	5	— 1. 00	5. 2
Rupert.....	24. 00	38. 84	34. 45	32. 43	17	66	17	56. 67	4	— 6	4	5. 33	4. 8
St. Johnsbury.....	17. 48	31. 77	21. 87	23. 71	31	52	18	40. 33	4	—27	4	— 4. 67	5. 3
MASSACHUSETTS—													
Amherst.....	25. 75	38. 16	30. 01	31. 31	31	58	18	45. 80	4	— 8	5	6. 10	4. 1
Bridgewater (s).....	27. 45	39. 42	32. 58	33. 15	18	61	18	50. 57	4	4	5	9. 00	4. 2
Cambridge.....	25. 77	39. 00	30. 58	31. 78	17	65	17	51. 33	4	t 0	5	6. 33	3. 8
Florida.....													5. 6
Lawrence.....	24. 51	37. 32	29. 35	30. 39	17	59	18	49. 67	4	0	5	7. 33	4. 3
Mendon.....	30. 77	39. 25	29. 58	33. 20	17	i 56	19	50. 00	3	u 0	4	9. 33	4. 0
Nantucket.....	32. 77	39. 58	33. 58	35. 31	18	52	18	47. 33	6	14	5	16. 83	3. 7
New Bedford.....	29. 09	39. 26	31. 00	33. 12	18	57	18	50. 00	5	j 3	5	8. 20	4. 5
Newburyport.....	28. 44	39. 48	30. 42	32. 78	16	59	?	?	5	3		?	?
Richmond.....	24. 90	36. 45	30. 65	30. 67	16	64	17	53. 67	5	— 6	5	0. 00	4. 1
Westfield.....	27. 19	37. 87	31. 00	32. 02	29	56	18	50. 67	4	— 2	5	6. 33	5. 0
Williamstown.....	23. 27	34. 54	28. 13	28. 65	17	59	17	51. 60	4	—10	4	2. 30	5. 1
Worcester.....	27. 35	40. 43	30. 28	32. 69	17	64	?	?	4	v 3	5	7. 67	5. 1
RHODE ISLAND—													
Providence (w).....	27. 50	40. 30	30. 60	32. 80	18	60	18	51. 00	4	2	5	10. 00	3. 7
CONNECTICUT—													
Columbia.....	26. 71	40. 58	28. 48	31. 92	18	63	18	51. 67	4	— 6	4	5. 33	4. 2
Pomfret.....	25. 78	37. 75	28. 61	30. 71	17	58	18	49. 50	4	1	?	?	3. 9
Saybrook.....	28. 97	36. 55	31. 52	32. 35	31	52	18	44. 33	4	7	5	8. 67	3. 6

a Register thermometer.

b Same temperature on the 27th.

c Observations taken at 9 a. m. and 9 p. m.

d Same temperature on the 21st.

e Observations taken at sunrise, 2 p. m., and 10 p. m.

f Observations at sunrise and sunset.

g Same temperature on the 20th.

h Observations taken at 6 a. m., 2 p. m., and 10 p. m.

i Same temperature on the 31st.

j Same temperature on the 6th.

k Same temperature on the 29th and 31st.

l Same temperature on the 18th.

m Same temperature on the 30th.

n Same temperature on the 29th.

o Same temperature on the 7th, 8th, and 14th.

p Observations interrupted from the 10th to the 16th.

q Same temperature on the 29th, 30th, and 31st.

r Incomplete.

s Observations taken at 7 a. m., 2 p. m., and 7 p. m.

t Same temperature on the 5th and 6th.

u Same temperature on the 4th.

v Same temperature on the 5th.

w Observations taken at sunrise, 1 p. m., and 10 p. m.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CONNECTICUT—Continued.	°	°	°	°		°		°		°			
Wallingford.....	25.74	41.23	30.29	32.42	18	65	18	53.83	4	—4.5	5	6.50	3.5
NEW YORK—													
Bellport.....	31.56	37.68	31.74	33.66	18	62	18	56.67	4	a 6	5	8.67	2.6
Buffalo (b).....	30.11	34.60	30.68	31.80	17	c 58	17	51.33	5	7	5	8.33	4.7
Canton (d).....	16.20	30.46	23.05	23.24	31	54	31	42.33	5	—10	5	1.67	4.7
Clinton.....	26.26	38.32	29.23	31.27	17	64	17	56.67	5	—6	5	2.33	5.8
Fishkill Landing.....	29.03	42.77	33.84	35.21	18	61	18	53.00	5	5	5	9.67	3.9
Flatbush.....	31.27	42.00	34.60	35.96	18	63	18	59.10	5	7	5	9.40	4.4
Fort Edward.....	24.00	36.10	29.23	29.78	31	57	18	48.00	4	a—5	4	4.00	5.1
Nichols.....	26.29	41.87	28.68	32.28	17	75	17	58.00	5	—3	5	3.00	5.4
Rochester.....	29.08	38.06	32.31	33.15	17	e 61	17	58.00	5	2	5	6.80	4.2
Sag Harbor.....	30.74	44.35	33.61	36.23	18	66	18	54.00	4	3	5	10.67	4.1
Waterford.....	27.22	40.98	30.64	32.95	17	63	17	53.83	4	—3	4	7.67	4.5
Wellsville.....	27.39	39.23	30.32	32.31	17	67	17	53.67	4	—7	4	1.67	5.9
NEW JERSEY—													
Bloomfield.....	31.65	42.92	34.29	36.29	17	f 60	18	55.50	5	6	5	8.33	3.6
Freehold.....	29.71	45.69	34.65	36.68	17	71	17	54.50	5	g 7	5	8.67	---
Lumbertville.....	29.26	46.62	35.08	36.99	16	68	---	---	16	—0.7	---	---	---
Newark (h).....	---	---	---	36.80	18	64	18	56.50	6	6.5	5	10.88	---
Sergeantsville.....	29.03	56.16	35.94	40.38	17	i 81	17	63.67	5	6	5	10.33	2.7
PENNSYLVANIA—													
Bedford.....	26.99	47.26	36.11	36.79	16	76	17	59.00	5	0	5	6.33	3.6
Berwick.....	30.48	45.51	35.80	37.26	17	73	17	60.00	5	2	5	5.33	3.3
Byberry.....	30.24	45.39	34.58	33.40	16	71	18	57.00	5	6	5	9.33	3.9
Cannonsburg.....	31.38	44.94	38.77	38.36	18	j 66	18	57.00	5	g 4	5	13.00	5.3
Chromedale.....	31.16	45.50	36.37	37.68	16	67	18	58.40	5	8	5	11.80	3.9
Easton.....	28.15	41.89	33.31	34.45	16	66	17	51.67	5	2	5	6.20	4.5
Fleming.....	27.06	46.10	32.64	35.27	16	k 70	17	55.33	4	a 2	5	7.67	4.4
Gettysburg.....	30.06	48.19	36.68	38.31	17	79	17	63.33	5	0	5	8.00	4.0
Harrisburg, [Heisely].....	35.06	47.58	42.03	41.56	18	66	17	56.67	5	g 11	5	16.00	4.3
Harrisburg, [Hickok].....	31.45	45.06	38.21	38.24	16	69	17	57.33	5	6	5	11.17	4.6
Indiana.....	26.90	43.22	32.54	34.22	17	71	17	60.00	5	—8	5	0.67	4.3
Lewisburg.....	23.50	44.25	35.43	36.06	17	68	17	56.33	5	4	5	8.10	5.2
Meadville.....	24.06	42.45	29.23	31.91	16	l 65	17	54.67	5	—20	5	3.00	5.2
Morrisville.....	29.84	45.90	34.48	36.74	16	69	18	57.33	5	4	5	11.00	2.6
Mount Joy.....	31.32	50.10	38.65	40.02	17	78	17	62.50	5	4.5	5	9.67	2.4
Murrysville.....	26.77	44.87	32.87	34.84	17	70	17	55.33	5	g—6	5	3.00	5.4
Norristown.....	31.80	44.28	35.74	37.27	16	i 66	18	59.00	5	6	5	10.00	3.4
North Whitehall (m).....	29.33	43.42	39.55	37.43	16	66	18	54.67	5	4	5	8.00	3.9
Paradise.....	---	---	---	35.00	---	---	---	---	---	---	---	---	---
Philadelphia.....	34.11	47.71	40.19	40.67	17	n 70	18	60.00	5	g 10	5	14.33	4.2
Pittsburg, [Martin].....	30.03	43.77	37.00	36.93	17	66	17	53.33	5	3	5	9.00	5.4
Pittsburg, [Wilson].....	31.06	43.42	35.84	36.77	17	71	16	58.00	5	0	5	6.33	---
Pocopson.....	30.87	46.29	36.61	37.92	16	68	18	57.67	5	6	5	10.67	4.4
Reading.....	30.48	44.11	36.56	37.05	17	64	18	53.67	5	7	5	11.16	3.9
Shamokin (o).....	26.87	42.57	38.37	35.94	17	72	17	60.33	3	—5	5	8.33	4.3
Somerset.....	26.81	42.39	33.16	34.12	17	68	17	59.33	5	g—2	5	2.33	6.3
Tarentum.....	28.26	46.32	34.61	36.40	17	72	17	56.33	5	—1	5	7.00	4.7
West Haverford.....	32.58	46.00	---	39.29	16	72	16	61.00	5	5	5	11.50	4.1
Westtown.....	30.68	44.24	35.48	36.80	16	66	18	56.33	5	g 5	5	8.83	4.3
DELAWARE—													
Georgetown (p).....	37.33	50.53	47.33	45.06	16	75	17	66.67	5	11	5	16.33	---
Milford (q).....	37.21?	46.09?	35.54?	46.28	15	72	?	?	5	15	5	17.67	2.7
MARYLAND—													
Annapolis.....	33.98	47.60	39.50	40.36	18	71	18	61.16	5	g 9	5	16.00	3.6

a Same temperature on the 5th.

b Observations taken at 8 a. m., 2 p. m., and 9 p. m.

c Same temperature on the 20th.

d Observations interrupted from the 16th to the 25th.

e Same temperature on the 31st.

f Same temperature on the 25th.

g Same temperature on the 6th.

h Observations taken at 7 a. m. and 6 p. m.

i Same temperature on the 19th.

j Same temperature on the 28th.

k Same temperature on the 17th.

l Same temperature on the 17th, 20th, and 27th.

m Observations taken at sunrise, noon, and sunset.

n Same temperature on the 18th.

o Mean of observations taken in the night, 21.10.

p Observations taken at 8 a. m., 1 p. m., and 6 p. m.

q Incomplete.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—Continued.	°	°	°	■	°	■			°	■			
Baltimore.....	34.99	47.50	42.41	41.63	15	70	18	60.83	5	10	5	15.08	5.3
Bladensburg.....	32.64	49.69	36.70	39.68	15	76	?	?	5	a 7.5	?	?	4.3
Chestertown.....	34.64	48.38	39.62	40.88	16	75	16	61.00	5	8	5	13.00	4.3
Frederick.....	34.14	47.50	39.33	40.32	16	70	17	62.67	5	8.5	5	14.17	3.8
Oakland.....	25.39	40.45	29.26	31.70	17	71	17	56.67	5	—11	5	—1.67	---
Sykesville.....	32.10	48.19	39.71	40.00	17	71	17	60.33	5	2	5	9.67	3.2
DISTRICT OF COLUMBIA—													
Washington.....	35.09	48.48	42.19	41.92	16	70	18	61.33	5	9	5	14.33	3.9
VIRGINIA—													
Alexandria.....	35.87	51.48	43.61	43.65	15	74	17	64.33	5	10	5	15.67	3.5
Crichton's Store (b).....	43.03	54.24	53.47	50.25	16	77	16	c 69.33	5	17	5	24.33	4.6
Hartwood.....	37.48	51.55	41.87	43.63	16	78	16	65.67	5	10	5	15.33	---
Lewisburg.....	28.90	45.52	35.81	36.74	27	68	27	57.33	7	2	2	12.67	4.4
Meadow Dale.....	26.87	43.39	38.10	36.21	16	69	16	57.00	6	—1	5	7.00	---
Montross.....	37.94	50.68	42.81	43.81	16	75	16	65.00	5	a 10	5	15.00	4.1
Mossy Creek.....	30.39	49.22	34.09	37.90	15	d 74	17	59.33	7	0	5	10.00	4.1
Poplar Grove.....	32.80	55.10	40.00	42.63	15	e 77	27	59.67	4	a 10	6	17.67	4.6
Portsmouth.....	40.61	53.03	42.45	45.36	16	f 77	18	66.33	5	15	5	20.33	2.8
Rose Hill (g).....	40.91	51.94	43.68	45.51	15	74	18	66.00	5	15	---	?	4.4
Rougemont.....	36.61	55.30	42.82	44.91	16	88	16	69.67	5	a 8	5	14.67	5.0
Ruthven (g).....	34.44	46.24	41.04	40.57	15	75	?	?	6	15	5	19.00	2.5
Salem.....	45.23	49.81	48.11	47.72	25	k 68	18	63.67	2	i 23	2	24.67	4.2
Smithfield.....	38.45	52.99	45.39	45.61	16	77	18	66.00	5	11	5	18.40	4.3
Winchester.....	36.42	49.52	42.39	42.78	16	f 72	17	66.00	5	8	5	13.33	2.6
Wirt Court House.....	28.84	50.23	37.68	38.92	28	74	29	59.33	7	—7	6	11.67	4.3
NORTH CAROLINA—													
Ashville (j).....	38.64	47.50	42.43	42.86	16	68	16	60.67	2	k 12	2	15.33	---
Chapel Hill.....	39.84	55.58	44.42	46.61	18	e 76	18	66.00	3	18	3	25.00	4.4
Davidson College.....	40.90	55.80	47.34	48.01	27	75	18	64.83	3	16	2	24.67	4.4
Gaston.....	39.39	54.87	42.58	45.61	16	77	18	65.00	6	13	5	19.67	---
Marlborough.....	44.69	56.09	48.54	49.77	15	76	18	67.00	3	18	4	26.00	4.8
Murfreesborough.....	42.10	54.28	47.28	47.89	16	74	17	65.33	5	17	6	22.33	3.3
SOUTH CAROLINA—													
Aiken.....	46.03	61.10	49.67	52.27	28	82	18	67.67	2	20	2	26.67	3.7
All Saints.....	47.71	58.78	50.77	52.42	18	l 79	18	71.67	3	24	3	30.00	4.0
Charleston, [Dawson].....	52.96	60.35	55.16	56.16	---	79	---	---	---	29	---	---	---
Charleston, [Johnson].....	52.10	60.35	55.16	55.87	28	79	28	69.33	3	29	5	35.00	---
St. John's.....	40.62	72.00	46.25	52.96	29	89	---	?	3	16	---	?	4.3
GEORGIA—													
Athens.....	44.44	59.47	50.45	51.45	19	77	17	67.17	2	18	2	25.30	4.4
Hillsborough (g).....	48.22	62.70	55.16	55.36	28	81	18	69.17	2	21	2	28.00	5.0
Savannah.....	51.80	64.60	56.30	57.57	28	83	23	71.80	2	27	2	34.60	3.9
Sparta.....	46.35	64.33	54.71	55.13	19	83	19	70.67	3	20	2	29.00	4.6
Whitemarsh Island.....	52.00	62.58	55.35	56.64	28	80	23	70.00	2	27	2	33.67	3.4
Zebulon.....	54.73	64.13	59.87	59.58	24	84	24	78.00	2	k 28	2	30.33	4.1
FLORIDA—													
Alachua County.....	51.74	71.08	58.06	60.29	19	n 83	23	72.33	3	30	?	?	3.4
Alligator.....	52.10	72.10	56.16	60.12	19	89	23	75.00	2	i 27	2	33.00	4.2
Atsena.....	58.65	64.48	62.58	61.90	30	76	23	n 71.33	2	32	2	39.33	4.1
Belair.....	54.10	71.74	62.68	62.84	28	84	23	77.33	2	30	2	40.00	3.5
Jacksonville.....	57.60	69.63	58.34	61.86	21	83	22	78.00	2	k 34	2	39.00	3.8
St. Augustine.....	60.42	67.55	60.42	62.80	23	84	21	77.00	2	37	2	k 41.33	4.1
Salt Ponds.....	68.68	74.45	---	71.56	18	o 83	23	p 79.50	3	54	3	55.50	3.4
ALABAMA—													
Greene Springs.....	49.46	65.39	54.25	56.37	19	77	19	70.16	3	i 24	1	q 31.67	4.6
Greensborough.....	49.29	65.85	56.84	57.33	28	80	19	70.50	2	25	2	33.33	4.3

a Same temperature on the 6th.

b Observations taken at 8 a. m., noon, and 5 p. m.

c Same temperature on the 18th.

d Same temperature on the 16th.

e Same temperature on the 27th.

f Same temperature on the 17th.

g Incomplete.

h Same temperature on the 26th.

i Same temperature on the 4th.

j Observations taken at 9 a. m., 2 p. m., and 9 p. m.

k Same temperature on the 3d.

l Same temperature on the 27th.

m Same temperature on the 20th.

n Same temperature on the 30th.

o Same temperature on the 23d, 24th, and 26th.

p Same temperature on the 24th.

q Same temperature on the 2d.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSISSIPPI—	°	°	°	°		°		°		°		°	
Columbus.....	47.95	63.14	54.83	55.31	19	77	19	70.83	2	26	1	32.53	4.5
Natchez.....	54.00	70.21	60.22	61.43	19	<i>a</i> 80	19	73.67	27	27	1	38.67	---
Paulding.....	54.38	69.96	61.11	61.82	28	85	18	73.50	2	25	1	35.67	5.0
LOUISIANA—													
Black River.....	54.71	71.10	61.77	62.53	20	19	20	76.00	2	28	1	39.00	5.3
New Orleans ( <i>b</i> ).....	63.40	70.64	72.80	68.95	29	89	19	<i>a</i> 83.33	1	38 <i>c</i>	1	41.67	---
TEXAS—													
Austin, [Swante Palm].....	58.00	70.87	60.68	63.18	11	81	28	73.00	1	32	1	38.33	5.1
Austin, [Van Nostrand].....	54.63	69.40	60.77	61.60	11	79	19	72.33	2	27	1	38.75	5.2
Goliad.....	59.19	70.40	63.82	64.47	27	78	20	72.00	2	31	1	41.67	5.2
Larissa.....	53.62	67.76	59.35	60.24	26	80	19	72.33	1	28	1	34.67	4.7
Union Hill.....	52.65	63.26	57.81	57.91	11	<i>d</i> 72	12	69.00	1	28	1	40.33	6.5
TENNESSEE—													
Glenwood.....	41.97	55.89	48.36	48.74	27	79	16	66.13	2	17	1	21.00	5.2
Memphis, [Tuck].....	48.32	59.71	53.61	53.88	27	78	19	<i>e</i> 68.67	2	24	1	<i>f</i> 29.33	4.5
KENTUCKY—													
Bardstown.....	37.14	52.70	43.88	44.57	27	78	16	66.50	2	9.5	2	14.50	3.9
Danville.....	38.84	56.52	44.68	46.68	15	<i>a</i> 79	20	68.00	7	5	2	16.67	3.6
Springdale.....	33.61	53.87	47.34	44.94	26	76	16	65.00	2	9	2	18.33	4.3
Millersburg.....	37.55	49.55	41.65	42.92	16	<i>e</i> 70	16	65.33	6	— 4	6	6.00	3.3
Paris.....	34.71	49.00	41.06	41.59	27	73	16	62.33	7	— 1	2	14.67	4.4
OHIO—													
Bellefontaine.....	35.68	47.76	37.52	40.32	16	74	16	68.00	7	1	5	11.43	4.5
Bowling Green ( <i>g</i> ).....	30.55	46.52	38.16	38.41	16	65	16	60.00	4	0	5	13.33	---
Cincinnati, [Harper].....	36.97	54.32	43.65	44.98	16	78	15	61.00	4	12	2	17.67	4.3
Cincinnati, [Hartt].....	32.90	51.58	39.84	41.47	16	73	17	64.00	7	2	6	14.33	3.2
Cleveland.....	29.94	40.03	33.15	31.71	17	68	16	59.50	5	— 4	5	6.80	5.5
Cleveland, [near].....				41.00									
Collingwood.....	31.68	44.00	36.48	37.39	15	62	15	56.67	4	8 <i>h</i>	5	12.33	---
Edinburg.....	27.39	42.52	32.26	34.06	16	63	16	57.67	5	— 10	5	1.33	5.3
Hillsborough.....	33.48	44.77	39.95	39.40	16	67	16	61.00	4	4	2	11.30	3.9
Hiram.....	30.00	42.13	33.33	35.15	16	75	16	63.33	5	— 2	5	5.00	5.7
Jackson, Jackson county.....	32.77	51.61	39.06	41.15	17	76	17	65.67	7	— 1	6	13.33	3.3
Jackson, Monroe county ( <i>i</i> ).....	27.36	45.70	32.38	35.15	16	<i>e</i> 72	16	55.67	7	3	5	10.67	5.0
Jefferson.....	25.74	37.03	30.90	31.22	16	<i>j</i> 58	16	<i>k</i> 48.67	5	— 6	6	2.67	9.2
Madison, [Atkins].....	31.16	39.03	31.13	33.77	17	70	17	63.67	5	1	5	4.67	5.4
Madison, [King].....	29.97	39.80	27.93	32.57	15	74	15	63.33	5	— 9	5	3.67	5.2
Medina.....	29.90	42.37	33.00	35.09	15	<i>l</i> 67	17	58.00	5	— 10	5	0.35	5.3
New Lisbon.....	32.48	53.40	36.84	40.91	16	<i>m</i> 76	17	62.33	5	— 2	5	7.10	4.0
Northwood.....	30.28	44.14	35.33	36.58	31	65	16	60.00	7	— 2	2	8.00	4.8
Perrysburg ( <i>n</i> ).....	34.23	47.77	37.65	39.88	18	71	16	60.00	4	5	5	14.67	---
Portsmouth ( <i>o</i> ).....	34.81	52.32	42.13	43.09	16	76	17	66.00	7	4	6	15.00	5.3
Ripley.....	33.18	---	40.54	36.86	27	75	14	<i>e</i> 59.00	7	6	4	13.00	4.0
Savannah.....	29.00	44.52	32.78	35.43	16	67	16	58.33	5	— 8	5	0.00	5.5
Urbana.....	31.23	49.16	36.10	38.83	16	73	16	63.33	4	— 2 <i>p</i>	6	10.67	5.4
Welchfield.....	29.54	42.58	31.32	34.48	17	70	16	59.00	3	0 <i>h</i>	5	5.67	4.0
Westerville.....	30.58	45.69	37.19	37.82	17	69	15	61.67	7	— 7	5	10.83	5.5
Windham.....	28.13	43.94	32.78	34.95	16	66	17	58.00	5	— 2	5	7.67	---
MICHIGAN—													
Battle Creek.....	30.03	45.74	35.16	36.98	27	76	16	58.00	5	— 7	5	8.00	4.2
Cooper.....	33.39	44.45	35.81	37.88	16	64	16	56.67	5	8	3	10.00	4.4
Grand Rapids, [Currier].....	29.45	42.94	34.84	35.74	15	<i>q</i> 67	15	59.33	5	— 3	5	9.67	4.6
Grand Rapids, [Streng].....	28.80	43.68	33.45	35.31	15	67	15	59.00	5	— 2	3	10.67	5.0
Marquette.....	24.68	33.97	28.18	28.94	15	58	15	52.20	5	— 12	3	— 4.50	5.3
Monroe.....													6.0

*a* Same temperature on the 20th.*b* Observations taken at 9 a. m., noon, and 3 p. m.*c* Same temperature on the 24 and 9th.*d* Same temperature on the 12th and 13th.*e* Same temperature on the 27th.*f* Same temperature on the 2d.*g* Observations taken at sunrise, 2 p. m., and 9 p. m.*h* Same temperature on the 5th.*i* Incomplete.*j* Same temperature on the 18th.*k* Same temperature on the 17th and 18th.*l* Same temperature on the 17th.*m* Same temperature on the 17th, 21st, and 23d.*n* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*o* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*p* Same temperature on the 7th.*q* Same temperature on the 31st.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued	°	°	°	°		°		°		°			
New Buffalo (a)-----	32.78	43.87	34.81	37.15	15	68	15	60.00	5	3	5	13.00	6.4
Port Huron -----	27.52	38.68	28.58	31.59	20	61	16	53.00	5	—10	5	1.00	5.0
INDIANA—													
Evansville -----	40.78	52.55	47.67	47.00	16	c72	16	66.00	3	15	1	22.33	4.2
Logansport -----	34.45	52.19	40.06	42.33	26	76	15	65.67	3	7	1	12.67	4.6
Madison -----	35.03	46.81	40.60	40.81	27	67	16	59.67	7	8	2	15.00	4.5
Michigan City-----	33.45	45.45	36.48	38.46	15	72	15	63.00	5	5	2	d14.33	5.1
New Harmony-----	39.29	53.52	45.84	46.22	27	74	16	64.33	2	e17	1	21.33	5.1
Richmond -----	31.45	45.68	37.40	38.18	16	67	16	58.67	7	—0.5	2	11.60	?
ILLINOIS—													
Athens -----	34.03	51.42	39.61	41.69	20	75	15	61.67	1	e5	1	9.33	4.4
Augusta -----	34.87	50.45	42.43	42.58	26	75	15	63.67	1	f1	1	7.33	4.0
Aurora -----	31.71	45.13	37.77	38.20	15	59	15	60.33	2	e4	3	11.00	4.7
Batavia -----	28.16	47.55	32.17	35.96	19	72	15	59.00	2	—2	1	e10.00	5.0
Brighton -----	34.61	48.52	40.06	41.06	31	70	30	54.67	13	24	13	30.00	4.4
Edgar County (h)-----	35.42			35.42									
Edgington -----	33.06	48.55	39.72	40.44	26	76	15	62.67	1	2	1	11.67	5.0
Elgin -----	30.61	44.58	34.10	36.43	15	71	15	60.67	2	e0	3	6.00	5.8
Evanston -----	35.10	44.73	34.93	38.25	15	70	15	61.67	2	5	2	12.33	4.8
Fremont Centre-----	33.71	45.84	35.19	38.25	15	58	15	60.33	2	e8	1	14.33	3.5
Hillsborough -----	33.48	44.77	39.95	39.40	16	67½	16	61.00	4	4	2	11.33	3.9
Jacksonville -----	34.84	52.81	47.45	45.03	26	77	15	66.33	3	—10	3	13.00	---
Manchester (a)-----	36.26	53.97	40.90	43.71	26	76	15	61.33	1	5	1	10.67	4.9
Marengo -----	34.71	46.97	34.45	38.71	15	72	15	63.33	1	2	3	8.67	4.9
Ottawa -----	32.67	46.25	38.48	39.13	26	71	15	61.67	2	4	3	11.67	4.4
Pekin -----	32.83	50.32	39.22	40.79	26	75	26	62.00	2	e0	1	8.67	4.1
Peoria -----	34.18	51.45	40.36	42.00	27	77	16	63.50	2	4	1	12.12	4.3
Riley -----	30.77	44.67	31.57	35.67	15	70	15	59.67	9	—4	1	6.33	3.3
South Pass -----	41.42	58.56	48.32	49.43	26	77	14	66.00	2	13	1	22.00	5.1
Warsaw -----	34.33	52.79	41.90	43.07	26	79	15	68.33	2	i6	1	14.67	---
Waynesville -----	31.52	49.27	44.42	41.74	27	76	16	62.67	2	0	1	9.33	4.2
West Salem-----	39.35	56.16	45.10	46.87	26	78	14	67.33	2	11	1	19.00	4.8
West Urbana-----	34.32	48.55	39.00	40.62	26	74	15	61.33	2	3	1	e11.67	4.6
Wheaton -----	30.10	43.00	34.90	36.00	15	70	15	61.00	2	—1	3	7.40	5.4
Winnebago -----	30.59	48.10	35.59	38.09	15	70	15	62.00	2	2	3	10.90	4.3
MISSOURI—													
St. Louis -----	41.00	55.20	47.30	47.83	25	76	19	64.50	1	11	1	16.50	4.5
Springfield (h)-----	41.51	56.26	48.03	48.60	10	75	19	62.67	1	14	1	20.33	7.4
WISCONSIN—													
Appleton -----	28.35	42.68	34.29	35.11	15	66	15	57.33	2	0	3	9.67	4.6
Bay City -----	23.58	32.94	26.35	27.62	15	64	15	51.33	4	—6	1	0.67	4.9
Beloit -----	31.25	46.14	35.38	37.59	15	68	15	59.00	2	4	3	11.33	4.1
Janesville -----	23.68	37.10	28.19	29.66	30	59	30	43.67	7	m0	7	6.67	4.5
Kenosha -----	31.85	41.63	35.20	36.24	15	71	15	61.00	2	0	1	f13.00	4.3
Lind -----													5.3
Madison, [Sterling]-----	31.68	42.23	35.87	36.59	15	66	15	59.00	2	e4	1	e10.00	5.4
Manitowoc -----	30.10	40.87	34.81	35.26	15	70	15	56.00	2	2	1	11.00	5.6
Menasha -----	29.39	42.77	32.84	35.00	15	68	15	58.67	4	—2	4	3.67	4.8
Milwaukee, [Lapham]-----										3	2		
Milwaukee, [Pomeroy]-----	29.19	39.88	32.90	33.99	16	60	15	52.67	2	3	3	8.33	5.6
Milwaukee, [Winkler]-----	31.45	40.69	33.61	35.25	15	69	15	60.67	2	e3	3	9.67	3.9
Mount Morris-----	29.25	43.19	32.29	34.91	15	66	15	58.67	4	1	3	9.00	5.4
New Danemora (n)-----	26.01	45.90	38.82	36.91	15	o68	15	63.00	2	—4	1	8.67	---
New London -----	26.19	40.64	32.06	32.96	15	65	15	54.67	4	—4	3	7.00	4.6
Platteville -----	32.26	47.32	37.64	39.07	15	70	15	63.00	2	—2	2	7.00	4.8
Racine -----	33.18	40.73	32.73	35.55	15	68	15	54.67	3	8	3	14.00	5.0

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 17th.

c Same temperature on the 27th.

d Same temperature on the 5th.

e Same temperature on the 3d.

f Same temperature on the 2d.

g Same temperature on the 31st.

h Observations taken at sunrise.

i Same temperature on the 1st.

j Same temperature on the 26th.

k Observations taken at sunrise, 3 p. m., and 9 p. m.

l Same temperature on the 19th.

m Same temperature on the 10th and 12th.

n Observations taken at 6 a. m., noon, and 6 p. m.

o Same temperature on the 25th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
St. Croix (a)-----	27. 19	-----	33. 00	30. 10	15	62	?	?	1	— 5	1	1. 67	5. 4
Waukesha-----	32. 32	43. 68	36. 13	37. 38	18	61	16	57. 00	2	b 4	3	9. 33	5. 2
IOWA—													
Bellevue-----	31. 49	48. 19	36. 87	38. 85	15	71	15	61. 67	2	2	3	11. 67	5. 5
Border Plains-----	33. 74?	50. 65?	38. 55?	40. 98	25	75	14	62. 67	1	10	1	14. 00	4. 7
Dubuque-----	33. 19	46. 16	38. 00	39. 12	15	70	15	61. 67	3	4	2	b 11. 67	5. 0
Fairfield-----	35. 62	49. 10	40. 80	41. 84	26	76	15	64. 00	1	1	1	5. 33	5. 5
Fort Madison (c)-----	33. 45	48. 83	43. 35	41. 88	26	74	15	64. 33	2	1	1	7. 67	4. 9
Franklin-----	34. 61	49. 84	38. 74	41. 06	26	71	15	60. 00	1	d 6	1	11. 00	4. 7
Iowa City-----	35. 15	46. 67	39. 43	40. 42	15	72	15	61. 67	2	8	1	12. 67	5. 2
Muscatine-----	31. 84	47. 52	36. 26	38. 54	15	e 70	19	59. 33	1	b 2	2	9. 00	3. 1
Pleasant Plain-----	33. 87	51. 32	40. 03	41. 74	26	78	15	67. 33	1	b 2	1	8. 33	4. 5
Poultney-----	32. 07	47. 84	33. 70	37. 87	15	73	15	62. 00	1	1	1	7. 00	5. 4
Rossville-----	31. 52	46. 28	35. 86	37. 89	15	65	15	57. 83	2	1	1	6. 67	4. 9
Sioux City-----	34. 50	50. 22	39. 41	41. 38	25	71	-----	?	1	6	2	13. 00	5. 1
MINNESOTA—													
Buchanan (f)-----	23. 61	41. 48	25. 87	30. 32	15	74	15	53. 75	1	—12	1	4. 75	-----
Burlington-----	22. 00	36. 20	28. 03	28. 74	15	56	16	45. 67	3	—10	1	2. 67	-----
Hazlewood-----	32. 55	43. 84	35. 06	37. 15	19	63	19	52. 33	1	2	2	4. 00	4. 8
Princeton-----	29. 39	46. 50	33. 97	36. 62	31	68	31	59. 33	2	1	2	5. 00	3. 2
Wabashaw-----	29. 19	46. 42	31. 78	35. 80	16	70	16	59. 33	1	— 2	2	5. 33	3. 7
NEBRASKA—													
Bellevue-----	38. 39	51. 68	43. 90	44. 66	26	75	26	61. 33	1	7	1	14. 50	4. 4
Omaha-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3. 8
KANSAS—													
Burlingame-----	39. 45	57. 30	44. 45	47. 07	26	81	26	65. 67	1	14	1	18. 33	4. 0
Lawrence-----	42. 10	57. 71	48. 45	49. 42	26	74	26	65. 67	1	14	1	20. 67	3. 3
Leavenworth City-----	41. 84	56. 26	44. 81	47. 64	26	76	15	65. 67	1	12	1	15. 67	4. 4
Manhattan-----	38. 23	60. 45	44. 90	47. 86	26	82	15	66. 00	3	10	1	20. 00	4. 3
Moneka-----	-----	-----	45. 23	-----	2	78	-----	-----	10	20	-----	-----	3. 1
Topeka-----	40. 81	58. 45	45. 13	48. 13	26	82	26	68. 00	1	b 12	1	17. 00	3. 0
MEXICO—													
Cordova (g)-----	66. 36	70. 36	66. 47	68. 23	22	81. 32	-----	-----	9	57. 20	-----	-----	-----
Mirador (h)-----	60. 85	74. 14	63. 27	66. 09	22	87. 80	30	78. 62	2	46. 04	8	d 52. 39	-----
Vera Cruz (i)-----	73. 46	-----	75. 95	74. 70	-----	-----	-----	-----	-----	-----	-----	-----	-----
CALIFORNIA—													
Marysville-----	48. 42	64. 32	55. 87	56. 20	1	76	1	63. 33	18	37	17	45. 67	4. 1
Sacramento, [Logan]-----	49. 45	57. 84	53. 94	53. 74	7	j 64	31	59. 00	18	k 43	17	46. 33	4. 4
San Francisco-----	50. 29	59. 61	51. 29	53. 73	6	72	6	61. 00	17	l 42	17	45. 67	4. 4
Union Rancho-----	44. 61	62. 52	54. 26	53. 80	3	m 74	1	63. 00	17	n 32	17	44. 67	-----
WEST INDIES—													
Nassau, Bahamas (o)-----	-----	-----	-----	79. 33	-----	-----	-----	-----	-----	-----	-----	-----	-----
St. George's, Bermuda (p)-----	-----	-----	-----	60. 59	-----	-----	25	80. 50	-----	-----	6	63. 50	-----
CENTRAL AMERICA—													
Guatemala (q)-----	54. 32	74. 30	59. 36	65. 70	?	85. 8	-----	-----	?	41. 4	-----	-----	-----
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (r)-----	75. 10	84. 70	79. 80	79. 87	17	s 88	29	82. 00	14	70	16	75. 33	5. 2

a Incomplete.

b Same temperature on the 3d.

c Observations taken at 6 a. m., noon, and 7 p. m.

d Same temperature on the 2d.

e Same temperature on the 19th.

f Observations taken at 7 a. m., noon, 3 p. m., and 9 p. m. Mean at noon, 41.10.

g Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m. Mean at 12 m., 68.74; at 6 p. m., 69.21.

h Observations taken at 7 a. m., 2 p. m., and 8 p. m.

i Observations taken from 6 to 8 a. m. and from 8 to 10 p. m.

j Same temperature on the 8th.

k Same temperature on the 19th and 28th.

l Same temperature on the 18th.

m Same temperature on the 23d.

n Same temperature on the 20th.

o Mean obtained from daily maximum and minimum.

p Observations taken at 3.30 and 9.30 a. m., and 3.30 and 9.30 p. m.

q Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.

Mean at 9 a. m., 66.02; mean at noon, 74.48.

r Observations taken at 6 a. m., 2 p. m., and 6 p. m.

s Same temperature on the 27th.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Fort Simpson (a).....				25.50	26	b 47	26	46.00	1	c 8	12	12.50	
Hamilton (d).....	44.43		44.73	44.58	22	66	30	60.00	7	e 34	7	f 35.00	
Montreal.....	38.27	46.12	39.76	41.38	29	57	29	51.13	7	19	7	29.86	6.0
Moose Factory (g).....				24.10									
Red River Settlement.....	30.43	42.07	30.79	34.43	19	h 62	28	54.33	5	13	5	17.67	4.6
Rigolet (i).....	22.97		27.70	25.33	24	38	24	35.00	5	— 3	4	6.50	
St. John's.....	35.67	40.33	35.30	37.10	27	60	27	52.00	4	20	5	26.67	
St. Martin (j).....	32.89	46.92	38.02	39.28	2	60	4	48.60	7	16	7	27.00	
Stanbridge.....	36.57	46.70	38.63	40.63	4	60	23	k 49.00	7	20	7	25.67	5.8
Toronto (j).....	37.07	46.44	39.72	41.08	30	61	30	52.13	7	24	6	30.83	6.5
Windsor.....	35.10	44.27	35.98	38.45	3	61	24	47.80	8	25	11	28.50	6.1
Wolfville.....	35.67	45.32	36.13	39.04	2	57	3	45.77	10	24	11	28.50	6.1
MAINE—													
Cornish, [Guptill].....	36.13	46.50	37.23	39.95	■	64	3	52.00	7	23	7	27.33	5.7
Cornish, [West].....	35.73	46.80	37.26	39.93	3	65	3	51.33	7	22	7	26.33	5.2
Gardiner.....	37.37	47.25	37.62	40.75	3	64	16	48.33	7	26	7	28.33	5.9
Monson.....													5.5
Perry.....	34.77	42.88	35.83	37.83	3	61	16	47.33	8	24	11	29.67	5.7
Portland.....	37.30	47.17	39.48	41.32	3	65	16	51.00	7	27	7	31.00	6.0
Steuben (l).....	35.33	44.71	36.12	38.72	3	60	15	47.33	1	m 29	7	30.00	6.1
NEW HAMPSHIRE—													
Concord.....	36.89	51.34	40.20	42.81	3	68	16	51.33	7	25	7	30.67	5.4
Francestown, [Bixby].....	40.93	49.61	40.89	43.81	3	66	3	55.33	7	27	7	31.33	5.2
Shelburne.....	36.30	49.73	37.13	41.05	3	n 64	22	50.67	7	20	7	25.33	5.7
Stratford.....	33.07	45.00	34.60	37.56	4	57	23	46.00	7	18	7	23.00	5.7
West Enfield.....	35.00	45.80	38.07	39.62	3	60	3	50.33	7	17	7	23.33	5.8
VERMONT—													
Brandon.....	36.96	48.93	40.08	41.99	3	62	4	50.50	7	21	7	27.50	5.6
Burlington.....	37.30	46.85	41.25	41.80	4	60	22	51.00	7	20	7	26.67	5.2
Craftsbury.....	33.57	43.77	37.20	38.18	3	56	■	o 46.00	7	17	7	23.00	5.3
Rupert.....	35.20	50.67	46.13	44.00	4	n 64	4	p 56.00	8	20	7	28.67	5.9
St. Johnsbury.....	34.70	45.31	35.20	38.40	3	59	24	46.33	7	21	7	25.33	5.7
MASSACHUSETTS—													
Amherst.....	40.29	53.93	43.90	46.04	3	68	30	59.80	7	28	7	34.60	5.4
Bridgewater (q).....	39.97	53.23	46.87	46.69	3	65	16	p 55.17	7	29	27	33.83	6.0
Cambridge.....	39.30	52.53	44.17	45.33	3	67	30	58.00	7	27	7	33.00	5.9
Florida.....													6.6
Lawrence.....	37.13	52.00	41.80	43.64	3	68	23	51.33	7	26	7	31.33	5.2
Mendon.....	38.20	52.73	44.46	45.13	3	70	30	57.67	7	26	27	32.33	5.2
Nantucket.....	44.37	51.00	43.37	46.25	10	62	23	52.83	7	b 34	27	35.67	5.0
New Bedford.....	41.58	52.62	43.57	45.92	3	r 61	23	53.20	7	30	27	35.00	6.2
Newburyport (s).....	37.74	49.26	41.98	42.99	16	t 59	?	?	9	32	?	?	?
Richmond.....	35.23	51.73	43.80	43.59	22	68	30	58.00	7	20	7	28.33	6.0
Westfield.....	41.33	53.23	44.10	46.22	3	67	30	59.67	7	29	7	36.00	5.8
Williamstown.....	38.43	49.27	41.70	43.13	3	62	9	52.80	7	24	7	30.60	6.1
Worcester.....	40.52	53.14	44.73	46.13	3	67	30	59.33	7	29	27	33.67	5.6
RHODE ISLAND—													
Providence (u).....	40.50	54.70	43.40	46.20	3	69	3	54.67	7	v 30	27	34.33	5.0
CONNECTICUT—													
Columbia.....	42.27	54.03	41.20	45.83	30	70	30	60.67	7	28	7	31.00	5.4
New London.....	41.00	50.90	41.37	44.42	29	61	30	53.67	27	31	27	33.33	4.9
Pomfret.....	37.39	51.50	42.10	43.66	30	■	3	53.60	7	27	27	32.20	5.2

a Register thermometer.

b Same temperature on the 27th.

c Same temperature on the 2d and 13th.

d Observations taken at 9 a. m. and 9 p. m.

e Same temperature on the 24th.

f Same temperature on the 11th.

g Observations taken at sunrise, 2 p. m., and 10 p. m.

h Same temperature on the 25th.

i Observations taken at sunrise and sunset.

j Observations taken at 6 a. m., 3 p. m., and 10 p. m.

k Same temperature on the 2d.

l For the first 24 days of the month.

m Same temperature on the 7th, 8th, and 21st.

n Same temperature on the 22d.

o Same temperature on the 5th.

p Same temperature on the 30th.

q Observations taken at 7 a. m., 2 p. m., and 7 p. m.

r Same temperature on the 16th.

s Incomplete.

t Same temperature on the 18th.

u Observations taken at 6 a. m., 1 p. m., and 10 p. m.

v Same temperature on the 8th.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
CONNECTICUT—Continued.	°	°	°	°		°		°		°		°	
Saybrook .....	42. 23	49. 77	42. 85	44. 95	30	60	30	55. 00	7	30	27	34. 33	5. 1
Wallingford .....	39. 30	54. 38	43. 72	45. 80	30	72	30	63. 17	7	23	27	33. 50	4. 3
NEW YORK—													
Bellport .....	44. 68	50. 88	44. 17	46. 58	30	65	30	58. 33	7	a 32	27	38. 00	4. 7
Buffalo (b) .....	42. 20	46. 33	42. 41	43. 65	4	70	---	?	6	c 30	7	33. 33	5. 4
Canton .....	38. 57	50. 77	42. 80	44. 05	4	70	4	59. 70	7	20	7	26. 00	5. 5
Clinton .....	41. 87	54. 23	43. 40	46. 50	4	70	22	59. 00	7	23	7	30. 00	6. 3
Fishkill .....	43. 32	56. 27	46. 90	48. 83	30	75	30	65. 67	7	31	7	38. 67	4. 7
Flatbush .....	43. 25	54. 10	45. 18	47. 51	30	77	30	64. 50	7	32	27	39. 20	5. 6
Fort Edward .....	39. 03	52. 40	43. 70	45. 04	3	65	30	57. 67	7	24	8	32. 33	6. 4
Houseville .....	38. 73	49. 40	38. 87	42. 33	3	65	30	56. 00	7	22	7	27. 67	6. 4
Nichols .....	39. 23	53. 40	40. 33	44. 32	4	71	30	61. 67	7	25	26	31. 67	6. 2
Rochester .....	41. 87	52. 43	44. 72	46. 34	4	d 72	22	61. 00	7	28	24	33. 00	5. 2
Sag Harbor (e) .....	43. 16	58. 37	43. 58	48. 37	3	69	---	?	7	31	---	?	5. 3
Waterford .....	42. 58	55. 03	44. 67	47. 43	3	69	30	58. 00	7	f 31	7	36. 33	6. 0
Wellsville .....	39. 67	51. 93	41. 53	44. 38	22	67	30	60. 00	6	c 28	6	31. 33	5. 8
NEW JERSEY—													
Bloomfield .....	44. 48	55. 20	46. 22	48. 63	30	74	30	65. 50	7	31	26	38. 67	5. 0
Freehold (g) .....	43. 52	56. 98	44. 08	48. 19	30	80	---	?	26	f 31	---	?	---
Lambertville .....	43. 16	57. 87	46. 09	49. 04	30	81	---	---	26	24	---	---	---
Newark (h) .....	---	---	---	48. 60	30	77	30	64. 50	26	30	27	38. 75	---
PENNSYLVANIA—													
Bedford .....	42. 19	58. 25	47. 77	49. 40	■	i 75	30	64. 33	7	25	24	37. 00	5. 5
Berwick .....	45. 70	55. 77	45. 88	49. 12	30	76	30	63. 00	25	j 36	12	39. 67	4. 2
Byberry .....	44. 12	57. 52	47. 38	49. 67	30	80	30	68. 00	1	31	25	37. 33	6. 2
Cannonsburg .....	43. 21	55. 25	50. 07	49. 51	4	77	4	64. 00	25	30	7	39. 33	6. 4
Easton .....	41. 15	54. 23	45. 45	46. 94	30	75	30	65. 00	26	k 30	26	37. 20	5. 8
Fleming .....	42. 10	55. 93	45. 70	47. 91	4	l 70	30	66. 33	7	j 29	■	m 36. 67	6. 1
Gettysburg .....	43. 93	58. 93	48. 10	50. 32	10	80	10	68. 33	7	28	12	n 40. 33	5. 1
Harrisburg, [Heisely] .....	46. 50	58. 20	52. 87	52. 52	30	77	30	68. 00	7	35	12	43. 00	5. 3
Harrisburg, [Hickok] .....	43. 72	55. 62	49. 80	49. 71	30	76	30	65. 67	7	31	7	40. 00	6. 2
Indiana .....	43. 93	55. 57	45. 33	48. 28	4	78	30	63. 67	7	26	■	33. 00	5. 6
Lewisburg .....	41. 47	55. 31	47. 46	48. 08	30	72	30	64. 57	7	28	26	36. 93	6. 2
Meadville .....	41. 33	55. 47	43. 33	46. 71	4	78	22	63. 00	7	22	26	32. 67	6. 7
Morrisville .....	44. 13	58. 03	47. 27	49. 81	30	84	30	69. 33	7	o 34	25	37. 67	4. 5
Mount Joy .....	45. 85	60. 60	50. 38	52. 28	30	81	30	69. 67	7	34	26	42. 17	5. 4
Murrysville .....	43. 86	56. 41	46. 70	48. 99	4	77	30	63. 00	7	29	■	36. 00	6. 4
Norristown .....	44. 31	55. 96	48. 23	49. 50	30	78	30	67. 50	7	33	27	40. 60	5. 6
North Whitehall (p) .....	40. 63	56. 30	50. 93	49. 29	30	77	30	66. 00	1	q 30	26	37. 67	?
Paradise .....	---	---	---	42. 00	---	---	---	---	---	---	---	---	---
Philadelphia .....	47. 00	59. 40	51. 15	52. 52	30	84	30	70. 67	7	35	25	41. 67	6. 4
Pittsburg, [Martin] .....	45. 77	57. 13	51. 17	51. 36	4	74	30	65. 00	7	31	7	o 39. 33	5. 6
Pittsburg, [Wilson] .....	45. 50	56. 13	49. 60	50. 41	4	80	4	r 64. 00	7	25	24	34. 67	---
Pocopson .....	44. 88	58. 27	48. 62	50. 59	30	81	30	67. 67	7	32	25	39. 67	6. 4
Reading .....	42. 43	55. 02	47. 48	48. 31	30	74	30	65. 00	7	30	26	39. 33	5. 8
Shamokin (s) .....	37. 23	51. 87	48. 40	45. 83	30	72	30	62. 00	26	13	16	34. 67	5. 2
Somerset .....	42. 07	52. 97	46. 47	47. 17	4	71	■	63. 33	7	22	6	33. 33	7. 2
Tarentum .....	44. 00	58. 17	48. 00	50. 06	4	80	■	63. 67	7	28	■	35. 67	6. 0
West Haverford .....	45. 37	58. 23	---	51. 80	30	81	30	68. 50	7	32	7	f 40. 00	6. 0
Westtown .....	43. 27	55. 58	46. 56	48. 47	30	80	30	66. 27	7	32	25	36. 90	5. 7
DELAWARE—													
Georgetown (t) .....	51. 03	61. 00	56. 43	56. 15	10	u 84	30	77. 00	27	36	27	40. 00	---
Milford (v) .....	57. 42	63. 79	---	60. 60	22	76	?	?	27	42	?	?	?

a Same temperature on the 8th.

b Observations taken at 8 a. m., 2 p. m., and 9 p. m.

c Same temperature on the 7th.

d Same temperature on the 22d.

e For the first 19 days of the month.

f Same temperature on the 27th.

g Observations at 9 p. m. interrupted from the 6th to the 20th, inclusive.

h Observations taken at 7 a. m. and 6 p. m.

i Same temperature on the 10th and 30th.

j Same temperature on the 26th and 27th.

k Same temperature on the 3d.

l Same temperature on the 9th and 10th.

m Same temperature on the 26th.

n Same temperature on the 24th.

o Same temperature on the 25th.

p Observations taken at sunrise, noon, and sunset.

q Same temperature on the 7th, 26th, and 29th.

r Same temperature on the 30th.

s Observations taken at night. Mean 32.20.

t Observations taken at 8 a. m. and 1 and 6 p. m.

u Same temperature on the 15th.

v Incomplete.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—	°	°	°	°		°		°		□		□	
Annapolis .....	47.70	59.10	53.40	53.40	30	84	30	72.00	7	34	25	41.83	6.2
Baltimore .....	47.71	57.91	52.59	52.74	30	80	30	68.33	7	35	25	41.33	?
Bladensburg .....	46.64	59.57	49.39	51.87	10	80	10	68.33	8	32	26	40.00	6.7
Chestertown .....	47.20	58.50	49.40	51.70	30	81	30	69.33	27	36	25	39.50	7.2
Frederick .....	46.38	57.24	50.11	51.24	10	77	30	66.67	7	34	26	41.93	5.7
Oakland (a) .....	40.83	50.67	41.32	44.27	4	b 71	4	61.33	26	23	26	28.67	---
Sykesville .....	45.80	57.60	49.10	50.83	10	c 76	10	66.33	26	33	12	39.50	5.4
DISTRICT OF COLUMBIA—													
Washington .....	48.13	58.70	53.43	53.42	30	c 83	30	69.67	7	34	25	41.67	6.2
VIRGINIA—													
Alexandria .....	49.83	61.03	54.43	55.10	10	c 83	30	71.67	7	35	25	43.00	6.2
Crichton's Store (d) .....	54.17	67.20	64.88	62.08	30	86	30	79.33	27	39	?	?	5.7
Hartwood .....	47.23	60.30	52.03	53.19	30	84	30	71.00	7	e 34	26	39.33	---
Kanawha .....	50.10	62.90	54.10	55.73	30	81	30	70.67	27	33	7	40.67	6.2
Meadowdale .....	40.27	52.73	49.10	47.37	10	c 72	30	66.67	27	24	27	32.67	---
Montross .....	49.40	60.20	51.97	53.86	30	83	30	71.33	25	34	25	36.67	6.9
Mossy Creek .....	44.76	57.76	44.73	49.03	30	82	30	69.00	25	29	25	31.67	6.0
Poplar Grove .....	49.97	67.30	53.03	56.77	22	85	30	71.00	27	33	24	f 41.00	6.6
Portsmouth .....	53.46	64.26	53.33	57.02	23	80	10	74.33	27	33	26	38.00	4.3
Rose Hill .....	51.62	58.92	56.20	55.58	30	83	---	?	26	37	---	?	7.0
Rougemon .....	50.00	64.62	53.80	56.14	30	92	30	81.00	25	34	25	38.67	6.6
Ruthven (g) .....	50.29	61.30	51.47	54.35	30	88	20	67.33	25	33	25	36.67	?
Smithfield .....	53.30	63.20	56.10	57.53	10	c 85	30	75.60	27	36	26	42.50	5.7
Winchester .....	48.83	58.87	52.33	53.34	10	80	10	70.00	7	h 36	25	40.67	5.1
Wirt Court-House .....	44.97	63.07	52.47	53.50	4	82	30	68.67	27	26	27	38.67	6.1
NORTH CAROLINA—													
Ashville (g) .....	47.77	57.71	51.19	52.22	10	c 76	30	67.33	27	i 34	27	37.33	---
Chapel Hill .....	52.20	67.77	56.53	58.83	10	c 89	10	76.00	27	34	26	38.67	5.8
Davidson College .....	53.80	66.41	57.93	59.38	10	83	11	74.00	26	j 37	26	37.33	4.7
Gaston .....	50.77	66.37	53.80	56.98	30	89	30	76.00	27	32	26	37.33	---
Marlborough .....	56.76	69.76	60.46	62.33	10	88	10	77.33	26	34	26	36.67	5.0
Murfreesborough .....	54.13	66.10	56.68	58.97	10	c 86	30	75.67	26	j 37	26	39.33	4.0
SOUTH CAROLINA—													
Aiken .....	56.86	73.04	58.89	62.93	19	88	19	75.33	28	37	27	41.00	4.1
All Saints .....	60.17	70.77	62.93	64.62	21	k 83	20	75.33	27	41	27	45.00	4.7
Charleston, [Dawson] .....	61.73	70.23	64.50	65.49	---	79	---	---	---	42	---	---	---
Charleston, [Johnson] .....	61.73	70.23	64.50	65.49	18	m 79	21	74.33	27	42	27	48.67	---
Columbia .....	55.63	71.73	63.17	63.51	19	89	19	76.00	28	36	26	41.00	4.8
St. John's (g) .....	56.30	77.17	56.20	63.22	19	96	---	?	27	34	---	?	?
GEORGIA—													
Athens .....	56.67	68.23	58.18	61.03	18	83	18	71.03	26	39	26	41.17	4.8
Hillsborough .....	56.67	69.98	61.78	62.81	18	83	19	71.90	26	j 41	26	45.67	4.8
Savannah .....	61.20	74.60	64.80	66.87	22	87	22	78.30	27	44	27	50.17	4.5
Sparta .....	54.67	72.57	61.47	62.90	18	87	11	75.00	28	38	27	46.67	4.6
Whitemarsh Island .....	62.17	72.80	64.10	66.36	21	n 84	21	77.33	26	j 46	27	50.00	4.3
Zebulon .....	56.60	68.57	65.20	63.46	18	84	18	78.00	28	40	14	49.83	5.7
FLORIDA—													
Alachua County (o) .....	58.81	79.17	62.97	66.98	22	91	22	79.00	28	40	?	?	2.8
Alligator .....	65.07	78.90	68.27	70.75	8	86	8	86.00	27	50	27	55.33	3.8
Atsena .....	66.87	72.23	69.87	69.99	10	p 78	22	76.00	27	52	27	60.67	2.7
Belair .....	60.97	77.53	68.60	69.03	22	87	22	80.00	25	i 48	27	58.00	3.3
Jacksonville .....	66.47	76.77	66.40	69.88	29	86	21	79.33	27	49	27	50.00	3.3
St. Augustine .....	68.97	75.07	67.73	70.59	22	89	22	81.33	28	55	28	57.67	3.1
Salt Ponds .....	73.20	80.20	---	76.70	11	q 85	12	81.50	28	66	2	i 70.50	3.6

a Observations interrupted from the 16th to the 21st, inclusive.

b Same temperature on the 10th and 22d.

c Same temperature on the 30th.

d Observations taken at 7 a. m., noon, and 6 p. m.

e Same temperature on the 26th and 27th.

f Same temperature on the 26th.

g Incomplete.

h Same temperature on the 25th.

i Same temperature on the 29th.

j Same temperature on the 27th.

k Same temperature on the 23d.

l Same temperature on the 21st.

m Same temperature on the 21st, 22d, and 23d.

n Same temperature on the 22d.

o Observations taken at 6 a. m., 3 p. m., and 9 p. m.

p Same temperature on the 11th and 19th.

q Same temperature on the 12th, 20th, 21st, and 22d.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ALABAMA—	°	°	°	□	°	°	°	°	°	°	°	°	
Greene Springs.....	57.79	71.68	60.11	63.19	7	83	10	75.00	27	<i>a</i> 37	27	46.00	3.3
Greensborough.....	57.08	72.58	62.23	63.96	7	84	17	72.83	27	42	27	48.67	2.7
Selma.....	57.27	74.30	61.37	60.98	17	<i>b</i> 86	18	73.33	27	42	27	48.67	4.0
MISSISSIPPI—													
Columbus.....	56.90	71.81	61.21	63.31	18	82	18	73.60	27	44	13	48.00	3.8
Natchez.....	58.22	73.70	65.19	65.70	6	79	10	75.31	29	42	29	54.00	---
Paulding.....	61.02	77.07	67.43	63.51	16	88	17	78.80	26	45	13	53.80	4.0
LOUISIANA—													
Black River.....	61.80	76.30	67.07	68.39	16	<i>c</i> 85	10	<i>d</i> 77.00	14	48	13	53.67	3.3
New Orleans.....	71.00	76.00	77.80	74.93	6	89	17	83.33	27	56	1	60.33	---
TEXAS—													
Austin, [Swante Palm].....	64.87	79.67	67.13	70.56	24	92	22	79.33	13	50	13	60.33	3.0
Austin, [Van Nostrand]....	61.71	79.24	66.64	69.20	22	91	17	78.33	13	48	13	59.70	3.8
Goliad.....	63.83	77.47	67.73	69.68	22	85	17	73.00	<i>e</i> 53	13	13	60.67	4.0
Larissa.....	58.05	76.15	63.87	66.02	15	87	15	76.17	14	42	13	47.67	3.0
Union Hill.....	58.67	69.77	61.33	63.26	19	76	17	66.73	1	<i>f</i> 50	13	56.00	4.6
Washington.....	61.86	78.36	64.13	63.12	15	88	---	?	13	46	13	52.67	3.7
TENNESSEE—													
Glenwood.....	52.60	64.74	56.01	57.78	10	79	10	73.43	27	34	25	42.50	6.0
Memphis.....	57.57	68.47	61.10	62.38	10	82	10	75.33	13	44	13	46.67	5.2
KENTUCKY—													
Bardstown.....	49.65	64.68	54.86	56.40	30	83	30	73.33	28	34	28	42.50	5.4
Danville.....	54.17	67.07	56.33	59.19	30	89	30	74.67	27	42	23	<i>g</i> 47.67	4.8
Louisville ( <i>h</i> ).....	50.77	62.37	56.10	56.38	30	80	30	72.33	27	34	27	44.67	---
Millersburg.....	51.37	61.17	54.63	55.72	10	80	10	71.33	27	34	27	40.00	6.3
Nolin.....	52.52	66.98	52.14	57.21	10	84	10	72.00	27	37	26	43.30	4.0
Paris.....	48.70	60.23	52.40	53.78	30	79	30	71.00	27	32	27	39.67	6.1
Springdale.....	46.97	65.25	57.58	56.60	30	84	30	73.67	26	26	26	44.17	5.6
OHIO—													
Bellefontaine.....	45.48	59.37	47.92	50.92	29	77	30	64.60	6	30	24	36.50	6.2
Bowling Green.....	45.34	56.59	47.58	49.84	22	74	30	69.17	5	31	6	38.00	5.5
Cincinnati, [Harper].....	50.23	65.40	55.30	56.98	30	87	30	76.33	27	35	23	43.67	5.6
Cincinnati, [Hurtt].....	49.07	63.73	51.83	54.88	30	87	30	74.67	27	30	26	38.67	5.2
Cleveland.....	45.04	50.42	46.04	47.17	30	68	22	66.33	6	<i>i</i> 27	6	32.67	6.9
Cleveland, (near).....				54.00									---
Collingwood.....	41.90	52.00	46.23	46.71	22	<i>j</i> 70	22	60.00	25	30	24	33.33	---
Edinburg.....	42.67	52.00	44.93	46.53	4	72	30	61.33	7	24	6	30.67	6.4
Hillsborough.....	47.17	57.48	52.08	52.24	30	77	30	71.80	6	<i>i</i> 34	24	39.70	4.6
Hiram.....	42.90	55.14	45.75	47.93	4	75	22	60.00	8	26	6	31.67	7.2
Jackson, (Jackson county)...	48.80	66.00	52.70	55.83	30	89	30	74.33	6	34	6	42.67	5.3
Jackson, (Monroe county)...	47.63	61.14	51.53	53.43	10	77	10	68.00	7	33	6	39.33	6.5
Jefferson.....	38.27	46.73	44.13	43.04	3	64	17	52.00	25	<i>l</i> 26	25	<i>g</i> 30.00	9.4
Lancaster.....	46.34	60.76	49.95	59.02	30	82	30	72.40	6	27	6	36.20	4.8
Madison, [Atkins].....	48.64	52.96	44.30	48.63	30	79	29	66.67	7	24	7	33.33	6.0
Madison, [King].....	45.53	52.20	42.37	46.70	22	<i>k</i> 75	22	66.00	26	27	24	<i>g</i> 34.33	5.9
Medina.....	44.42	54.53	45.97	48.31	22	72	22	64.50	7	26	8	32.00	6.1
Mount Union.....	47.22	60.12	46.00	51.11	4	78	22	<i>j</i> 64.67	6	25	6	32.67	5.2
New Lisbon.....	48.86	65.93	51.60	55.46	4	86	30	70.00	7	28	6	39.33	4.4
Northwood.....	44.99	55.64	44.32	48.32	3	<i>k</i> 72	30	64.67	6	<i>m</i> 30	24	33.33	6.0
Perrysburg ( <i>n</i> ).....	47.31	55.79	46.31	49.90	30	78	30	71.33	6	<i>m</i> 32	24	33.33	---
Portsmouth ( <i>o</i> ).....	51.47	64.43	58.27	58.06	10	80	10	71.00	28	35	25	44.67	7.3
Ripley ( <i>p</i> ).....	48.70	---	54.90	56.80	30	73	---	?	27	34	---	?	?
Savannah.....	45.53	57.10	46.13	49.59	22	74	29	66.00	24	26	21	31.00	6.9
Urbana.....	46.40	60.53	47.70	51.54	30	80	29	68.33	27	31	25	38.67	6.5
Welchfield.....	43.43	54.93	43.50	47.29	22	71	22	61.67	6	25	6	30.00	5.6

*a* Same temperature on the 28th.*b* Same temperature on the 18th.*c* Same temperature on the 17th.*d* Same temperature on the 16th.*e* Same temperature on the 11th.*f* Same temperature on the 13th.*g* Same temperature on the 26th.*h* Observations taken at 7 a. m., 3 p. m., and 9 p. m.*i* Same temperature on the 7th.*j* Same temperature on the 30th.*k* Same temperature on the 29th.*l* Same temperature on the 26th and 27th.*m* Same temperature on the 24th.*n* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*o* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*p* Incomplete.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG. WARMEST DAY.				LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
Ohio—Continued.	□	■	○	○		○	■			□	□		
Westerville .....	46.27	58.42	49.82	51.50	29	74	30	68.17	27	31	24	37.33	6.
Windham .....	40.23	54.90	45.83	46.99	3	a 69	30	60.67	7	25	■	33.33	---
MICHIGAN—													
Battle Creek .....	43.67	54.33	44.53	47.51	3	b 78	29	68.67	■	c 30	24	33.67	5.1
Cooper .....	43.60	51.47	40.07	45.05	3	d 72	3	62.67	23	24	23	30.00	4.1
Detroit .....	43.50	52.07	41.83	45.80	22	78	29	59.33	6	27	24	32.00	5.5
Grand Rapids, [Streng] .....	39.73	54.00	42.20	45.31	3	78	29	66.67	5	24	24	31.00	6.5
Marquette .....	35.52	41.37	34.61	37.17	2	64	2	54.23	■	19	6	23.90	6.2
Monroe .....													5.9
New Buffalo (e) .....	45.13	53.00	42.67	46.93	29	73	29	67.67	■	f 26	6	33.00	7.1
Port Huron .....	43.20	50.25	40.79	44.75	3	g 72	29	60.67	26	24	■	31.00	6.3
INDIANA—													
Cannelton .....	52.14	62.62	55.12	56.63	10	76	30	70.84	27	36	23	44.23	5.2
Evansville .....	55.04	62.37	59.23	58.88	30	75	30	72.16	27	35	25	46.17	5.6
Logansport .....	45.87	61.07	51.20	52.71	3	d 80	29	70.67	25	31	25	39.33	6.2
Madison .....	49.63	59.30	51.60	53.51	29	78	30	70.33	26	h 36	26	40.33	5.8
Michigan City .....	45.40	53.92	45.29	48.20	29	83	29	72.16	■	27	■	34.33	6.0
New Harmony .....	52.07	65.10	55.27	57.48	30	81	30	72.67	24	38	14	h 45.00	6.1
Richmond, [Austin] (i) .....	45.83	58.33		52.08	30	78	30	72.00	6	30	26	b 41.00	?
Richmond, [Moore] .....	46.84	57.17	50.47	51.49	30	75	30	67.50	6	31	25	37.83	6.6
ILLINOIS—													
Athens .....	47.30	59.83	48.20	51.78	29	84	29	70.00	6	29	24	39.00	6.2
Augusta .....	45.20	58.47	50.47	51.38	29	81	29	71.33	6	27	13	j 37.00	5.2
Aurora .....	43.03	51.70	44.23	47.32	29	79	29	69.33	25	29	■	35.00	6.0
Batavia .....	40.16	54.96	42.36	45.83	29	82	29	70.00	6	26	■	32.67	6.5
Brighton .....	46.03	60.63	54.27	53.64	30	81	30	74.67	24	30	25	37.00	6.0
Edgington .....	42.07	56.20	45.80	48.02	3	d 78	29	70.00	■	25	6	34.00	6.1
Edgar County (k) .....	44.37			44.37									
Egin .....	41.13	52.86	42.83	45.61	29	78	29	70.00	26	22	6	32.33	7.2
Evanston (l) .....	43.48	55.62	43.00	47.37	30	76	29	69.33	24	j 30	25	32.33	6.9
Hillsborough .....													5.7
Jacksonville .....	50.67	59.53	54.27	54.82	29	84	30	75.33	6	26	13	39.00	---
Manchester (m) .....	48.07	61.73	45.53	51.78	29	82	29	73.00	■	30	13	33.33	5.7
Marango .....	42.40	52.40	42.23	45.68	29	82	3	66.00	5	n 26	5	n 32.67	7.0
Ottawa .....	45.43	54.50	45.50	49.48	29	80	29	71.67	6	30	■	34.33	6.1
Pekin .....	45.93	54.59	48.03	49.52	29	81	29	70.33	6	30	6	37.67	5.7
Peoria .....	46.97	60.45	49.92	52.45	29	87	29	74.46	6	30	5	37.25	5.6
Riley .....	39.97	51.04	40.36	43.79	8	69	27	57.00	5	n 25	5	27.33	5.5
South Pass .....	52.27	66.87	55.90	58.35	22	84	■	70.67	24	37	13	41.33	5.6
Warsaw .....	44.90	61.17	49.20	51.76	30	84	29	72.67	6	30	6	j 36.67	---
Waynesville .....	42.26	59.62	53.10	51.66	3	o 78	29	69.00	26	25	25	37.00	5.6
West Salem .....	51.97	67.23	54.83	58.01	30	86	30	75.00	13	p 38	26	43.67	5.7
West Urbana .....	46.63	58.93	51.57	52.38	29	80	29	69.67	5	32	5	38.67	5.7
Wheaton .....	41.75	51.31	43.63	45.56	3	73	29	66.23	6	29	■	32.07	6.6
Winnebago .....	40.51	54.57	42.78	45.95	29	80	29	69.67	6	27	6	33.50	6.0
MISSOURI—													
St. Louis .....	51.70	65.50	55.90	57.70	29	q 84	30	75.17	13	35	13	40.00	5.6
Springfield (r) .....	47.47	62.93	53.83	54.74	2	s 76	30	67.67	12	34	13	39.00	?
WISCONSIN—													
Appleton .....	38.30	48.53	41.43	42.89	29	74	29	68.00	5	25	24	30.00	5.8
Bay City .....	34.20	38.60	33.30	35.37	30	48	29	46.33	5	20	5	25.33	4.9
Beloit .....	40.56	53.60	43.16	45.77	29	84	29	70.00	5	27	5	32.00	5.4
Green Bay (t) .....	36.95	47.21	40.42	41.53	29	76	29	65.00	5	24	23	30.67	7.2
Janesville .....	41.10	53.87	44.17	46.38	29	82	29	69.50	5	26	5	33.33	6.6

a Same temperature on the 9th.

b Same temperature on the 28th.

c Same temperature on the 24th.

d Same temperature on the 24th.

e Observations taken at 7 a. m., 1 p. m., and 9 p. m.

f Same temperature on the 24th and 25th.

g Same temperature on the 22d and 29th.

h Same temperature on the 27th.

i Observations taken at 6 a. m., and 1 p. m.

j Same temperature on the 25th.

k Observations taken at sunrise.

l Observations interrupted from the 3d to the 11th, inclusive.

m Observations taken at 7 a. m., 1 p. m., and 9 p. m.

n Same temperature on the 6th.

o Same temperature on the 29th and 30th.

p Same temperature on the 23d.

q Same temperature on the 30th.

r Observations taken at sunrise, 3 p. m., and 9 p. m.

s Same temperature on the 3d, 9th, 28th, and 30th.

t For the last 19 days of the month.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Kenosha.....	40.62	47.76	42.00	43.46	29	80	29	69.67	5	30	24	33.17	5.8
Madison, [Sterling] .....	39.26	48.75	42.92	43.64	29	77	29	68.33	5	25	5	30.67	7.2
Manitowoc.....	38.00	47.40	41.17	42.19	29	72	29	62.67	5	a 28	6	31.33	6.9
Milwaukee, [Pomeroy] .....	38.60	45.43	39.37	41.13	29	80	29	68.00	5	b 28	6	29.67	7.3
Milwaukee, [Winkler] .....	39.13	45.72	39.68	41.51	29	76	29	68.33	24	28	6	30.50	5.9
Mount Morris.....	38.46	48.16	39.43	42.02	3	74	29	68.00	5	a 22	5	29.00	7.6
New Danemora (c).....	35.57	49.75	47.45	44.25	29	80.5	29	76.67	6	19	5	27.84	-----
New London.....	35.36	47.70	38.26	40.44	29	78	29	71.00	7	20	6	27.00	5.9
Platteville.....	40.10	53.50	42.87	45.49	29	85	29	73.00	5	22	5	28.67	6.2
Racine.....	40.00	44.09	38.89	40.99	29	66	29	63.00	24	a 27	25	31.00	5.4
Waukesha.....	39.33	52.30	43.77	45.13	29	80	29	70.00	5	27	5	31.67	7.3
IOWA—													
Bellevue.....	39.10	54.27	44.27	45.88	29	81	29	70.33	5	b 26	5	32.33	6.4
Border Plains.....	41.03	54.27	45.73	47.01	29	83	29	73.00	5	20	5	29.00	7.0
Davenport.....	42.93	54.79	43.37	47.03	28	80	28	70.67	6	22	5	33.00	5.7
Dubuque.....	43.47	52.00	44.97	46.81	29	80	29	73.00	5	27	5	32.00	6.2
Fairfield.....	45.90	56.79	46.50	49.73	3	80	29	70.33	5	30	25	34.67	6.6
Fort Madison (d).....	43.13	56.74	50.16	50.01	29	80	29	71.67	6	24	25	36.67	5.2
Franklin.....	41.67	54.87	43.53	46.69	29	82	29	72.00	5	24	5	29.00	5.7
Iowa City.....	44.48	53.35	45.76	47.86	29	75	29	69.16	6	29	5	33.67	6.2
Muscatine.....	41.17	56.03	41.43	46.21	29	78	29	69.67	6	24	5	34.33	5.2
Pleasant Plain.....	43.33	56.80	46.33	48.82	29	81	29	73.00	5	23	5	36.00	5.9
Poultney.....	38.08	51.15	39.18	42.80	3	76	2	55.00	5	22	5	27.33	6.6
Rossville.....	37.72	48.40	41.34	42.49	29	80	29	70.03	5	21	5	26.97	6.2
Sioux City.....	39.73	47.36	44.14	43.74	28	80	?	?	5	b 25	-----	?	8.?
MINNESOTA—													
Buchanan (e).....	32.73	48.17	32.27	37.72	21	78	21	59.75	5	f 20	5	25.75	-----
Burlington.....	30.93	42.73	35.06	36.24	1	59	1	g 44.67	6	14	6	23.67	-----
Hazlewood.....	36.47	45.70	38.70	40.29	28	74	28	65.00	5	16	5	19.00	5.7
Princeton.....	39.53	50.03	39.67	43.03	26	78	27	67.00	5	20	5	24.67	4.9
NEBRASKA—													
Bellevue.....	44.67	54.17	45.83	48.23	28	83	28	67.33	5	27	12	34.67	5.2
Elkham.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.9
Omaha.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.5
KANSAS—													
Burlingame.....	46.26	60.93	49.70	52.30	2	h 78	29	69.33	12	i 33	6	j 37.00	5.1
Cayuga.....	41.36	58.23	46.30	48.63	21	k 79	29	68.33	23	26	12	35.00	-----
Lawrence.....	49.87	61.17	53.80	54.95	28	80	28	k 68.67	13	36	13	41.33	4.9
Leavenworth City, [Berthoud] .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.3
Leavenworth City, [McCarty] .....	49.03	59.21	49.93	52.72	2	79	29	70.33	6	l 34	6	36.00	5.9
Manhattan.....	45.60	62.93	49.00	52.51	28	87	28	73.67	14	30	14	29.67	5.4
Moneka.....	-----	-----	59.00	-----	22	m 70	-----	-----	5	28	-----	-----	3.0
Topeka.....	48.27	63.10	49.70	53.69	28	83	28	69.67	11	j 33	6	35.00	3.6
OREGON—													
Portland (n).....	-----	-----	-----	51.50	-----	70	-----	-----	-----	31	-----	-----	-----
MEXICO—													
Cordova (o).....	69.99	74.77	71.69	72.55	18	83.75	-----	-----	28	j 66.20	-----	-----	-----
Minatitlan (p).....	74.69	87.00	-----	80.85	19	94	19	86.00	28	71	28	77.00	-----
Mirador (q).....	64.99	80.67	67.86	71.17	-----	-----	-----	79.81	-----	-----	-----	64.76	-----
Vera Cruz (r).....	74.90	-----	77.90	76.40	-----	-----	-----	-----	-----	-----	-----	-----	-----
CALIFORNIA—													
Marysville.....	54.06	74.00	60.93	63.00	24	89	24	75.33	9	40	9	52.00	2.8
Sacramento.....	55.20	64.43	59.77	59.80	24	81	24	74.00	9	46	8	52.00	2.2
San Francisco.....	52.83	63.40	52.63	56.29	24	81	23	67.00	9	47	8	49.67	2.3

a Same temperature on the 25th.

b Same temperature on the 6th.

c Observations taken at 6 a. m., noon, and 6 p. m.

d Observations taken at 6 a. m., noon, and 7 p. m.

e Observations taken at 7 a. m., noon, 3 and 9 p. m.; mean at 3 p. m., 46.93.

f Same temperature on the 23d.

g Same temperature on the 2d.

h Same temperature on the 21st and 28th.

i Same temperature on the 13th.

j Same temperature on the 12th.

k Same temperature on the 29th.

l Same temperature on the 12th and 13th.

m Same temperature on the 30th.

n Observations taken at 6 a. m., 12 m., and 6 p. m.

o Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.; mean at 12 m. 72.50, and at 6 p. m. 73.80.

p For the last 13 days only; observations taken at 7 a. m. and 3 p. m.

q Observations taken at 7 a. m., 2 and 8 p. m.

r Observations taken at 6 to 8 a. m. and at 9 to 11 p. m.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WEST INDIES—	○	○	○	○		□		○		○		○	
Nassau, Bahamas (a) -----				78.61	-----	-----	21	82.50	-----	-----	3	73.00	-----
St. George's, Bermuda (c) -----				64.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
CENTRAL AMERICA—													
Guatemala (d) -----	55.40	77.72	63.14	69.08	?	89.6	-----	-----	?	46.9	-----	-----	-----
SOUTH AMERICA—													
Catharina Sophia, Surinam (e) -----	76.00	85.20	79.90	80.37	16	f88	16	82.00	11	72	11	g77.33	6.0

*a* Mean obtained from daily maximum and minimum.*b* Same temperature on the 21d.*c* Observations taken at 3½ and 9½ a. m., and 3½ and 9 p. m.*d* Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.; mean at 9 a. m., 69.63; mean at noon, 79.52.*e* Observations taken at 6 a. m., 2 p. m., and 6 p. m.*f* Same temperature on the 17th.*g* Same temperature on the 18th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Fort Simpson (a).....	-----	-----	-----	47.40	29	75	29	66.50	11	30	10	32.50	-----
Hamilton (c).....	51.74	-----	50.62	51.18	23	d 68	31	64.00	11	40	17	42.00	-----
Montreal.....	50.86	59.36	50.88	53.70	31	77	31	70.80	11	40	2	43.83	4.1
Moose Factory (e).....	-----	-----	-----	39.50	-----	-----	-----	-----	-----	-----	-----	-----	-----
Red River Settlement.....	43.53	54.70	40.92	46.38	4	f 74	-----	?	12	25	14	30.00	4.3
Rigolet (g).....	29.68	-----	33.00	31.34	29	46	29	39.00	4	20 h	4	24.00	-----
St. John's.....	40.77	45.71	40.19	42.22	2	b 60	2	53.33	3	30 i	3	32.67	-----
St. Martin.....	45.54	62.61	50.79	52.98	31	80	31	66.60	3	29	2	37.90	4.9
Stanbridge.....	48.58	58.26	49.16	52.00	31	78	31	70.00	3	33	2	39.00	5.4
Toronto (j).....	45.86	53.31	47.15	48.94	9	66	6	57.15	2	35	17	40.92	6.9
Windsor.....	42.60	54.30	44.80	47.23	31	76	31	58.80	3	33	3	37.20	5.7
Wolfville.....	45.11	53.42	45.80	48.11	31	72	31	60.70	3	35	3	38.57	5.2
MAINE—													
Cornish, [Guptill].....	46.80	58.58	47.41	50.93	31	72	31	60.67	3	38	20	k 41.33	5.0
Cornish, [West].....	46.90	58.30	46.77	50.66	31	72	31	61.00	3	38 l	20	39.67	5.0
Dexter.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.9
Gardiner.....	48.48	59.45	47.43	51.79	31	70	31	70.00	3	38	3	31.00	5.3
Perry.....	43.63	55.31	44.18	47.71	31	76	31	61.50	3	32	17	40.50	4.8
Portland.....	47.95	54.88	47.66	50.16	31	67	31	57.16	3	39	21	42.33	6.0
Steuben.....	46.35	55.74	45.06	49.05	5	72	5	58.00	22	33	7	23.33	5.7
NEW HAMPSHIRE—													
Concord.....	48.79	61.33	48.83	52.98	31	75	7	61.00	4	38	18	42.33	5.9
Francetown, [Bixby].....	48.82	58.32	49.00	52.05	31	73	31	63.00	18	37	18	40.83	5.5
Shelburne.....	48.19	64.84	48.03	53.69	31	82	31	64.00	5	38	20	42.67	5.1
Stratford.....	44.23	57.90	45.03	49.05	31	79	31	62.33	2	34 m	2	33.67	5.2
West Enfield.....	47.45	57.74	47.71	50.97	31	72	31	63.33	3	34	17	41.00	5.8
VERMONT—													
Brandon.....	46.70	58.77	49.37	51.61	31	76	31	64.67	3	32	3 n	39.67	5.6
Burlington.....	48.68	57.27	49.82	51.92	31	75	31	67.33	3	36	2	39.83	5.3
Craftsbury.....	44.61	56.77	48.03	49.80	31	73	31	63.00	3	33	2	38.00	5.1
Rupert.....	47.94	65.35	60.71	58.00	7	82	8	74.00	3	28	17	40.00	6.9
St. Johnsbury.....	45.39	58.42	46.77	50.19	31	77	31	61.00	2	33 n	2	40.33	5.1
MASSACHUSETTS—													
Amherst.....	49.40	61.38	51.82	54.20	31	74	1	61.10	18	40	17	o 44.60	6.4
Bridgewater (p).....	48.90	57.83	51.05	52.59	31	70	24	63.33	18	41	18	43.17	5.9
Cambridge.....	48.78	59.58	49.52	52.63	24	71	24	61.67	3	38 q	18	44.33	6.1
Florida.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7.4
Lawrence.....	47.03	60.00	49.00	52.01	31	73	24	61.00	3	36	19	43.33	5.7
Mendon.....	49.58	58.06	50.26	52.63	31	70	31	62.67	18	40	18	42.00	6.1
Nantucket.....	50.10	54.08	47.89	50.69	14	63	12	r 55.83	3	41	3	43.83	6.1
New Bedford.....	49.53	57.81	49.07	52.14	13	65	15	58.00	3	41	3	44.80	6.9
Newburyport (s).....	49.94	59.06	49.14	52.71	15	72	-----	?	3	41	-----	?	?
Richmond.....	47.32	62.52	54.00	54.61	29	73	28	64.00	3	35	3	43.67	7.2
Westfield.....	48.07	60.55	51.03	53.22	15	71 d	1	61.67	21	37	17	o 42.67	6.7
Williamstown (t).....	47.48	58.00	50.67	52.05	15	68	9	59.50	18	39	17	41.70	6.7
Worcester.....	49.41	59.46	51.96	53.61	31	73	15	64.00	17	41 o	18	43.00	6.2
RHODE ISLAND—													
Providence (u).....	49.60	60.70	49.80	53.37	24	75	24	64.00	3	41	18	45.00	5.8
CONNECTICUT—													
Columbia.....	49.23	61.35	49.23	53.27	15	74	1	v 62.67	16	40 w	18	40.00	6.5
New London.....	51.10	60.55	52.77	54.81	24	70	8	61.33	23	39	23	44.33	6.4
Pomfret.....	47.62	59.03	48.74	51.80	31	70	24	60.00	3	39 o	3	40.00	6.1

a Register thermometer.

b Same temperature on the 10th.

c Observations taken at 9 a. m. and 9 p. m.

d Same temperature on the 31st.

e Observations taken at sunrise, 2 p. m., and 10 p. m.

f Same temperature on the 26th.

g Observations at sunrise and sunset.

h Same temperature on the 8th.

i Same temperature on the 5th, 7th, and 23d.

j Observations taken at 6 a. m., 2 p. m., and 10 p. m.

k Same temperature on the 21st.

l Same temperature on the 20th and 21st.

m Same temperature on the 3d.

n Same temperature on the 17th.

o Same temperature on the 18th.

p Observations taken at 7 a. m., 2 p. m., and 7 p. m.

q Same temperature on the 4th.

r Same temperature on the 13th.

s Incomplete.

t For the last 26 days of the month.

u Observations taken at 6 a. m., 1 p. m., and 10 p. m.

v Same temperature on the 15th.

w Same temperature on the 18th and 30th.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Meantemp	
CONNECTICUT—Continued.	°	°	°	□		°		°		°		°	
Saybrook .....	49.19	57.00	50.45	52.21	31	66	24	59.00	3	42	18	46.33	6.6
Wallingford .....	48.48	60.71	50.29	53.16	24	73	15	61.83	3	40 <sup>a</sup>	18	45.17	6.3
NEW YORK—													
Bellport .....	51.90	56.77	50.39	53.02	13	68	25	62.33	2	43	18	48.00	5.9
Buffalo (c) .....	50.81	55.03	52.16	52.67	29	68	28	60.00	2	40	12	43.67	6.3
Canton .....	49.52	61.65	51.42	54.20	31	86	31	71.33	3	34	2	42.00	5.7
Clinton .....	50.55	61.29	51.00	51.28	9	80	31	68.67	2	41	17	44.00	7.4
Fishkill Landing .....	51.61	62.10	53.52	55.74	15	75	15	65.67	17	40	18	47.00	6.1
Flatbush .....	51.12	58.67	51.49	53.76	24	77	24	67.30	3	44 <sup>a</sup>	3	47.20	7.4
Fort Edward .....	49.77	59.48	51.81	53.69	31	76	31	66.33	17	35	17	39.33	6.4
Houseville .....	47.62	55.65	48.21	50.49	8	74	31	65.33	2	35	2	38.00	6.6
Nichols .....	49.94	62.32	50.65	54.30	9	77	9	66.00	3	34	16	44.33	7.5
Rochester .....	49.71	60.71	53.26	54.56	31	81	31	69.67	2	40 <sup>e</sup>	2	44.67	5.3
Sag Harbor (f) .....	52.10	65.37	50.57	56.01	24	78	24	64.67	28	46 <sup>g</sup>		?	6.2
Waterford .....	51.50	61.93	53.58	55.67	31	76	31	67.33	2	42 <sup>h</sup>	17	44.33	6.4
NEW JERSEY—													
Bloomfield .....	51.39	61.76	53.29	55.48	24	78	24	67.00	3	43	27	48.67	6.7
Freehold (i) .....	51.58	60.74	53.44	55.25	23	73		?	15	43		?	
Lambertville .....	52.12	63.88	53.10	56.37	24	79			23	37			
Newark (j) .....				54.82	24	76	24	67.12	3	40	27	47.75	
PENNSYLVANIA—													
Bedford (k) .....	54.77	65.55	56.00	58.77	8	82		?	12	48		?	?
Derwick .....	54.32	63.29	55.32	57.64	15	77	10	66.00	12	46 <sup>l</sup>	12	50.67	5.9
Cannonsburg .....	54.87	63.10	58.58	58.85	17	78	17	70.00	12	41	12	49.67	7.8
Easton .....	50.08	60.32	53.91	54.77	24	75		?	23	44		?	7.2
Fleming .....	52.35	63.48	53.80	56.54	11	78	24	66.33	16	44 <sup>n</sup>	12	48.00	7.3
Gettysburg .....	55.52	63.29	58.19	59.00	1	79	1	68.67	29	43	29	48.67	6.3
Harrisburg, [Heisely] .....	56.23	65.37	60.48	60.69	15	79	24	73.00	29	50	29	53.67	6.8
Harrisburg, [Hickok] .....	53.63	62.42	56.76	57.60	15	74	24	69.50	4	48 <sup>o</sup>	21	52.17	7.3
Lewisburg .....	52.09	61.65	54.67	56.14	15	77	24	66.80	3	42	16	49.33	7.5
Meadville .....	51.03	63.39	52.87	55.76	17	83	17	65.33	16	39 <sup>p</sup>	20	45.33	7.0
Morrisville .....	52.61	63.06	54.35	56.67	24	75	24	68.67	3	45	29	51.33	6.2
Mount Joy .....	57.10	63.55	57.00	60.88	1	81	25	73.33	21	49 <sup>r</sup>	21	54.50	6.8
Murrysville .....	56.37	65.30	54.81	58.83	17	81	31	71.67	12	44	12	49.67	7.3
North Whitehall (s) .....	50.35	61.74	57.00	56.36	6	76	24	67.33	23	38	26	49.33	5.4
Norristown .....	53.09	60.93	54.40	56.14	24	78	24	69.30	4	46 <sup>r</sup>	27	49.30	7.4
Paradise .....				63.00									
Philadelphia .....	55.26	64.79	57.87	59.31	1	78	24	71.33	29	48	27	51.30	7.0
Pittsburg, [Martin] .....	56.35	64.12	58.48	59.65	17	78	31	70.33	12	46	12	52.12	7.4
Pittsburg, [Wilson] .....	54.35	63.74	56.80	58.30	17	80	31	68.67	12	41	12	48.67	
Pocopson .....	54.58	61.97	55.06	57.20	24	80	24	69.67	12	48 <sup>r</sup>	26	51.67	7.0
Shamokin (t) .....	48.78	58.58	55.64	54.33	24	75	24	68.00	11	27	29	45.00	7.1
Somerset .....	51.45	62.78	53.81	56.01	31	81	31	66.67	22	42	29	44.00	8.4
Tarentum .....	53.35	66.39	56.26	58.67	17	82	17	69.00	13	33	12	50.67	6.9
West Haverford .....	53.19	63.74		58.47	1	74	1	71.00	3	45	27	49.00	6.5
Westtown .....	54.15	62.08	52.99	56.41	24	76	24	69.16	17	45	27	48.93	7.1
DELAWARE—													
Georgetown (u) .....	57.26	65.10	60.71	61.02	1	86	1	77.67	17	49	29	52.00	
Milford (v) .....	60.35	65.35	61.61	62.44	24	85	1	75.33	29	50		?	?
MARYLAND—													
Annapolis .....	56.80	64.30	60.00	60.37	1	81	24	73.00	29	49	29	51.50	6.1
Baltimore .....	57.05	64.13	59.32	60.17	1	83	1	71.50	29	48	29	50.00	7.8

- <sup>a</sup> Same temperature on the 4th.  
<sup>b</sup> Same temperature on the 21st.  
<sup>c</sup> Observations taken at 8 a. m., 2 p. m., and 9 p. m.  
<sup>d</sup> Same temperature on the 31st.  
<sup>e</sup> Same temperature on the 16th.  
<sup>f</sup> For the last 19 days of the month.  
<sup>g</sup> Same temperature on the 29th and 30th.  
<sup>h</sup> Same temperature on the 17th.  
<sup>i</sup> Observations at 9 p. m. interrupted from the 9th to the 21st.  
<sup>j</sup> Observations taken at 7 a. m. and 6 p. m.  
<sup>k</sup> Observations interrupted from the 16th to the 25th, inclusive.  
<sup>l</sup> Same temperature on the 14th and 16th.

- <sup>m</sup> Same temperature on the 14th.  
<sup>n</sup> Same temperature on the 21st.  
<sup>o</sup> Same temperature on the 21st and 29th.  
<sup>p</sup> Same temperature on the 18th and 19th.  
<sup>q</sup> Same temperature on the 15th.  
<sup>r</sup> Same temperature on the 29th.  
<sup>s</sup> Observations taken at sunrise, noon, and sunset.  
<sup>t</sup> Observations taken in night, and at 7 a. m., 2 p. m., and 9 p. m.  
 Mean at night, 43.23.  
<sup>u</sup> Observations taken at 8 a. m. and 1 and 6 p. m.  
<sup>v</sup> Incomplete.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
MARYLAND—Continued.	°	°	°	°		°		°		°		°	
Bladensburg (a).....	57.41?	68.12?	56.00?	60.51?	1	86	---	?	2	b 47	---	?	7.4
Chestertown.....	55.79	64.48	56.21	58.83	1	83	1	70.80	29	46	29	49.33	7.1
Frederick.....	57.20	64.17	57.42	59.60	1	79	1	70.00	29	48	29	49.67	6.8
Oakland.....	52.19	58.07	50.45	53.57	31	80	24	68.33	13	37	21	41.00	---
Sykesville.....	56.65	65.97	56.71	59.78	1	81	1	71.67	29	46	29	48.00	6.4
DISTRICT OF COLUMBIA—													
Washington.....	57.93	65.24	59.50	60.89	1	83	24	72.00	29	49	29	51.00	6.9
VIRGINIA—													
Alexandria.....	59.97	69.03	61.32	63.47	1	85	1	74.67	3	52	27	56.70	7.1
Buffalo.....	62.81	74.55	63.19	66.85	7	c 92	17	82.67	2	d 50	11	55.00	4.4
Crichton's Store (e).....	61.79	73.80	70.17	68.59	1	90	1	81.67	4	49	4	53.67	5.8
Hartwood.....	57.81	67.94	58.52	61.42	15	86	1	78.00	29	45	29	49.67	---
Kanawha.....	58.35	69.50	61.16	63.00	31	84	24	73.33	22	48	21	54.67	6.3
Meadow Dale.....	50.19	61.90	56.65	56.25	1	76	1	69.67	12	f 38	12	42.67	---
Montross.....	58.61	68.32	59.71	62.21	1	86	24	76.33	29	50	29	52.00	6.9
Mossy Creek.....	55.51	66.10	53.84	58.48	15	85	15	71.67	21	40	29	46.00	7.2
Poplar Grove.....	58.69	72.77	59.77	63.74	14	90	14	76.00	22	46	12	55.00	6.9
Portsmouth.....	61.16	72.90	60.48	64.85	18	94	25	79.00	3	49	3	54.67	4.3
Rose Hill (a).....	59.15	66.84	62.61	62.87	14	81	---	?	4	53	---	?	6.7
Rougemon.....	59.61	72.96	61.43	64.67	1	92	1	80.33	4	50	29	53.00	7.4
Ruthven.....	60.00	72.22	59.10	63.77	1	88	25	76.33	3	g 50	3	53.67	4.3
Smithfield.....	59.80	71.30	62.70	64.60	18	88	18	75.00	14	52	3	55.50	6.3
Winchester.....	57.13	65.26	60.29	60.89	1	82	1	71.33	5	h 50	29	51.33	6.1
Wirt Court-House.....	56.23	69.84	58.81	61.63	31	86	31	75.00	22	40	17	49.00	6.2
NORTH CAROLINA—													
Ashville (i).....	57.80	65.75	59.89	61.15	1	j 78	---	?	4	f 48	---	?	---
Chapel Hill.....	62.29	77.26	64.48	68.01	15	k 90	25	78.00	4	52	29	56.67	5.6
Davidson College.....	62.47	74.05	67.27	67.93	16	85	26	77.00	22	49	---	?	4.2
Gaston.....	59.58	75.32	61.81	65.57	18	90	25	78.00	4	42	4	52.00	---
Marlborough.....	62.42	77.86	64.30	68.19	26	89	1	76.67	4	52	3	58.00	5.1
Murfreesborough.....	62.03	73.27	64.38	66.56	1	88	25	78.67	4	51	28	57.33	4.3
SOUTH CAROLINA—													
Aiken.....	64.13	81.93	67.14	71.07	16	94	16	m 80.00	11	50	11	60.33	3.3
All Saints.....	67.71	77.26	70.19	71.72	16	87	25	80.33	13	61	3	64.00	3.7
Charleston, [Dawson].....	69.32	77.58	72.00	72.97	---	84	---	---	---	62	---	---	---
Charleston, [Johnson].....	69.32	77.58	72.00	72.97	26	n 84	26	79.67	7	o 62	12	68.67	---
Columbia.....	64.58	80.81	72.74	72.71	25	92	25	82.00	12	54	6	63.67	4.3
St. John's.....	67.04	84.87	63.92	71.94	27	93	25	80.67	13	54	---	?	4.3
GEORGIA—													
Athens.....	64.13	75.75	66.50	68.79	16	87	16	77.13	11	55	29	58.07	4.4
Hillsborough.....	64.40	80.70	70.30	71.80	16	91	16	79.83	6	55	11	60.27	4.3
Savannah.....	69.30	82.40	72.50	74.73	25	90	26	81.40	7	61	3	68.90	3.6
Sparta.....	62.64	82.39	70.42	71.82	31	90	31	80.33	12	51	12	61.67	3.6
Whitemarsh Island.....	71.16	79.10	71.90	74.05	26	n 86	27	80.33	7	64	3	70.00	3.2
Zebulon.....	66.46	77.50	73.64	72.53	16	89	29	p 82.00	21	53	4	61.67	2.6
FLORIDA—													
Alachua County (q).....	64.97	86.57	72.55	74.70	30	95	30	81.67	12	56	7	67.33	2.8
Alligator.....	70.81	89.32	68.03	76.05	16	r 95	18	p 84.67	9	s 60	7	69.33	3.5
Atsena.....	74.29	76.71	76.16	75.72	21	t 88	31	82.33	12	62	12	67.67	1.5
Belair.....	70.45	86.03	77.35	77.94	30	p 94	30	86.00	11	59	4	73.00	?
Jacksonville.....	73.16	82.70	72.80	76.22	20	91	20	n 81.67	7	66	7	71.33	3.2
St. Augustine.....	74.35	79.52	74.35	76.07	26	95	26	85.33	13	68	12	71.67	2.8
Salt Ponds.....	77.61	82.87	---	80.24	11	v 88	31	84.00	6	w 74	6	j 76.00	4.6

a Incomplete.

b Same temperature on the 28th.

c Same temperature on the 8th.

d Same temperature on the 5th and 11th.

e Observations taken at 7 a. m., noon, and 6 p. m.

f Same temperature on the 13th.

g Same temperature on the 4th.

h Same temperature on the 22d and 29th.

i For the first 22 days of the month.

j Same temperature on the 16th.

k Same temperature on the 18th.

l Same temperature on the 15th.

m Same temperature on the 24th.

n Same temperature on the 27th.

o Same temperature on the 12th.

p Same temperature on the 31st.

q Observations taken at 5 a. m., 2 p. m., and 7 p. m.

r Same temperature on the 18th and 20th.

s Same temperature on the 10th.

t Same temperature on the 22d.

u Same temperature on the 26th.

v Same temperature on the 25th.

w Same temperature on the 9th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
ALABAMA—	○	■	■	○		○		○		○		■	
Carlownville .....	61.94	82.92	66.31	70.39	16	a 92	31	83.67	26	55	28	63.00	2.5
Greene Springs .....	64.05	80.95	66.51	70.50	27	90	30	82.00	12	49	6	59.17	3.8
Greensborough .....	65.00	79.02	68.56	70.86	16	88	30	79.67	11	53	6	61.17	3.5
Selma .....	66.90	82.45	69.42	72.92	27	91	26	81.00	11	56	11	61.67	4.9
MISSISSIPPI—													
Columbus .....	66.16	79.84	68.07	71.36	27	90	30	81.17	11	54	11	60.47	3.6
Natchez .....	69.16	80.39	74.42	74.66	31	88	30	82.20	11	51	11	63.33	---
Paulding .....	69.62	85.68	75.80	77.03	30	95	30	86.80	11	55	11	65.30	4.2
LOUISIANA—													
Black River .....	71.55	82.87	74.42	76.28	31	91	29	b 84.33	11	61	10	66.67	4.2
New Orleans (c) .....	78.74	83.16	87.26	83.05	18	94	31	89.33	1	68	11	74.33	---
TEXAS—													
Austin, [Swante Palm] .....	70.65	83.42	71.71	75.26	29	94	29	85.00	9	55	3	61.67	4.4
Austin, [Van Nostrand] .....	69.04	81.37	73.63	74.68	28	d 91	28	83.00	9	55	2	62.10	4.9
Goliad .....	71.61	81.67	73.23	75.50	25	e 86	27	f 81.33	10	57	10	64.67	4.8
Larissa .....	66.72	80.71	70.30	72.58	31	92	29	84.00	11	52	11	61.00	4.1
New Braunfels .....	66.13	84.23	71.26	73.87	26	d 97	25	83.67	10	50	1	61.00	4.3
Union Hill .....	62.71	74.42	63.97	67.00	26	90	26	75.67	3	g 58	10	61.00	5.4
Washington .....	71.50	84.56	70.50	75.52	26	h 94	29	84.33	10	56	---	?	4.6
TENNESSEE—													
Glenwood .....	60.93	72.23	63.62	65.59	30	85	30	77.70	11	45	11	52.93	6.8
Memphis .....	65.45	74.58	67.61	69.21	30	88	30	81.33	10	51	11	55.67	5.2
KENTUCKY—													
Bardstown .....	61.76	72.93	62.38	65.69	28	89	14	79.83	11	46	11	46.83	5.9
Louisville (i) .....	58.52	69.90	62.77	63.73	14	85	14	73.67	12	43	11	50.33	6.0
Millersburg .....	60.00	69.90	63.87	64.59	15	84	15	77.33	21	42	11	47.33	5.4
Nolin .....	60.88	76.21	59.09	65.39	23	87	24	76.20	10	j 40	11	45.80	4.0
Paris .....	58.52	70.00	60.13	62.88	14	k 82	15	74.67	11	45	11	49.00	6.4
Springdale .....	54.60	73.58	64.15	64.11	14	88	14	77.00	21	36	11	47.00	6.2
OHIO—													
Bellefontaine .....	54.24	66.63	55.06	58.64	23	83	23	72.33	17	41	3	42.80	7.3
Bowling Green .....	53.05	63.11	55.87	57.34	30	79	30	70.80	2	40	1	42.20	6.4
Cincinnati, [Harper] .....	59.48	71.48	61.90	64.29	23	87	23	f 75.67	11	44	11	49.67	6.3
Cincinnati, [Hurt] .....	57.10	70.94	58.55	62.20	23	l 87	31	76.67	11	38	11	46.33	4.5
Cleveland .....	54.66	61.29	53.31	56.42	30	78	30	70.50	18	42	20	44.33	---
Cleveland, (near) .....				60.00									
Collingwood .....	?	?	?		31	74		?	5	j 42		?	---
Dayton .....	53.82	67.10	54.72		23	84	30	73.17	11	41	1	48.13	7.3
Edinburg .....	51.81	62.39	51.19	55.13	30	79	30	67.33	18	38	1	41.00	7.3
Hillsborough .....	54.95	64.42	57.97	59.11	23	80	23	73.00	11	40	16	45.50	5.9
Hiram .....	53.39	61.35	53.35	56.03	30	75	23	67.00	1	38	1	41.33	7.8
Jackson, (Jackson county) .....	58.42	71.17	59.58	63.06	23	86	31	77.67	11	m 46	10	52.33	5.6
Jackson, (Monroe county) .....	57.92	66.71	57.40	60.68	30	81	31	72.67	1	44	10	51.00	7.6
Jefferson .....	59.55	63.10	56.52	59.72	20	n 68	21	o 66.00	19	42	12	50.00	10.0
Lancaster .....	54.61	66.45	56.19	59.08	30	82	30	71.73	16	41	10	p 45.67	5.9
Madison, [Atkins] .....	55.48	60.93	52.77	56.39	30	85	30	73.33	1	41	1	45.00	7.2
Madison, [King] .....	52.63	60.19	50.29	54.37	30	80	31	70.00	18	39	1	42.67	6.9
Medina .....	52.27	62.82	53.79	56.29	30	76	30	69.67	2	32	13	30.63	7.4
Mount Union .....	55.55	65.86	54.35	58.59	17	82	30	71.00	18	38	1	44.67	6.3
New Lisbon .....	58.09	72.25	60.00	63.45	17	86	30	72.33	19	40	1	53.33	5.1
Northwood .....	52.54	64.18	51.26	55.99	28	f 78	30	73.00	1	36	1	42.33	6.6
Portsmouth (q) .....	59.90	70.42	63.68	64.67	14	84	31	75.00	11	48	16	53.67	6.7
Ripley .....	56.94		61.06	59.00		?			11	r 44	---	?	6.7
Savannah .....	54.39	66.45	54.19	58.31	30	84	30	71.33	1	37	1	41.00	7.7

a Same temperature on the 17th and 31st.

b Same temperature on the 30th and 31st.

c Observations taken at 9 a. m., noon, and 3 p. m.

d Same temperature on the 29th.

e Same temperature on the 26th, 27th, 29th, and 30th.

f Same temperature on the 30th.

g Same temperature on the 10th and 11th.

h Same temperature on the 28th.

i Observations taken at 7 a. m., 3 p. m., and 9 p. m.

j Same temperature on the 11th.

k Same temperature on the 23d.

l Same temperature on the 27th.

m Same temperature on the 12th.

n Same temperature on the 21st, 22d, 28th, and 31st.

o Same temperature on the 22d and 28th.

p Same temperature on the 16th.

q Observations taken at 7 a. m., 1 p. m., and 9 p. m.

r Same temperature on the 21st.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	a c	Mean temp.	
Ohio--Continued.	°	°	°	°		°		°		°		°	
Urbana .....	54.03	67.74	54.78	58.85	23	83	30	75.67	16	40	1	43.67	7.3
Welchfield .....	53.65	63.58	51.41	56.21	30	80	30	68.67	1	38	1	41.67	6.8
Westerville .....	54.39	65.24	56.9	58.87	23	80	23	72.00	16	41	1	45.67	7.7
Windham .....	50.61	61.45	53.16	55.07	18	76	31	64.67	20	38	18	45.67	---
MICHIGAN--													
Battle Creek .....	52.19	61.03	52.23	55.15	8	a 76	30	68.33	11	39	11	40.67	5.7
Cooper .....	49.32	54.90	45.68	49.97	29	78	29	b 64.67	19	30	19	36.00	7.4
Detroit .....	52.58	60.96	51.58	55.04	23	79	30	73.33	2	c 38	11	42.00	6.3
Grand Rapids, [Streng] .....	48.96	64.19	52.00	55.05	27	78	30	67.67	11	38	11	39.33	6.5
Marquette .....	42.75	50.03	41.32	44.70	28	68	28	60.57	10	28	1	33.70	5.2
Monroe .....													6.6
New Buffalo (d) .....	53.13	59.87	50.61	54.54	28	74	30	69.67	1	35	---	?	7.5
Port Huron .....	51.12	56.32	47.57	51.67	8	77	31	68.00	20	35	1	42.33	7.3
INDIANA--													
Cannelton .....	60.61	69.50	62.49	64.20	27	81	23	74.47	11	44	11	45.80	5.5
Evansville .....	62.68	68.77	65.74	65.73	23	81	27	76.08	11	52	11	53.92	6.4
Logansport .....	52.97	64.94	57.29	58.40	14	87	14	78.67	12	40	11	43.33	6.7
Madison .....	58.00	65.26	58.58	60.61	14	78	30	72.33	11	44	11	46.67	6.2
Michigan City .....	52.23	59.65	51.60	54.49	28	76	28	69.50	9	38	11	39.00	6.7
New Harmony .....	60.40	70.90	62.20	64.50	14	87	30	77.00	5	32	11	47.67	6.9
Richmond, [Austin] (e) .....	52.86	65.27	---	59.06	14	80	28	68.00	21	39	16	46.00	8.6
Richmond, [Moore] .....	54.48	64.02	56.34	58.28	14	81	30	72.50	2	40	16	44.50	7.0
ILLINOIS--													
Athens .....	56.41	66.74	55.67	59.61	27	87	23	75.00	16	42	1	47.00	7.5
Augusta .....	53.74	62.93	56.90	57.86	27	83	27	74.33	16	40	15	46.00	6.3
Aurora .....	52.48	62.94	51.90	55.77	28	83	28	69.67	1	f 39	1	41.33	7.3
Batavia .....	50.00	62.23	50.15	54.13	29	86	28	70.00	1	36	1	39.67	7.8
Brighton .....	58.00	74.52	66.32	66.28	31	g 88	30	79.33	12	h 42	2	51.33	6.3
Edgar County (i) .....	53.61												
Edgington .....	53.13	62.39	54.84	56.79	29	79	27	j 68.67	2	38	2	43.33	7.6
Elgin .....	51.55	62.00	52.03	55.19	28	79	28	a 68.67	1	33	1	41.00	7.2
Jacksonville .....	56.87	67.03	61.42	61.77	27	85	27	80.11	16	42	1	48.00	---
Manchester (d) .....	55.74	64.77	56.26	58.92	23	84	27	a 73.00	15	k 43	2	46.00	6.9
Marengo .....	52.65	62.45	51.81	55.64	28	82	28	72.67	11	36	1	40.67	7.3
Ottawa .....	53.26	61.09	54.64	56.33	28	76	28	70.00	2	40	1	43.00	6.6
Pekin .....	53.61	64.19	54.87	57.56	23	82	23	71.00	1	40	1	43.33	7.4
Peoria .....	55.71?	66.03?	57.42?	59.72	27	88	27	76.25	1	40	1	44.75	6.9
Riley .....	48.17	59.62	48.55	52.11	28	78	28	71.33	23	36	2	40.33	5.7
South Pass .....	60.00	73.94	63.00	65.65	23	87	14	78.00	10	45	9	51.33	6.2
Warsaw .....	55.23	65.06	55.10	58.46	27	83	27	73.33	16	39	16	43.67	6.5
Waynesville .....	50.70	62.42	58.96	57.36	14	l 78	30	71.00	18	36	1	45.33	7.3
West Salem .....	60.10	72.94	60.74	64.59	14	90	30	78.00	11	42	11	47.33	6.0
West Urbana .....	55.00	62.60	56.40	58.00	8	79	27	71.33	11	38	11	45.00	7.4
Wheaton .....	50.94	59.83	51.72	54.16	28	78	28	68.97	1	38	1	40.59	7.6
Winnebago .....	50.95	64.51	53.33	56.26	29	80	28	70.16	2	m 40	1	42.50	6.7
MISSOURI--													
St. Louis .....	60.50	70.20	61.30	64.00	14	l 88	30	79.67	2	44	10	48.83	6.7
WISCONSIN--													
Appleton .....	47.77	59.65	49.94	52.45	29	74	28	j 65.33	10	37	10	41.00	5.7
Bay City .....	44.52	50.71	42.26	45.83	30	78	30	63.33	9	30	9	36.67	5.7
Beloit .....	50.29	63.06	52.35	55.23	28	84	28	72.00	3	40	1	43.00	5.7
Green Bay .....	46.55	59.13	46.55	50.74	28	78	29	66.33	11	n 34	10	38.00	5.7
Janesville .....	51.13	62.68	53.00	55.60	27	o 80	28	69.67	1	p 40	1	42.67	7.5
Kenosha .....	48.55	54.35	49.72	50.87	31	72	31	63.33	11	37	11	40.33	6.0
Madison, [Sterling] .....	50.27	57.93	50.82	53.01	27	73	27	o 65.00	11	k 38	1	42.33	7.1
Manitowoc .....	47.19	55.77	48.26	50.41	31	71	14	1.00	2	q 38	1	40.67	7.0

a Same temperature on the 30th.

b Same temperature on the 30th and 31st.

c Same temperature on the 17th.

d Observations taken at 7 a. m., 1 p. m., and 9 p. m.

e Observations taken at 6 a. m. and 1 p. m.

f Same temperature on the 2d.

g Same temperature on the 26th.

h Same temperature on the 20th.

i Observations taken at sunrise for twenty-five days only.

j Same temperature on the 29th.

k Same temperature on the 16th.

l Same temperature on the 27th.

m Same temperature on the 11th and 17th.

n Same temperature on the 15th, 16th, and 17th.

o Same temperature on the 28th.

p Same temperature on the 2d, 3d, and 11th.

q Same temperature on the 10th, 15th, and 16th.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Milwaukee, [Lapham] .....									20	30			
Milwaukee, [Pomeroy] .....	45.84	53.32	45.52	48.23	23	76	31	67.32	10	a 35	1	34.33	8.3
Milwaukee, [Winkler] .....	47.76	54.94	45.95	49.55	23	76	31	62.33	1	b 37	10	39.33	6.0
New Danemora (c) .....	46.34	61.40	54.97	54.24	28	83	27	76.67	11	36.5	17	44.67	
New London .....	45.77	59.74	49.09	51.53	28	d 75	29	65.67	2	e 35	10	38.33	5.5
Platteville .....	52.13	64.22	54.61	56.99	28	87	28	75.00	11	40	13	40.67	6.6
Waukesha .....	50.52	61.26	50.58	54.12	29	90	29	80.67	2	37	1	42.00	7.1
IOWA—													
Bellevue .....	50.71	62.93	54.13	55.92	27	80	27	70.33	2	a 40	1	f 43.67	7.1
Border Plains .....	51.45	58.90	52.61	54.32	27	84	27	74.33	15	38	15	41.33	6.9
Dubuque .....	53.65	60.97	54.06	56.23	27	80	27	71.00	3	g 41	3	42.67	6.4
Fairfield .....	54.00	61.71	54.19	56.63	27	83	23	70.67	15	h 41	1	i 43.00	7.5
Fort Madison (j) .....	53.54	63.03	57.19	57.92	27	82	27	73.67	11	39	15	i 44.33	6.6
Franklin .....	51.32	61.13	53.35	55.27	27	84	27	74.00	17	39	3	43.67	6.9
Iowa City .....	52.69	61.60	54.54	56.28	27	77	27	71.67	15	40	2	41.67	7.1
Muscataine .....	53.55	62.77	53.94	56.75	27	81	27	71.67	■	32	1	43.67	5.0
Pleasant Plain .....	53.90	64.48	54.06	57.48	27	83	27	74.00	16	g 40	16	43.33	7.0
Rossville .....	48.81	58.55	48.75	52.04	27	80	27	70.03	17	36	■	39.57	6.2
Sioux City .....	49.66	61.79	50.97	54.14	26	85	26	72.67	■	34	3	40.50	7.5
MINNESOTA—													
Buchanan .....	42.71	61.16	41.77	48.55	5	88	2	k 37.33	2	30	31	58.33	---
Burlington .....	38.50	53.40	42.93	44.94	31	72	31	60.00	2	28	2	36.33	---
Hazlewood .....	48.68	59.65	50.97	53.10	27	78	27	69.67	14	37	14	40.67	5.4
Princeton .....	52.26	63.03	51.35	55.55	■	81	27	74.33	19	37	19	42.67	4.5
Wabashaw .....	53.26	64.04	52.61	56.64	27	82	27	76.00	1	l 40	1	40.67	4.5
NEBRASKA—													
Bellevue .....	52.26	60.71	53.52	55.50	27	86	26	74.67	16	35	2	41.00	6.2
Brownsville .....	57.07	67.93	55.22	60.07	27	95	27	77.33	10	m 40	15	45.00	4.9
Elkham .....													6.4
Omaha .....													5.8
KANSAS—													
Burlingame .....	55.84	68.39	56.26	60.16	28	89	28	77.67	18	38	2	44.33	5.8
Lawrence .....	58.00	68.48	59.48	61.99	27	86	27	78.33	17	n 44	3	47.33	5.8
Leavenworth C'y, [Berthoud] .....													5.0
Leavenworth City, [McCarty] (o) .....	57.52	68.30	58.41	61.41	27	89	27	80.00	4	42	2	44.00	6.3
Manhattan .....	56.10	70.16	56.94	61.07	27	91	23	75.67	17	39	2	47.33	5.9
Mapleton .....	58.81	70.90	59.81	63.17	26	p 90	26	q 77.33	11	40	17	47.33	5.4
Topeka .....	57.23	71.90	57.55	62.23	26	q 94	27	80.33	15	40	15	46.00	4.5
OREGON—													
Portland (r) .....				55.58		85				40			
MEXICO—													
Cordova (s) .....	72.12	74.95	72.01	73.35	31	t 78.08			18	u 69.08			
Minatitlan (v) .....	75.45	87.72		81.58	25	95	2	w 85.50	19	x 72	21	76.00	
Mirador (y) .....	68.07	78.84	68.45	71.79				77.00				67.51	
Vera Cruz (z) .....	83.65		80.87	82.26									
CALIFORNIA—													
Marysville .....	61.41	79.77	67.48	69.55	6	87	7	77.00	15	aa 56	21	61.00	2.5
Sacramento .....	60.87	70.61	67.32	66.27	31	80	7	74.00	1	55	15	59.00	1.9
San Francisco .....	55.78	65.32	53.74	58.28	5	bb 75	5	68.67	7	cc 49	12	53.60	2.7

a Same temperature on the 11th.

b Same temperature on the 10th and 16th.

c Observations taken at 6 a. m., noon, and 6 p. m.

d Same temperature on the 29th.

e Same temperature on the 10th, 11th, and 17th.

f Same temperature on the 3d.

g Same temperature on the 17th.

h Same temperature on the 16th and 17th.

i Same temperature on the 16th.

j Observations taken at 6 a. m., noon, and 7 p. m.

k Same temperature on the 3d and 4th.

l Same temperature on the 2d, 11th, 15th, 17th, and 19th.

m Same temperature on the 15th and 17th.

n Same temperature on the 18th.

o Observations interrupted from the 10th to the 19th.

p Same temperature on the 30th.

q Same temperature on the 27th.

r Observations taken at 6 a. m., 12 m., and 6 p. m.

s Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.  
Mean at 12 m., 74.17; mean at 6 p. m., 73.51.

t Same temperature on the 29th.

u Same temperature on the 12th.

v Observations taken at 7 a. m. and 3 p. m.

w Same temperature on the 7th and 25th.

x Same temperature on the 21st and 22d.

y Observations taken at 7 a. m., 2 p. m., and 8 p. m.

z Observations taken at 7 a. m. to 9 a. m., and at 9 p. m. to 11 p. m.

aa Same temperature on the 16th and 21st.

bb Same temperature on the 6th.

cc Same temperature on the 8th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WEST INDIES— Nassau, Bahamas (a)-----	○	○	○	○		○		□		○		○	
CENTRAL AMERICA— Guatemala (c)-----	59.36	74.84	64.04	69.01	?	86.9	-----	-----	?	55.6	-----	-----	-----
SOUTH AMERICA— Catharina Sophia, Surinam(d)	75.20	84.60	79.90	79.90	15	90	3	82.00	4	e 73	29	76.67	5.6

*a* Mean obtained from daily maximum and minimum.*b* Same temperature on the 28th and 29th.*c* Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.

Mean at 9 a. m., 70.16; mean at noon, 76.64.

*d* Observations taken at 6 a. m., 2 p. m., and 6 p. m.*e* Same temperature on the 7th, 8th, 13th, 25th, and 28th.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA.—	°	°	°	°	°	°	°	°	°	°	°	°	
Fort Simpson (a).....				61.80	18	89	18	77.00	12	31	12	40.00	---
Hamilton (b).....	71.93		69.76	70.84	26	88	25	84.59	12	d 51	11	e 52.00	---
Montreal.....	64.69	73.49	66.09	64.09	24	f 89	25	80.83	13	55	13	56.26	5.7
Moose Factory (g).....				52.10									---
Red River Settlement.....	55.67	68.78	59.46	61.30	30	90	30	78.83	1	h 41	1	46.33	5.2
Rigolet (i).....	39.00		46.27	42.63	25	71	25	64.50	5	28	5	34.00	---
St. John's.....	50.40	59.47	51.70	53.86	8	73	8	j 65.00	22	39	23	44.67	---
St. Martin.....	61.16	77.17	64.64	67.66	26	97	26	85.90	12	51	13	55.50	4.9
Stanbridge.....	64.37	73.93	64.13	67.48	25	90	25	82.67	11	k 51	9	55.33	5.2
Toronto (d).....	61.87	72.28	63.53	65.89	24	86	26	79.98	13	49	12	53.08	4.8
Windsor.....	56.63	68.55	57.68	60.95	8	85	7	72.30	13	44	13	46.80	6.4
MAINE.—													
Cornish, [Guptill].....	63.06	73.60	64.20	66.95	18	f 88	25	80.67	13	46	15	49.00	5.4
Cornish, [West].....	62.16	72.50	62.26	65.64	28	86	24	78.33	13	46	15	48.00	5.3
Dexter.....													6.3
Gardiner.....	61.43	71.30	60.90	64.54	18	88	18	77.33	1	42	15	52.67	6.5
Perry.....	56.00	65.48	55.62	59.03	18	85	18	71.00	2	46	13	48.50	5.0
Portland.....	61.45	68.02	60.73	63.40	18	87	18	71.66	14	m 49	15	49.50	6.5
Steuben.....	57.17	66.67	56.77	60.20	18	82	28	70.67	13	47	13	48.33	6.9
NEW HAMPSHIRE.—													
Concord.....	62.90	77.63	63.50	68.01	25	93	28	79.33	12	47	15	52.67	5.3
Shelburne.....	63.23	81.27	62.70	69.07	28	95	24	83.00	15	51	13	57.00	6.0
Stratford.....	61.07	74.57	59.83	65.16	25	88	25	76.67	8	47	8	53.33	5.2
West Enfield.....	63.00	75.63	63.83	67.49	27	94	25	81.33	12	47	12	50.67	5.1
VERMONT.—													
Brandon.....	62.73	75.00	65.03	67.59	25	91	25	82.00	12	50	12	53.50	5.1
Burlington.....	64.43	72.40	65.40	67.41	25	n 88	26	82.00	9	51	12	54.83	4.6
Craftsbury.....	60.60	71.07	62.63	64.77	18	89	25	78.00	9	48	11	e 53.00	5.1
Norwich.....	63.37	76.80	63.17	67.78	25	93	27	81.00	12	d 49	12	51.00	---
Rupert.....	65.00	80.67	75.80	73.82	28	94	28	85.33	12	m 52	12	56.67	5.7
St. Johnsbury.....	59.50	74.00	60.10	64.53	24	f 90	25	77.67	11	46	9	52.67	5.1
MASSACHUSETTS.—													
Amherst.....	65.09	76.23	67.34	69.55	27	90	26	82.50	12	46	12	50.40	6.6
Bridgewater (o).....	61.48	74.49	64.91	66.96	25	90	28	80.17	12	48	15	49.10	5.8
Cambridge.....	63.23	75.57	64.07	67.62	28	89	28	79.00	12	d 48	15	51.00	5.4
Florida.....													6.0
Lawrence.....	60.90	76.52	63.93	67.12	25	92	24	78.67	12	46	15	48.33	5.4
Mendon.....	65.30	76.33	63.70	68.44	25	92	25	81.67	1	45	1	m 48.67	5.2
Nantucket.....	61.63	67.82	59.55	63.00	20	f 78	26	72.00	2	50	2	53.33	5.7
New Bedford.....	62.02	73.00	61.70	65.57	25	84	28	76.33	13	49	15	50.33	6.8
Newburyport.....	61.79	72.74	56.22	63.58	18	90		?	12	p 48	15	48.30	6.2
Richmond.....	57.33	77.57	66.07	66.99	18	q 92	22	80.00	12	38	12	41.33	3.8
Westfield.....	61.33	76.60	65.23	67.72	25	92	25	80.67	12	43	12	48.00	5.7
Williamstown.....	61.88	74.50	65.45	67.28	26	85	24	78.50	12	47		?	5.1
Worcester.....	64.32	76.85	65.93	69.03	25	92	25	82.67	13	45	13	41.67	4.0
RHODE ISLAND.—													
Providence (r).....	62.50	76.20	64.50	67.73	25	91	28	79.67	13	m 49	15	50.33	4.8
CONNECTICUT.—													
Columbia.....	64.20	75.93	62.93	67.69	25	92	25	81.33	14	47	16	49.67	5.0
Pomfret.....	63.10	73.34	63.24	66.56	25	86	26	80.10	13	44	15	47.20	5.6
Saybrook.....	63.10	71.20	62.77	65.69	27	83	28	78.33	12	s 50	15	52.00	4.6
Wallingford.....	63.02	78.02	64.17	68.40	26	92	26	81.50	12	48	12	52.00	3.8
NEW YORK.—													
Bellport.....	64.92	70.93	64.62	66.84	26	t 87	26	79.33	13	m 52	15	54.67	4.4

a Register thermometer. No observations after the 21st of the month.

b Observations taken at 9 a. m. and 9 p. m.

c Same temperature on the 26th and 27th.

d Same temperature on the 13th.

e Same temperature on the 12th.

f Same temperature on the 25th.

g Observations taken at sunrise, 2 p. m., and 10 p. m.

h Same temperature on the 10th.

i Observations taken at sunrise and sunset.

j Same temperature on the 27th.

k Same temperature on the 11th.

l Observations taken at 6 a. m., 2 p. m., and 10 p. m.

m Same temperature on the 15th.

n Same temperature on the 26th.

o Observations taken at 7 a. m., 2 p. m., and 7 p. m.

p Same temperature on the 14th and 15th.

q Same temperature on the 22d.

r Observations taken at 6 a. m., 1 p. m., and 10 p. m.

s Same temperature on the 13th and 15th.

t Same temperature on the 28th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°	°	°	°	°	°	°	
Buffalo (a) -----	66.00	69.77	66.50	67.42	30	83	30	78.00	12	52	13	53.00	3.4
Canton -----	65.00	76.57	66.83	69.47	24	92	27	83.00	12	54	9	57.00	4.7
Clinton -----	67.26	79.23	66.73	71.07	25	92	27	83.00	15	51	12	54.00	5.0
Fishkill Landing -----	69.00	79.63	69.37	72.67	26	94	26	85.33	13	41	13	53.00	3.9
Flatbush -----	67.92	78.30	65.63	70.62	26	93	28	83.20	13	51	12	55.30	5.3
Fort Edward -----	65.83	76.07	67.97	69.96	28	90	26	82.00	12	50	12	53.33	5.4
Houseville -----	63.32	73.28	61.44	66.01	26	88	27	79.33	8	c 48	12	52.00	5.5
Nichols -----	66.20	80.90	63.57	70.22	25	94	25	80.00	14	49	12	54.33	4.9
Rochester -----	66.30	79.00	69.93	71.74	24	94	24	83.33	1	d 31	13	53.67	3.0
Sag Harbor -----	65.44	80.37	64.59	70.13	28	95	28	82.00	13	51	15	54.33	4.2
Waterford -----	66.72	78.21	68.78	71.24	26	e 91	27	83.67	12	51	12	53.33	5.0
NEW JERSEY---													
Bloomfield -----	68.73	81.70	67.35	72.59	25	f 95	25	84.67	12	51	12	56.17	4.6
Freehold -----	69.55	80.20	68.23	72.66	25	93	26	85.00	12	53	12	56.67	---
Lambertville -----	70.51	84.90	69.87	75.09	26	98	---	---	13	48	---	---	---
Newark (g) -----	---	---	---	70.94	26	91	26	83.50	1	46	1	d 55.50	---
PENNSYLVANIA---													
Bedford -----	68.08	83.08	68.04	73.07	30	95	30	83.33	14	h 51	14	59.33	4.3
Berwick -----	69.90	81.00	70.07	73.66	25	93	10	83.33	12	d 57	12	57.00	3.5
Cannonsburg -----	65.66	76.66	70.73	71.02	26	i 90	31	80.33	14	52	13	57.67	4.4
Easton -----	67.20	79.53	69.28	72.00	27	92	29	81.67	13	51	12	54.00	5.0
Fleming -----	66.43	82.36	68.10	72.30	22	95	22	80.67	15	53	14	59.00	4.1
Gettysburg -----	69.07	83.07	71.10	74.41	30	95	30	84.67	12	j 56	12	d 60.00	4.2
Harrisburg, [Heisely] -----	72.74	84.07	77.20	78.00	26	96	28	88.00	13	57	12	63.33	4.2
Harrisburg, [Hickok] -----	68.40	80.88	72.24	73.84	26	i 91	28	83.00	13	56	14	59.83	5.2
Indiana -----	70.40	81.10	68.70	73.40	30	94	30	82.67	14	50	13	56.33	3.9
Lewisburg -----	69.00	79.91	68.81	72.57	26	93	26	82.63	12	55	12	55.90	5.5
Meadville -----	67.60	81.87	65.67	71.71	29	96	27	85.67	13	47	13	51.00	3.6
Morrisville -----	69.80	83.23	70.27	74.43	28	96	28	86.00	12	d 54	12	58.00	3.2
Mount Joy -----	72.80	86.03	74.03	77.65	26	e 101	26	88.67	12	56	12	61.00	3.6
Murrysville -----	68.88	80.41	66.33	71.87	24	i 91	29	81.00	13	52	14	58.33	3.9
Norristown -----	68.46	78.69	69.76	72.30	26	l 90	28	83.50	12	54	12	57.70	4.1
North Whitehall (m) -----	65.63	79.30	73.63	72.85	26	e 90	28	82.33	12	d 53	12	57.33	4.1
Paradise -----	---	---	---	80.00	---	---	---	---	---	---	---	---	---
Philadelphia -----	73.78	83.57	75.28	77.54	28	95	28	89.20	13	55	13	60.20	5.1
Pittsburg, [Martin] -----	68.76	79.36	71.35	73.16	24	n 90	27	83.33	14	53	13	j 59.67	4.6
Pittsburg, [Wilson] (o) -----	65.95	77.29	69.67	70.97	30	98	29	84.67	14	50	14	55.00	---
Pocopson -----	72.40	83.83	71.17	75.80	26	i 96	27	86.67	13	56	1	c 61.67	5.0
Shamokin (p) -----	59.13	79.90	68.77	69.27	26	95	29	78.67	3	40	12	57.67	4.6
Somerset -----	63.83	79.00	64.80	69.21	27	i 90	30	77.33	14	48	14	53.67	5.0
Tarentum -----	68.53	81.13	66.60	72.09	23	i 91	29	80.67	14	51	14	57.33	3.9
West Haverford -----	68.67	82.57	---	75.62	26	95	26	e 86.00	12	d 56	12	59.00	5.2
Westtown -----	70.02	80.47	70.35	73.61	26	93	30	84.50	12	53	13	58.17	5.0
DELAWARE---													
Georgetown (q) -----	73.10	82.00	76.97	77.36	30	95	28	88.67	1	r 59	14	60.33	---
Milford -----	72.04	80.55	73.70	75.43	26	93	26	88.00	15	58	15	61.00	23.1
MARYLAND---													
Annapolis -----	71.10	81.27	76.25	76.21	26	94	26	86.33	1	57	14	63.00	4.1
Baltimore -----	70.95	81.68	74.63	75.75	39	94	30	86.83	13	j 57	14	60.83	5.0
Bladensburg -----	71.13	84.54	69.20	74.96	21	s 95	28	84.33	1	j 58	14	61.33	24.0
Chestertown -----	71.34	81.36	72.77	75.16	30	94	30	87.00	14	56	14	60.33	4.4
Frederick -----	72.81	80.12	72.45	75.13	30	93	30	87.33	1	j 59	14	62.33	4.4
Leitersburg (m) -----	62.50	84.07	72.97	73.18	30	94	27	81.33	2	i 50	3	61.00	?

a Observations taken at 8 a. m., 2 p. m., and 9 p. m.

b Same temperature on the 29th.

c Same temperature on the 12th.

d Same temperature on the 17th.

e Same temperature on the 27th.

f Same temperature on the 26th.

g Observations taken at 7 a. m. and 6 p. m.

h Same temperature on the 15th.

i Same temperature on the 30th.

j Same temperature on the 14th.

k Same temperature on the 29th and 30th.

l Same temperature on the 26th and 30th.

m Observations taken at sunrise, noon, and sunset.

n Same temperature on the 26th and 27th.

o Observations interrupted from the 18th to the 26th, inclusive.

p Mean of observations taken in the night, 53.87.

q Observations taken at 8 a. m., 1 p. m., and 6 p. m.

r Same temperature on the 14th and 18th.

s Same temperature on the 25th, 27th, 28th, and 30th.

t Same temperature on the 16th.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MARYLAND—Continued.	°	□	°	■		°		°		°		°	
Oakland.	63.73	74.87	59.80	66.13	29	a 85	29	78.33	14	39	14	48.00	
Sykesville.	69.70	80.50	71.27	73.82	27	a 89	30	83.00	14	57	14	59.67	4.6
DISTRICT OF COLUMBIA—													
Washington.	71.93	82.40	74.77	76.37	30	94	28	87.00	1	b 60	14	?	4.2
VIRGINIA—													
Alexandria.	74.00	84.27	76.75	78.34	30	96	30	89.33	14	60	14	64.33	4.2
Buffalo.	77.43	88.80	78.50	81.58	29	a 108	23	94.33	13	a 62	13	62.33	
Crichton's Store (c).	72.53	84.08	80.14	78.92	30	96	30	88.67	15	60	15	62.00	5.4
Hartwood.	69.87	83.39	72.37	75.18	27	d 98	29	85.33	14	56	14	56.00	
Kanawha.	68.28	79.97	70.68	72.98	27	92	30	82.67	15	52	14	59.00	4.0
Lewisburg.	66.17	81.47	68.93	72.19	30	92	30	80.33	14	54	14	58.33	
Lewinsville.	70.87	81.10	73.07	75.01	30	99	30	87.67	14	56	14	60.67	4.9
Meadow Dale.	59.40	74.83	66.50	66.91	29	a 86	29	78.00	15	40	14	54.00	
Montross.	72.33	81.73	72.70	75.59	29	95	27	85.67	14	59	14	56.67	4.0
Poplar Grove.	69.34	82.52	68.97	73.61	30	98	30	87.33	14	52	14	61.00	4.7
Portsmouth.	73.10	86.07	71.80	76.99	30	98	30	87.33	1	59	17	63.00	3.1
Rose Hill (e).	69.07	80.32	76.73	75.37	27	91		?	14	f 61		?	5.0
Rougemont.	74.40	86.86	75.33	78.86	26	a 100	30	91.33	14	57	14	60.00	5.1
Ruthven.	72.81	83.85	72.11	76.23	26	a 94	30	86.33	14	f 60		?	3.1
Smithfield.	70.91	81.24	73.56	75.24	27	93	30	84.00		62	14	63.53	5.6
Winchester.	69.90	79.87	72.63	74.13	30	94	30	85.33	14	55	14	58.33	3.4
Wirt Court-House.	71.08	82.31	71.46	74.95	30	94	30	83.00	13	59	13	60.33	4.6
NORTH CAROLINA—													
Ashville.	65.92	73.96	69.62	69.83	29	a 78	30	74.33	14	56		?	
Chapel Hill.	72.23	85.90	72.30	76.81	30	97	30	86.67	14	58	14	61.00	5.2
Davidson College.	71.41	82.96	73.93	76.10	27	91	30	82.33	15	57	13	62.33	3.1
Gaston.	74.00	85.23	70.77	76.67	30	98	30	87.00	14	58	14	61.67	
Marlborough.	72.65	85.33	73.04	77.01	22	97	25	83.67	15	62	14	f 65.00	5.7
Murfreesborough.	73.43	83.41	74.49	77.11	27	96	30	85.67	16	61	14	63.67	3.8
SOUTH CAROLINA—													
Aiken.	76.17	84.10	75.96	78.74	24	96	24	84.33	14	67	15	68.67	4.1
All Saints.	75.23	80.50	77.50	77.74	28	86	28	82.00	15	67	16	72.00	4.3
Charleston, [Dawson].	76.23	83.40	78.33	79.32		88				69			
Charleston, [Johnson].	76.23	83.40	78.27	79.30	30	88	30	83.67	15	g 69	15	73.67	
Columbia.	73.83	85.53	76.33	78.56	1	97	26	84.00	14	63	14	70.00	5.5
St. John's.	72.85	86.03	71.71	76.86	23	97	27	83.00	5	63	8	69.67	5.1
GEORGIA—													
Athens.	67.97	79.81	70.01	72.60	23	88	23	76.97	14	56	14	63.93	4.4
Hillsborough.	72.11	86.04	74.80	77.65	24	93	24	82.67	14	57	14	66.67	4.8
Savannah.	75.80	85.80	78.10	79.90	1	93	30	84.97	14	68	15	75.03	4.2
Sparta.	69.43	87.23	75.60	77.44	23	94	23	83.00	14	54	15	66.33	5.4
Whitemarsh Island.	76.80	82.87	76.30	78.66	30	89	30	83.67	15	68	15	73.33	4.2
Zebulon.	72.18	82.08	78.47	77.58	29	88	1	85.67	13	57	13	65.00	3.0
FLORIDA—													
Alachua County (h).	70.03	87.72	75.34	77.70	2	94	1	83.67	15	i 65	21	73.03	2.9
Alligator.	75.50	90.00	79.00	81.50	2	97	26	83.33	15	68	12	75.33	3.9
Atsena.	77.63	83.57	79.40	80.20	4	j 87	30	83.00	15	68	15	74.00	3.8
Belair.	75.47	88.13	77.13	80.24	5	96	26	86.33	13	59	12	66.67	
Jacksonville.	73.70	85.13	74.07	79.30	2	96	29	85.67	15	70	15	75.67	4.0
Micanopy.	75.60	88.20	77.45	80.42	2	95	1	83.00	15	69	15	73.60	4.3
St. Augustine.	79.93	81.30	78.80	80.01	1	k 85	29	a 82.00	12	74	13	75.67	4.2
Salt Ponds.	79.87	85.77		82.82	1	l 89	30	85.50	15	76	15	77.50	5.9
ALABAMA—													
Greene Springs.	73.40	84.23	71.86	76.50	3	95	3	84.67	14	59	14	63.16	4.1
Greensborough.	71.93	81.95	72.82	75.57	3	91	3	82.00	13	58	13	63.00	3.3
Selma.	72.63	85.07	74.20	77.30	1	m 92	2	83.67	14	60	14	64.67	6.1

a Same temperature on the 30th.

b Same temperature on the 13th and 14th.

c Observations taken at 6½ a. m., noon, and 6 p. m.

d Same temperature on the 29th.

e Incomplete.

f Same temperature on the 15th.

g Same temperature on the 16th.

h Observations taken at 5 a. m., 2 p. m., and 9 p. m.

i Same temperature on the 17th.

j Same temperature on the 16th and 17th.

k Same temperature on the 29th and 30th.

l Same temperature on the 7th and 30th.

m Same temperature on the 2d and 26th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSISSIPPI—	°	°	°	°	°	°	°	°	°	°	°	°	
Columbus .....	72.56	86.23	74.63	77.81	27	94	27	84.07	13	59	13	64.90	3.8
Natchez .....	73.80	84.60	78.80	79.07	1	90	2	83.67	14	60	14	70.33	---
Paulding .....	75.59	86.78	78.88	80.42	2	98	2	89.67	13	62	13	67.33	5.1
LOUISIANA—													
Black River .....	77.10	86.47	77.77	80.45	27	92	27	85.33	13	a 68	13	71.33	4.2
New Orleans (b) .....	83.56	85.50	86.20	85.09	1	c 92	28	90.00	14	74	14	77.67	---
TEXAS—													
Austin, [Palm] .....	76.77	88.63	76.43	80.61	24	96	25	86.67	5	63	12	70.33	4.7
Austin, [Van Nostrand] .....	74.86	86.01	76.55	79.14	24	d 91	29	84.88	5	64	5	70.83	4.3
Goliad .....	74.75	84.76	77.44	78.98	25	90	25	82.67	5	67	13	74.00	4.4
Larissa .....	76.39	89.57	75.17	80.38	30	e 96	30	?	12	59	12	67.00	3.2
New Braunfels .....	71.07	86.77	74.27	77.37	8	f 93	1	81.67	6	57	6	66.67	2.2
Union Hill .....	65.97	83.57	65.80	71.78	29	93	29	79.00	12	58	12	64.67	5.0
Washington .....	77.13	86.33	74.86	79.44	29	93	29	84.00	5	g 66	---	?	3.8
TENNESSEE—													
Glenwood .....	67.46	79.61	69.96	72.34	27	89	27	80.93	13	53	13	59.37	4.1
Memphis .....	74.90	83.70	75.20	77.93	27	92	27	86.00	12	62	12	65.00	4.1
KENTUCKY—													
Bardstown .....	72.16	83.91	71.98	76.02	30	95	30	90.50	13	54	13	59.33	3.9
Louisville (h) .....	69.20	81.23	73.63	74.69	26	91	30	84.33	14	56	13	61.33	4.7
Millersburg .....	74.70	84.57	72.63	77.30	29	i 92	29	86.67	14	56	14	62.00	4.2
Paris .....	68.00	79.93	69.59	72.51	30	92	30	83.33	13	a 55	13	57.33	4.4
Springdale .....	61.50	84.98	73.23	73.24	26	i 97	30	84.83	14	46	13	60.67	4.2
OHIO—													
Bellefontaine .....	70.34	82.71	68.95	74.00	26	95	26	85.67	12	50	12	54.33	4.6
Bowling Green .....	69.22	81.08	67.91	72.74	30	94	30	84.00	12	j 53	12	54.70	3.2
Cincinnati, [Harper] .....	70.63	82.37	75.13	76.04	29	94	26	87.00	14	56	12	60.33	4.1
Cincinnati, [Hurt] .....	70.83	82.28	72.52	75.21	25	k 95	25	89.67	12	54	12	58.67	3.3
Cleveland .....	70.45	79.03	67.47	72.32	27	91	27	84.67	13	51	12	53.33	---
Cleveland, [near] .....				75.00									---
Collingwood .....	68.60	76.40	68.73	71.24	27	92	25	83.33	12	50	12	55.00	---
Dayton .....	65.97	82.62	68.00	72.20	30	95	30	82.78	14	52	13	54.57	4.5
Edinburg .....	67.73	78.67	65.87	70.76	22	96	22	84.00	13	46	13	52.33	4.4
Hillsborough .....	67.48	78.12	71.57	72.39	30	92	30	83.70	13	51	13	56.20	3.5
Hiram .....	67.23	77.46	66.57	70.42	23	m 90	30	82.67	12	n 50	12	52.00	4.5
Jackson, [Jackson county] .....	70.93	85.75	70.92	75.87	25	98	25	86.33	13	48	13	56.00	2.8
Jackson, [Monroe county] .....	72.25	83.37	67.86	74.49	24	96	30	85.17	13	53	13	57.00	3.8
Jefferson .....	68.47	71.67	69.73	69.96	29	96	29	90.67	11	g 52	11	g 54.00	5.7
Lancaster .....	70.95	81.45	68.19	73.53	27	94	30	84.90	13	52	13	54.57	3.5
Madison, [Atkins] .....	71.79	80.26	67.96	73.34	25	94	25	85.00	13	48	13	50.33	2.6
Madison, [King] .....	69.40	79.38	63.20	70.66	27	92	27	83.00	13	46	12	51.00	3.6
Medina .....	68.43	77.53	65.47	70.48	26	91	26	82.50	13	49	13	50.67	4.5
New Lisbon .....	72.67	89.07	72.70	78.15	24	l 106	25	89.33	14	57	14	58.67	2.9
Northward .....	67.85	81.81	63.78	71.15	26	98	---	?	12	j 48	12	50.67	4.2
Ripley .....	67.43	---	72.04	69.73	29	84	---	?	13	53	---	?	4.9
Savannah .....	71.20	83.27	67.40	73.96	30	98	24	88.00	13	48	12	51.67	4.9
Urbana .....	68.20	82.17	68.76	73.04	23	97	27	88.00	13	51	12	55.33	4.2
Welchfield .....	73.43	82.76	67.33	74.51	22	o 97	23	89.67	13	a 48	13	52.00	3.4
Westerville .....	69.47	81.17	70.57	73.74	26	i 94	26	85.33	13	a 52	13	55.50	4.8
Windham .....	63.73	76.67	66.93	69.11	26	91	26	81.00	14	49	13	50.67	---
MICHIGAN—													
Battle Creek .....	69.37	80.50	68.03	72.63	30	96	26	84.00	12	48	12	57.33	3.2
Cooper .....	72.30	80.40	70.07	74.26	28	m 98	29	89.33	11	j 50	13	55.33	2.3
Detroit .....	72.36	84.88	72.10	76.45	22	106	22	90.33	8	p 55	11	59.00	4.0
Forestville (q) .....	61.67	69.94	66.37	66.83	18	i 86	18	80.50	12	45	11	50.00	---
Grand Rapids, [Streng] .....	65.27	81.10	66.40	70.92	28	i 98	26	83.67	11	47	10	56.00	4.8

a Same temperature on the 14th.

b Observations taken at 9 a. m., noon, and 3 p. m.

c Same temperature on the 3d and 28th.

d Same temperature on the 29th.

e Same temperature on the 22d.

f Same temperature on the 19th and 20th.

g Same temperature on the 12th.

h Observations taken at 7 a. m., 3 p. m., and 9 p. m.

i Same temperature on the 30th.

j Same temperature on the 13th.

k Same temperature on the 26th.

l Same temperature on the 27th.

m Same temperature on the 29th and 30th.

n Same temperature on the 13th and 14th.

o Same temperature on the 23d.

p Same temperature on the 11th.

q Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a. m., 69.33.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°		°		°		°		°	
Marquette .....	57.34	68.15	55.14	60.21	22	94	22	82.13	12	38	11	47.07	4.8
Monroe .....													3.4
New Buffalo (a) .....	71.03	77.00	64.20	70.74	30	94	26	84.00	13	44	11	52.00	5.9
Port Huron .....	66.70	78.37	61.18	68.75	30	97	30	83.33	13	42	13	49.33	4.2
INDIANA—													
Cannelton .....	70.69	79.90	69.86	73.48	29	90	27	82.37	13	54	13	59.33	3.6
Evansville .....	72.23	79.77	75.90	75.97	27	90	27	86.17	13	52	14	60.50	4.3
Logansport .....	70.13	82.80	72.03	74.99	23	b 98	26	b 87.33	12	52	12	59.00	4.9
Madison .....	69.13	77.10	70.27	72.17	23	90	23	83.00	12	c 56	13	58.67	3.6
Michigan City .....	69.10	77.58	66.35	71.01	30	100	24	86.33	11	47	11	48.33	4.4
New Harmony .....	73.17	81.13	72.23	75.51	27	93	27	87.33	12	54	12	58.67	4.4
Richmond, [Austin] (d) .....	65.96	79.74		72.85	27	e 93	27	85.50	13	51	13	57.50	4.3
Richmond, [Moore] .....	68.22	79.13	68.37	71.91	26	e 91	27	83.00	13	51	12	55.50	4.3
ILLINOIS—													
Athens .....	69.36	82.16	67.53	73.02	26	96	29	82.67	12	50	12	55.00	4.6
Augusta .....	67.33	77.27	70.17	71.59	22	f 88	23	81.33	11	52	12	59.00	3.9
Aurora .....	67.90	79.83	64.63	70.79	30	93	23	g 81.33	11	45	11	50.67	4.6
Batavia, [Capon] .....	67.23	79.37	65.50	70.70	27	101	27	83.00	11	46	11	52.00	5.3
Batavia, [Mead] .....	66.86	77.76	64.46	69.69	27	e 101	23	89.00	11	44	11	52.00	5.3
Brighton .....	65.93	82.67	71.20	73.27	29	93	20	83.67	12	48	11	56.00	---
Edgington .....	65.57	79.79	69.97	71.78	30	94	27	e 83.00	1	50	12	57.67	5.4
Elgin .....	66.03	78.20	64.83	69.69	25	h 90	24	81.00	11	44	11	50.67	---
Jacksonville (i) .....	71.10	82.73	72.63	75.49	28	h 98	27	90.22	12	52	12	57.00	---
Manchester (a) .....	68.38	79.80	67.50	71.89	20	92	27	82.00	12	52	12	57.67	5.0
Marengo .....	72.13	81.27	65.40	72.93	27	e 96	23	h 85.33	11	j 46	11	54.00	5.4
Ottawa .....	67.86	78.42	68.00	71.43	27	93	25	82.00	11	51	11	55.00	4.8
Pekin .....	68.43	80.56	67.46	72.15	16	h 92	29	83.33	12	49	12	57.00	4.5
Peoria .....	71.60	84.90	72.30	76.27	26	98	27	87.75	11	j 57	12	60.50	3.9
Riley .....	67.72	78.11	64.46	70.10	29	92	29	82.33	11	46	11	51.33	4.0
South Pass .....	72.67	82.50	72.17	75.78	29	97	29	88.33	12	52	12	57.00	4.3
Upper Alton .....	70.45	77.66	69.57	72.56	28	h 88	29	81.33	2	k 56	12	57.67	3.7
Warsaw .....	71.53	81.33	66.80	73.22	28	93	28	84.67	12	55	12	60.00	4.3
Waynesville .....	63.63	80.00	73.00	72.21	27	l 93	27	83.67	12	m 48	12	52.67	5.1
West Salem .....	71.07	83.77	70.57	75.14	27	97	27	86.00	12	50	12	55.67	4.0
West Urbana .....	71.77	79.27	69.30	73.45	28	95	27	89.00	13	51	13	52.33	4.4
Wheaton .....	67.78	77.53	66.07	70.46	27	91	23	81.67	11	45	11	50.67	5.7
Winnebago .....	66.75	79.28	66.77	70.93	29	93	29	83.50	11	49	11	55.16	5.2
MISSOURI—													
St. Louis .....	74.10	81.90	73.60	76.53	27	95	27	88.50	12	50	12	57.00	4.6
WISCONSIN—													
Appleton .....	65.83	78.17	66.17	70.06	28	95	26	l 84.00	11	j 48	11	52.67	3.8
Bay City .....	57.87	68.43	56.33	60.88	17	96	23	77.33	11	42	3	46.00	4.6
Beloit .....	65.80	78.33	66.03	70.05	27	92	29	82.00	11	j 50	11	55.33	3.6
Green Bay .....	66.10	79.77	65.73	70.53	28	h 98	29	86.67	11	48	10	51.33	3.5
Janesville .....	66.43	80.33	67.13	71.30	28	95	29	84.67	11	50	11	55.33	5.0
Kenosha .....	65.73	71.81	64.41	67.32	25	e 85	30	80.50	11	48	11	49.83	3.4
Madison, [Sterling] .....	69.24	74.48	66.47	70.06	27	89	29	84.33	12	49	11	54.67	5.1
Manitowoc .....	64.37	72.17	60.97	65.84	29	87	29	77.67	12	47	11	53.00	5.5
Milwaukee, [Lapham] .....									5	39			---
Milwaukee, [Pomeroy] .....	63.23	71.60	60.80	65.21	29	89	29	78.67	10	40	10	44.00	6.9
Milwaukee, [Winkler] .....	65.73	74.43	61.53	67.23	23	91	23	n 80.00	12	46	10	49.00	3.9
New Danemora (o) .....	65.38	80.58	75.88	73.95	17	94.5	28	86.84	8	50	3	56.67	---
New London .....	61.80	79.40	65.16	68.79	28	95	29	87.67	12	45	12	53.67	4.1
Platteville .....	68.57	82.23	70.90	73.90	23	97	28	87.00	12	52	11	j 61.00	4.4
Waukesha .....	66.60	79.23	65.90	70.58	27	96	27	85.33	11	50	11	56.33	4.7

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 27th.

c Same temperature on the 13th and 14th.

d Observations taken at 6 a. m. and 1 p. m.

e Same temperature on the 30th.

f Same temperature on the 23d and 28th.

g Same temperature on the 29th and 30th.

h Same temperature on the 29th.

i Observations taken at morning, noon, and sunset.

j Same temperature on the 12th.

k Same temperature on the 11th.

l Same temperature on the 28th.

m Same temperature on the 13th.

n Same temperature on the 27th and 30th.

o Observations taken at 6 a. m., noon, and 6 p. m.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
IOWA—	°	°	°	°		°		°		°		°	
Bellevue.....	68.07	79.66	67.53	71.75	28	94	27	84.00	11	50	11	57.00	5.0
Border Plains.....	69.33	79.73	68.93	72.66	29	a 92	30	85.33	7	b 55	10	59.33	5.2
Dubuque.....	69.37	78.93	70.47	72.92	28	93	28	86.33	10	c 55	10	57.67	4.3
Fairfield.....	71.15	78.00	69.00	72.72	17	d 90	28	85.33	8	56	10	58.33	5.3
Fort Madison (·).....	69.56	80.76	72.20	74.17	28	f 95	29	87.33	12	54	10	60.00	3.7
Franklin.....	68.87	78.83	68.83	72.18	17	d 90	27	83.00	2	53	2	g 60.33	3.9
Iowa City.....	69.48	76.77	69.89	72.05	22	88	30	83.33	13	57	10	59.00	4.6
Muscatine.....	67.37	78.37	66.17	70.64	27	91	27	81.00	4	h 52	10	57.67	3.6
Pleasant Plain.....	71.40	82.30	68.47	74.06	17	i 94	22	84.00	8	k 55	10	57.00	4.5
Poultney.....	66.85	79.57	64.04	70.15	30	98	23	82.00	12	44	11	54.67	5.0
Sioux City.....	65.85	77.42	67.61	70.63	30	90	30	84.00	11	49	10	55.17	6.2
MINNESOTA—													
Burlington.....	47.50	64.80	54.30	55.53	27	82	27	67.33	11	35	3	45.67	---
Forest City.....	67.26	78.19	71.00	72.15	27	93	19	88.33	11	49	11	53.33	1.5
Hazlewood.....	66.00	70.00	66.33	67.44	23	92	30	84.67	10	44	10	51.67	4.0
Lapham.....	59.90	80.00	61.13	67.01	23	a 92	30	83.00	10	43	3	b 57.00	3.6
Princeton.....	70.63	82.96	67.62	73.74	17	102	17	89.67	7	48	3	55.33	4.3
Wabashaw.....	66.07	79.53	65.80	70.47	17	95	29	83.67	6	46	9	59.00	3.8
NEBRASKA—													
Bellevue.....	67.37	77.17	67.83	70.79	30	90	30	83.33	2	50	11	54.67	3.5
Brownville.....	70.57	82.23	70.00	74.27	23	a 97	30	86.00	11	50	11	54.67	3.5
Elkham (m).....	72.25	88.06	73.56	77.96	23	n 94	23	83.67	15	54	12	70.00	4.5
Omaha.....	69.60	81.93	73.87	75.13	22	99	22	86.67	18	50	10	57.33	3.6
KANSAS—													
Burlingame.....	67.36	80.60	68.86	72.27	16	94	16	a 81.33	5	49	4	57.33	4.8
Lawrence.....	70.27	80.93	72.50	74.57	30	94	30	87.33	11	o 55	11	58.33	4.2
Leavenworth City, [McCarty].....	72.40	82.20	70.13	74.91	23	a 94	30	88.67	4	54	4	57.33	5.2
Manhattan.....	72.53	85.13	71.50	76.39	22	98	30	87.33	5	52	11	59.33	4.4
Mapleton.....	72.43	84.73	71.50	76.22	30	97	29	89.67	11	55	3	59.33	4.7
Topeka.....	70.47	85.23	70.03	75.24	16	a 98	30	87.67	4	52	4	59.33	3.6
OREGON—													
Portland (p).....				66.77		101				42			---
MEXICO—													
Cordova (q).....	71.85	74.16	71.80	72.85	2	77.36			28	69.44			---
Minatitlan (r).....	75.73	84.89		80.31	18	s 90	19	83.50	4	t 74	26	75.50	---
Mirador (u).....	68.85	75.79	68.25	70.96				72.91				67.64	---
Vera Cruz (v).....	80.49		81.69	81.09									---
CALIFORNIA—													
Marysville.....	67.50	86.03	73.26	75.60	3	w 96	4	84.00	18	59	18	64.00	2.0
Sacramento.....	65.23	74.87	68.20	69.43	3	86	3	77.00	11	x 61	11	65.33	1.3
San Francisco.....	56.57	65.77	55.03	59.12	26	74	26	63.33	1	51	8	56.67	3.4
WEST INDIES—													
Nassau, Bahamas (y).....				85.25			30	88.50			14	82.00	---
CENTRAL AMERICA—													
Guatemala (z).....	59.80	71.42	62.42	67.76	?	82.6			?	57.4			---
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (aa).....	74.80	83.30	79.60	79.23	18	88	26	83.00	15	73	14	bb 77.33	5.7

a Same temperature on the 30th.

b Same temperature on the 9th and 10th.

c Same temperature on the 13th.

d Same temperature on the 28th and 29th.

e Observations taken at 6 a. m., noon, and 7 p. m.

f Same temperature on the 29th and 30th.

g Same temperature on the 9th.

h Same temperature on the 13th.

i Same temperature on the 22d and 27th.

j Same temperature on the 27th and 28th.

k Same temperature on the 10th and 13th.

l Same temperature on the 11th.

m For the last 18 days of the month.

n Same temperature on the 21st and 30th.

o Same temperature on the 14th.

p Observations taken at 6 a. m., 12 m., and 6 p. m.

q Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.  
Mean at 13 m., 73.42; at 6 p. m., 73.04.

r Observations taken at 7 a. m. and 3 p. m.

s Same temperature on the 19th.

t Same temperature on the 16th, 17th, 25th, 26th, and 28th.

u Observations taken at 7 a. m., 2 p. m., and 8 p. m.

v Observations taken at 6 a. m. to 8 a. m., and at 9 p. m. to 11 p. m.

w Same temperature on the 4th.

x Same temperature on the 15th, 18th, 28th, and 29th.

y Mean obtained from daily maximum and minimum.

z Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.  
Mean at 9 a. m., 69.98; mean at noon, 75.20.

aa Observations taken at 6 a. m., 2 p. m., and 6 p. m.

bb Same temperature on the 16th.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	MEAN.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp	Date.	Temp.	Date	Mean temp.	
BRITISH AMERICA—	°	□	°	□		□		°		□		□	
Hamilton (a) . . . . .	72.42		70.80	71.61	10	85	8	83.50	12	60	12	60.50	
Montreal . . . . .	64.70	72.56	65.43	67.56	7	85	7	77.67	12	54	12	59.60	5.8
Moose Factory (b) . . . . .				59.30									
Red River Settlement . . . . .	63.21	73.03	64.32	60.85	5	90	5	80.00	8	c 53		?	4.9
St. John's . . . . .	56.64	64.75	56.94	59.44	17	82	17	71.67	12	47	6	50.67	
St. Martin . . . . .	61.25	75.81	63.83	66.96	7	91	7	79.20	1	50	29	57.70	5.1
Stanbridge . . . . .	64.84	73.58	65.39	67.94	7	88	7	83.33	24	54	29	58.00	4.7
Toronto (d) . . . . .	63.32	73.55	65.23	67.37	7	83	8	75.78	13	57	12	58.25	5.0
Windsor . . . . .	59.60	70.17	60.80	63.52	7	87	14	77.30	26	50	5	53.60	5.9
MAINE—													
Cornish, [Guptill] . . . . .	65.16	73.16	64.84	67.72	8	88	8	79.33	12	e 52	12	53.33	6.1
Cornish, [West] . . . . .	62.35	72.74	62.90	65.90	8	86	8	76.67	1	f 52	24	52.67	5.5
Dexter . . . . .													6.1
Gardiner . . . . .	72.39	63.26	74.03	69.89	8	88	8	79.33	1	43	24	54.67	6.7
Perry . . . . .	58.07	67.53	58.13	61.24	7	88	7	75.33	26	51	24	54.17	5.6
Portland . . . . .	64.62	71.98	64.32	66.97	11	87	8	78.50	12	54	12	55.83	6.2
Steuben . . . . .	61.52	67.45	58.68	62.55	8	88	8	88.33	5	g 52	24	52.67	6.8
NEW HAMPSHIRE—													
Concord . . . . .	65.30	76.50	64.93	68.91	8	92	8	80.33	24	54	12	56.33	5.3
Shelburne . . . . .	64.20	81.29	63.55	69.68	8	96	8	84.00	12	e 54	12	56.67	6.3
Stratford . . . . .	61.97	72.87	59.87	64.90	8	90	8	77.33	24	50	24	54.33	5.8
West Enfield . . . . .	62.35	74.65	62.45	66.48	10	90	8	80.00	1	49	12	h 56.33	5.4
VERMONT—													
Brandon . . . . .	69.08	75.10	63.93	69.37	8	90	8	78.00	1	i 51	25	55.33	4.8
Burlington . . . . .	63.63	70.79	64.29	66.24	10	84	10	76.00	24	i 54	29	56.67	5.6
Craftsbury . . . . .	59.90	71.06	62.71	64.56	8	j 83	7	75.00	24	i 50	29	55.00	5.3
Norwich . . . . .	62.64	76.45	63.65	67.58	10	94	10	82.00	1	53	29	57.33	
Rupert . . . . .	67.94	81.42	73.94	74.43	10	98	10	88.67	30	58	30	60.67	5.8
St. Johnsbury . . . . .	58.90	73.26	61.57	64.58	8	86	10	75.33	1	k 50	29	54.33	5.3
MASSACHUSETTS—													
Amherst . . . . .	65.51	77.85	68.31	70.56	11	92	11	80.60	24	58	30	59.70	6.2
Bridgewater (l) . . . . .	65.58	75.42	67.55	69.52	11	89	11	81.33	25	55	25	58.33	5.6
Cambridge . . . . .	64.87	77.10	67.16	69.71	8	91	10	80.00	1	e 56	24	58.33	5.7
Florida . . . . .													5.9
Lawrence . . . . .	62.61	76.34	66.84	68.60	11	95	11	82.33	1	53	24	58.00	5.6
Mendon . . . . .	65.77	76.81	66.68	69.82	11	92	11	82.00	12	m 57	12	57.67	5.0
Nantucket . . . . .	68.06	73.74	65.03	68.94	9	n 80	11	74.67	25	58	25	59.50	4.7
New Bedford . . . . .	65.71	74.48	65.74	68.64	11	82	11	76.30	25	56	1	61.30	5.9
Newburyport (o) . . . . .	64.72	73.43	64.00	67.38	11	91		?	29	55		?	?
Richmond . . . . .	62.55	82.45	70.39	71.80	8	p 93	11	81.67	25	41	25	56.00	4.3
Westfield . . . . .	62.23	77.06	67.23	68.84	11	90	11	79.33	26	52	30	59.67	5.1
Williamstown . . . . .	62.87	72.42	65.02	66.77	10	86	10	81.00	2	53	1	53.00	5.6
Worcester . . . . .	65.98	77.17	67.03	70.06	11	92	11	81.33	24	55	25	58.50	4.9
RHODE ISLAND—													
Providence (q) . . . . .	65.30	77.50	66.70	69.83	8	r 88	10	81.33	25	s 57	25	60.00	5.5
CONNECTICUT—													
Columbia . . . . .	64.65	76.35	66.19	69.06	11	88	4	p 78.67	1	52	1	59.00	4.9
New London . . . . .	67.48	78.97	68.74	71.73	11	89	11	79.67	26	56	25	62.33	4.8
Pomfret . . . . .	63.79	71.78	65.09	66.89	8	82	5	74.67	25	53	25	57.30	5.9
Saybrook . . . . .	68.07	75.90	67.60	70.52	28	86	28	77.67	24	59	25	62.33	5.0
Wallingford . . . . .	64.08	77.60	66.94	69.54	11	89	11	79.50	2	i 55	25	60.17	4.3
NEW YORK—													
Bellport . . . . .	69.87	75.68	68.10	71.22	4	t 80	9	76.33	24	60	25	64.00	4.0
Buffalo (u) . . . . .	69.19	74.03	71.20	71.47	9	85	9	80.33	12	58	12	59.00	3.5

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at sunrise, 2 and 10 p. m.

c Same temperature on the 16th.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e Same temperature on the 24th.

f Same temperature on the 11th and 24th.

g Same temperature on the 24th, 25th, and 27th.

h Same temperature on the 30th.

i Same temperature on the 25th.

j Same temperature on the 9th.

k Same temperature on the 19th and 29th.

l Observations taken at 7 a. m., 2 p. m., and 7 p. m.

m Same temperature on the 25th and 26th.

n Same temperature on the 11th and 12th.

o Observations taken at 6 a. m., 1 p. m., and 10 p. m.

p Same temperature on the 11th.

q Incomplete.

r Same temperature on the 10th.

s Same temperature on the 26th.

t Same temperature on the 15th and 26th.

u Observations taken at 8 a. m., 2 p. m., and 9 p. m.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Clinton	69.45	81.42	67.32	72.73	10	96	10	86.67	1	53	1	61.33	5.1
Fishkill Landing	68.45	80.55	72.55	73.85	11	93	10	84.67	25	59	25	67.00	3.4
Flatbush	69.65	79.16	68.92	72.58	12	91	12	82.80	25	60	25	63.60	4.2
Fort Edward	66.97	76.47	68.79	70.74	9	90	8	79.33	22	57	29	60.80	4.7
Houseville (b)	67.10	78.00	64.62	69.91	10	92	10	79.33	23	50	24	58.00	5.2
Nichols	67.71	84.06	64.71	72.16	3	c 94	3	82.67	24	53	24	59.33	5.0
Rochester	67.58	78.03	69.77	71.79	7	d 90	10	83.33	12	58	12	58.67	3.6
Sag Harbor	68.81	80.87	68.29	72.66	11	90	11	81.33	25	59	25	63.67	4.9
Waterford	68.13	79.24	68.87	72.08	8	91	10	83.33	23	57	30	61.33	4.7
NEW JERSEY—													
Bloomfield	68.47	82.15	69.66	73.93	9	92	9	83.50	24	59	25	65.17	3.1
Freehold	70.99	81.02	71.01	74.34	11	92	11	83.92	25	60	25	64.67	---
Lambertville	70.46	87.11	70.68	76.08	11	79	---	---	25	48	---	---	---
Newark	---	---	---	73.40	11	91	11	84.00	25	57	25	64.62	---
PENNSYLVANIA—													
Bedford	70.70	83.70	70.70	75.03	3	95	3	85.67	23	60	23	e 68.00	4.0
Berwick	70.81	83.03	71.90	75.25	11	f 92	10	84.00	15	62	24	64.67	2.9
Cannonsburg	68.39	81.93	72.45	74.26	1	92	1	81.67	25	60	13	66.00	4.3
Chambersburg	77.00	85.77	74.48	79.08	11	97	29	87.00	14	g 66	20	68.00	3.7
Easton (h)	68.63	82.61	70.96	74.07	11	f 94	---	?	26	58	24	67.33	4.0
Fleming	69.50	85.70	69.30	74.83	10	i 92	3	81.33	25	56	24	65.00	3.8
Gettysburg	70.26	84.65	73.13	76.01	29	95	11	85.00	25	58	20	68.00	3.9
Harrisburg, [Heisely]	75.37	86.10	80.48	80.65	10	f 95	11	89.00	25	64	20	72.00	3.8
Harrisburg, [Hickok]	70.39	83.31	74.06	75.92	11	f 93	11	85.67	25	60	20	67.33	4.6
Indiana	72.68	84.00	72.74	76.47	1	j 92	1	82.33	13	62	13	65.00	3.8
Lewisburg	70.81	81.67	70.96	74.48	29	93	10	84.00	15	61	20	66.70	5.1
Meadville	70.39	84.00	68.65	74.35	1	97	29	83.33	12	k 58	12	60.00	---
Morrisville	69.84	83.13	72.48	75.15	11	94	11	86.00	25	60	25	66.00	2.3
Mount Joy	77.45	90.71	76.18	81.45	11	103	11	92.67	14	e 67	20	72.00	3.5
Murrysville	70.94	83.42	68.74	74.37	1	91	10	80.67	24	61	13	67.00	3.8
Norristown	69.55	80.85	71.79	74.06	29	91	10	82.30	26	61	20	66.30	3.9
North Whitehall (l)	68.06	82.13	76.39	75.53	10	m 88	3	n 81.67	25	54	25	66.67	4.0
Paradise	---	---	---	82.00	---	---	---	---	---	---	---	---	---
Philadelphia	75.13	85.31	77.23	79.22	11	95	11	89.20	26	67	25	71.20	4.2
Pittsburg, [Martin]	73.35	82.87	73.90	76.71	3	f 91	2	84.67	27	64	24	70.33	4.4
Pittsburg, [Wilson]	72.06	85.74	74.16	77.32	1	95	21	84.67	13	62	13	68.00	---
Pocopson	73.39	87.19	73.10	77.89	3	o 94	11	86.00	25	64	24	70.33	4.1
Pottsville	76.73	83.31	71.00	77.01	11	93	---	---	24	61	24	68.33	---
Shamokin (p)	61.97	81.35	69.68	71.00	3	96	3	84.00	25	36	25	60.00	4.4
Somerset	67.19	82.78	68.06	72.68	2	q 91	2	r 79.67	8	58	13	65.33	4.9
Tarentum	70.97	83.42	68.68	74.36	3	91	3	84.00	24	60	13	66.33	3.8
Westtown	70.58	82.50	72.10	75.06	29	93	11	84.87	26	62	25	66.67	4.2
DELAWARE—													
Georgetown (s)	76.84	85.42	78.87	80.38	29	98	10	90.00	14	t 70	14	71.00	---
MARYLAND—													
Annapolis	73.90	84.30	79.70	79.30	29	97	29	87.33	7	65	25	72.50	3.0
Baltimore	73.56	82.97	77.20	77.91	29	94	11	86.67	7	u 66	20	71.33	4.4
Bladensburg (v)	72.50	88.08	71.53	77.37	19	98	3	c 84.67	25	62	---	?	4.3
Chestertown	75.41	84.90	74.88	78.40	29	95	3	88.33	25	64	25	69.10	3.6
Frederick	74.03	82.35	74.78	77.05	3	92	3	87.50	24	65	20	68.77	3.9
Leitersburg	71.29	85.03	72.06	76.13	29	96	11	85.00	23	60	20	w 68.00	3.3
Sykesville	69.87	79.45	72.61	73.98	29	89	3	j 82.00	25	58	25	65.33	4.0
DISTRICT OF COLUMBIA—													
Washington	74.32	83.43	77.04	78.26	3	93	10	85.67	25	65	15	71.67	3.6

a Same temperature on the 9th.

b For the last 22 days of the month.

c Same temperature on the 10th.

d Same temperature on the 8th and 10th.

e Same temperature on the 24th.

f Same temperature on the 29th.

g Same temperature on the 20th and 24th.

h Observations after the 10th taken at 7 a. m., 2 p. m., and 10 p. m.

i Same temperature on the 11th and 18th.

j Same temperature on the 11th.

k Same temperature on the 12th.

l Observations taken at sunrise, noon, and sunset.

m Same temperature on the 11th, 29th, and 30th.

n Same temperature on the 11th and 30th.

o Same temperature on the 10th, 29th, and 30th.

p Observations taken at night. Mean, 55.03.

q Same temperature on the 17th.

r Same temperature on the 3d.

s Observations taken at 8 a. m., 1 p. m., and 6 p. m.

t Same temperature on the 25th and 26th.

u Same temperature on the 8th.

v Incomplete.

w Same temperature on the 23d.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
VIRGINIA—	°	°	°	°		°		°		°			
Buffalo .....	77 74	89. 94	77. 78	81. 82	2	a 100	6	92. 67	13	b 65	13	68. 67	3. 5
Crichton's Store (c) .....	76. 17	86. 77	82. 44	81. 79	1	d 97	—	?	26	67	—	?	4. 6
Hartwood .....	70. 17	83. 10	71. 33	74. 87	30	97	39	83. 33	1	e 60	1	65. 67	—
Kanawha .....	72. 11	84. 35	73. 50	76. 65	3	91	2	d 81. 33	8	f 65	23	69. 33	4. 1
Lewinsville .....	72. 68	85. 29	74. 97	77. 65	11	d 95	11	85. 60	26	65	19	71. 33	4. 2
Lewisburg .....	67. 29	83. 45	69. 55	73. 43	28	94	28	80. 67	7	54	14	66. 60	3. 2
Meadow Dale .....	62. 26	76. 03	68. 10	68. 80	3	g 83	4	77. 00	7	h 54	15	62. 00	—
Montross .....	74. 06	85. 26	74. 26	77. 86	3	97	3	85. 67	6	64	5	70. 00	4. 3
Poplar Grove .....	71. 65	86. 81	70. 15	76. 20	3	d 94	3	80. 67	13	j 65	23	69. 00	4. 4
Portsmouth .....	77. 45	87. 77	73. 90	79. 71	3	100	3	88. 33	26	64	26	68. 33	2. 7
Rose Hill (k) .....	73. 27	80. 50	76. 54	76. 77	3	90	—	?	7	65	—	?	5. 2
Rougemont .....	75. 97	87. 06	76. 84	79. 96	3	95	3	85. 00	6	68	19	73. 00	4. 9
Ruthven (k) .....	74. 95	86. 79	73. 05	78. 23	3	94	—	?	6	66	—	?	2. 5
Smithfield .....	73. 88	82. 15	76. 70	77. 58	30	90	4	84. 30	26	m 66	26	71. 10	5. 0
Wirt Court-House .....	73. 31	84. 52	68. 26	75. 36	3	n 92	28	83. 00	5	64	1	o 70. 00	3. 7
NORTH CAROLINA—													
Chapel Hill .....	74. 58	88. 29	74. 29	79. 05	2	97	2	85. 33	24	f 66	7	72. 00	4. 4
Davidson College .....	72. 50	83. 97	76. 25	77. 57	3	p 90	4	82. 67	26	65	7	72. 00	3. 7
Gaston .....	75. 19	88. 06	73. 90	79. 05	1	g 100	4	90. 67	24	66	7	72. 00	—
Murfreesborough .....	76. 00	85. 52	76. 65	79. 37	30	95	4	87. 00	7	q 68	20	74. 67	3. 7
SOUTH CAROLINA—													
Aiken .....	74. 00	86. 86	74. 71	78. 52	4	r 96	29	84. 00	27	66	7	71. 00	5. 4
All Saints .....	77. 61	83. 19	80. 03	80. 28	22	p 89	3	84. 67	7	69	7	73. 00	4. 4
Charleston, [Dawson] .....	77. 74	85. 45	80. 41	81. 20	—	94	—	—	—	70	—	—	—
Charleston, [Johnson] .....	77. 74	85. 45	80. 42	81. 20	4	94	4	87. 33	7	70	7	72. 00	—
Columbia .....	74. 55	86. 16	79. 03	79. 91	4	95	4	86. 67	26	m 68	6	73. 67	3. 4
St. John's .....	75. 00	89. 71	73. 45	79. 39	22	105	25	88. 00	25	67	7	69. 33	4. 6
GEORGIA—													
Athens .....	70. 48	80. 41	72. 03	74. 31	29	88	21	79. 50	8	64	8	66. 63	4. 5
Savannah .....	77. 20	87. 70	79. 60	81. 50	4	97	3	86. 97	7	70	7	71. 13	5. 2
Sparta .....	72. 48	88. 26	76. 33	79. 02	4	s 94	21	83. 67	11	62	8	73. 67	4. 3
Whitemarsh Island .....	78. 16	84. 33	78. 35	80. 28	3	94	3	86. 00	7	69	7	70. 00	4. 8
FLORIDA—													
Alachua County (t) .....	73. 93	84. 83	77. 40	78. 72	1	93	4	84. 33	2	70	5	74. 00	3. 6
Alligator .....	77. 29	87. 52	80. 35	81. 72	3	g 97	4	86. 33	7	72	11	75. 00	5. 0
Atsena .....	80. 29	83. 84	81. 52	81. 88	2	u 88	4	86. 67	7	v 76	26	77. 33	4. 9
Belair .....	77. 45	87. 32	86. 58	83. 78	4	96	4	88. 33	7	b 74	12	77. 00	4. 5
Jacksonville .....	79. 60	86. 55	80. 76	82. 30	4	96	3	88. 33	7	74	7	75. 67	4. 5
Micanopy .....	75. 17	88. 16	79. 41	80. 91	3	g 97	4	88. 67	5	b 74	7	76. 67	4. 1
St. Augustine .....	81. 03	86. 10	80. 11	82. 41	4	w 94	4	88. 00	12	m 75	27	77. 33	4. 0
Salt Ponds .....	81. 58	87. 97	—	84. 77	3	x 90	10	86. 50	17	77	17	y 79. 00	3. 6
ALABAMA—													
Carlowville .....	75. 35	91. 84	77. 90	81. 70	20	96	5	87. 00	1	72	3	76. 67	2. 3
Greene Springs .....	76. 07	86. 35	75. 55	79. 32	18	93	18	83. 50	12	69	11	p 73. 67	3. 3
Greensborough .....	75. 27	86. 63	77. 44	79. 78	18	93	18	83. 50	31	71	11	74. 33	3. 8
Selma .....	77. 03	87. 84	78. 32	81. 06	18	95	18	85. 67	14	z 72	12	76. 00	5. 3
MISSISSIPPI—													
Columbus .....	75. 51	88. 36	77. 42	80. 43	18	94	19	aa 84. 33	5	71	11	73. 43	3. 9
Natchez .....	77. 74	86. 71	81. 94	82. 13	18	bb 92	18	86. 67	3	cc 74	3	77. 33	3. 2
Paulding .....	78. 30	92. 14	82. 19	84. 21	18	98	—	?	10	72	—	?	3. 9

a Same temperature on the 6th.

b Same temperature on the 14th.

c Observations taken at 6½ a. m., noon, and 6 p. m.

d Same temperature on the 29th.

e Same temperature on the 3d and 6th.

f Same temperature on the 25th.

g Same temperature on the 4th.

h Same temperature on the 8th and 15th.

i Same temperature on the 9th and 29th.

j Same temperature on the 14th and 15th.

k Incomplete.

l Same temperature on the 11th and 30th.

m Same temperature on the 27th.

n Same temperature on the 11th, 28th, and 29th.

o Same temperature on the 13th.

p Same temperature on the 30th.

q Same temperature on the 26th.

r Same temperature on the 19th.

s Same temperature on the 22d.

t Observations taken at 5 a. m., 2 p. m., and 9 p. m.

u Same temperature on the 3d and 4th.

v Same temperature on the 26th and 27th.

w Same temperature on the 31st.

x Same temperature on the 4th, 5th, 10th, 25th, 28th, 29th, and 30th.

y Same temperature on the 19th.

z Same temperature on the 15th and 16th.

aa Same temperature on the 20th.

bb Same temperature on the 24th.

cc Same temperature on the 5th, 13th, and 15th.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
LOUISIANA—	°	°	°	°		°		°		°			
Black River .....	79.68	88.68	80.65	83.00	24	94	23	a 86.67	14	74	4	78.33	3.8
New Orleans (b) .....	85.80	87.40	88.61	87.27	31	94	23	91.67	8	78	8	79.67	---
TEXAS—													
Austin, [Palm] .....	80.23	93.39	81.81	85.14	23	98	23	89.00	12	73	4	79.67	2.9
Austin, [Van Nostrand] .....	80.76	91.73	82.12	84.87	24	96	23	88.25	12	72	12	78.50	3.2
Goliad .....	78.43	90.96	79.86	83.08	24	95	26	87.33	26	75	4	80.00	2.9
Larissa .....	78.77	91.51	80.39	83.56	24	a 97	19	87.67	4	72	4	70.00	2.8
New Braunfels .....	74.93	95.27	80.37	83.52	26	101	26	86.33	12	c 71	12	76.17	1.6
Union Hill .....	68.45	90.84	68.90	76.06	20	99	20	81.00	14	d 65	3	72.33	3.9
TENNESSEE—													
Glenwood .....	71.73	82.42	73.87	76.01	3	89	3	80.93	13	64	13	70.63	4.7
Memphis .....	79.61	87.58	79.06	82.08	21	e 94	31	86.33	12	72	12	75.00	3.4
KENTUCKY—													
Bardstown .....	75.62	86.37	75.66	79.22	3	94	3	86.33	25	64	11	67.83	3.8
Dunville .....	75.06	85.94	74.77	78.59	1	f 90	3	84.00	13	66	12	70.67	2.6
Louisville (g) .....	73.71	85.52	79.35	79.53	3	94	3	85.67	12	h 67	23	70.67	3.8
Paris .....	71.58	83.73	73.03	76.11	3	91	3	84.33	12	62	12	65.67	4.3
Springdale (i) .....	66.53	88.53	78.68	77.91	7	97	3	83.83	25	54	23	69.33	3.6
Ohio—													
Bellefontaine .....	72.18	81.99	69.33	74.50	6	j 91	2	82.33	12	58	12	61.00	4.9
Bowling Green .....	71.25	81.85	69.92	74.34	28	92	9	81.70	24	58	12	63.90	3.9
Cincinnati, [Harper] .....	77.97	85.19	81.52	81.66	2	k 93	3	86.67	13	l 70	13	72.33	4.4
Cleveland .....	72.16	78.47	70.56	73.73	8	92	10	82.00	12	61	12	61.67	5.0
Cleveland, (near) .....				77.00									
Collingwood .....	68.19	78.94	71.65	72.93	1	m 88	1	80.67	6	50	7	60.67	---
Dayton .....	69.35	85.55	71.82	75.87	1	95	3	81.66	13	60	12	64.02	5.1
Edinburgh .....	71.19	81.00	69.71	73.97	2	90	2	82.00	25	58	11	65.33	4.3
Hillsborough .....	69.71	80.81	74.20	74.91	1	90	3	80.30	12	60	12	63.80	3.7
Hiram .....	69.96	78.71	69.26	72.64	1	89	1	79.67	12	n 59	12	60.33	5.2
Jackson, Monroe county .....	74.70	86.58	70.88	77.39	2	95	3	83.17	23	63	12	68.33	4.1
Jefferson .....	77.48	85.35	83.35	82.06	2	o 88	6	j 85.33	23	p 74	17	79.33	3.7
Lancaster .....	72.99	84.29	70.86	76.05	28	93	10	82.37	12	61	12	63.70	3.4
Madison, [Atkins] .....	71.42	76.96	67.52	71.97	10	88	---	?	23	54	---	?	4.7
Madison, [King] .....	72.03	78.42	66.26	72.24	10	q 90	10	80.00	24	55	12	59.67	4.2
Medina .....	71.38	80.14	68.95	73.49	9	90	9	84.33	24	59	12	61.56	4.4
New Lisbon .....	75.42	92.35	75.45	81.07	1	105	1	89.33	25	64	12	68.33	2.8
Northwood (r) .....	73.59	85.21	76.40	78.40	3	s 92	29	84.00	24	64	24	70.00	5.6
Ripley (r) .....	70.46	84.10	75.50	76.69	8	95	28	82.33	24	h 63	12	67.67	5.6
Savannah .....	75.26	86.65	70.84	77.58	6	s 97	2	85.67	24	54	12	65.00	5.5
Urbana .....	71.26	84.42	70.42	75.37	3	t 90	3	81.00	25	59	12	64.67	4.6
Welchfield .....	73.83	82.87	68.45	75.05	1	101	1	86.67	12	a 59	12	61.00	3.8
Westerville (u) .....	73.02	89.02	74.07	78.70	3	91	8	86.33	24	62	24	67.33	4.3
Windham .....	67.10	80.19	69.42	72.24	1	v 89	29	79.67	24	58	12	63.00	---
MICHIGAN—													
Battle Creek .....	69.03	82.61	70.63	74.11	8	96	9	84.00	12	57	10	61.00	3.2
Cooper .....	78.13	86.45	77.61	80.73	1	w 98	2	89.00	12	x 56	12	58.00	0.5
Detroit .....	72.29	86.29	72.12	76.90	9	98	9	88.33	24	56	24	66.33	4.6
Forrestville (y) .....	65.54	72.97	69.76	70.07	26	88	26	80.00	19	aa 56	11	59.25	4.8
Grand Rapids, [Streng] .....	67.22	84.42	69.00	73.55	6	93	2	80.33	11	58	11	62.67	4.6
Marquette .....	60.09	71.95	58.35	63.46	6	92	6	77.97	4	bb 44	8	48.20	5.7
Monroe .....													3.6

a Same temperature on the 24th.

b Observations taken at 9 a. m., noon, and 3 p. m.

c Same temperature on the 19th.

d Same temperature on the 27th.

e Same temperature on the 28th and 31st.

f Same temperature on the 3d, 17th, and 29th.

g Observations taken at 7 a. m., 3 p. m., and 7 p. m.

h Same temperature on the 25th.

i Observations taken at 5 a. m., 2 p. m., and 7 p. m.

j Same temperature on the 7th and 8th.

k Same temperature on the 3d.

l Same temperature on the 14th.

m Same temperature on the 3d, 8th, and 9th.

n Same temperature on the 23d and 24th.

o Same temperature on the 3d, 5th, 6th, 7th, and 8th.

p Same temperature on the 25th and 26th.

q Same temperature on the 8th.

r Incomplete.

s Same temperature on the 28th.

t Same temperature on the 10th, 28th, and 29th.

u Observations interrupted from the 10th to the 15th, inclusive.

v Same temperature on the 3d and 29th.

w Same temperature on the 2d and 3d.

x Same temperature on the 13th.

y Observations taken at 6 a. m., 9 a. m., 3 p. m. and 6 p. m.; mean at 9 a. m., 72.0.

z Same temperature on the 9th.

aa Same temperature on the 25th.

bb Same temperature on the 11th.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
New Buffalo (a).....	73.61	79.35	66.07	73.01	■	92	2	83.67	13	b 54	13	64.00	6.8
Port Huron.....	68.89	80.00	65.17	71.35	2	92	7	80.33	19	c 55	23	64.00	4.6
INDIANA—													
Cannelton.....	74.26	85.09	74.52	77.96	8	90	3	83.00	26	65	13	70.60	3.4
Evansville.....	77.89	84.74	80.17	80.93	■	90	8	85.67	13	d 71	12	72.42	4.6
Logansport.....	70.90	86.97	74.68	77.52	9	96	9	84.67	14	59	12	65.33	4.7
Madison.....	73.03	83.32	75.79	77.38	7	e 90	3	83.00	24	64	23	69.00	3.0
Michigan City.....	69.92	78.48	69.92	72.77	28	93	■	82.50	12	f 58	12	61.16	5.1
New Harmony.....	78.13	85.94	76.87	80.31	2	g 93	2	85.67	12	68	12	71.00	4.2
Richmond.....	70.80	82.21	71.03	74.68	7	h 89	7	81.00	12	58	12	64.50	4.5
ILLINOIS—													
Athens.....	72.64	85.93	73.06	77.21	8	i 95	31	84.33	12	60	12	65.67	4.9
Augusta.....	70.23	80.74	73.23	74.73	1	91	8	e 80.00	12	61	12	64.33	4.6
Aurora.....	69.07	81.16	67.03	72.42	8	e 90	2	79.67	4	58	11	64.00	5.4
Batavia.....	69.19	84.13	67.22	73.51	1	j 97	9	86.00	23	53	12	63.33	6.3
Batavia, [Lapon].....	69.48	80.71	68.13	72.77	5	k 92	28	80.67	23	56	11	64.00	6.2
Brighton.....	70.90	88.58	80.39	79.96	28	i 94	28	86.00	24	59	11	70.33	4.3
Elgin.....	64.39	81.98	71.10	73.82	30	93	2	79.33	5	58	12	64.33	7.0
Elgin.....	68.32	78.77	67.13	71.41	8	90	2	77.33	23	57	12	63.00	6.1
Jacksonville (m).....	72.84	88.00	75.01	78.61	1	n 96	27	84.22	13	62	12	68.11	-----
Manchester (u).....	72.26	92.97	72.81	78.68	31	92	8	82.67	12	60	12	66.00	4.6
Marengo.....	73.42	80.52	68.06	74.00	8	96	8	84.67	23	58	11	64.67	6.2
Ottawa.....	68.74	79.93	70.46	73.04	28	91	28	81.33	4	p 60	19	d 67.33	6.4
Pekin.....	71.90	83.65	71.39	75.65	6	94	8	82.33	24	62	12	64.33	5.8
Peoria.....	73.20	86.47	74.33	78.00	8	q 96	8	86.00	24	62	12	66.50	5.3
Riley.....	68.19	79.29	65.77	71.08	8	92	2	77.67	25	54	11	62.33	4.6
Upper Alton.....	73.21	84.03	74.90	77.38	20	89	3	84.33	24	60	12	67.33	2.1
Warsaw.....	71.81	83.55	70.58	75.31	30	94	28	83.67	12	56	12	64.00	6.0
Waynesville.....	67.47	83.77	75.38	75.54	■	93	21	81.00	24	54	12	65.33	5.6
West Salem.....	74.77	89.48	75.65	79.97	9	96	3	85.33	13	65	12	71.33	3.9
West Urbana.....	75.16	85.19	74.06	78.14	8	96	8	87.00	24	61	11	67.00	5.1
Wheaton.....	69.00	79.33	69.50	72.61	8	91	30	82.16	23	56	12	61.76	5.8
Winnebago.....	68.97	80.92	68.65	72.85	1	91	28	79.33	5	59	11	64.50	6.3
MISSOURI—													
St. Louis.....	78.50	88.70	79.30	82.17	9	■	2	90.50	24	■	12	71.33	3.6
WISCONSIN—													
Appleton.....	66.84	79.79	67.48	71.37	1	g 89	1	80.67	11	54	11	60.00	3.4
Bay City.....	60.87	69.03	60.84	63.58	6	■	6	84.33	8	r 50	8	q 51.33	4.1
Beloit.....	70.61	80.67	67.68	72.95	28	91	21	c 79.67	12	f 60	12	64.00	4.3
Green Bay.....	67.35	77.71	68.94	71.33	1	98	1	83.33	12	57	11	61.33	3.9
Kenosha.....	68.79	75.55	67.77	70.70	30	85	28	78.50	12	57	4	62.67	3.3
Madison, [Sterling] (s).....	71.36	77.54	69.50	72.80	7	85	7	80.33	11	60	11	62.33	6.4
Manitowoc.....	69.10	75.06	64.71	69.62	2	t 84	2	78.00	12	54	12	60.33	5.8
Milwaukee, [Lapham].....									9	p 49			
Milwaukee, [Pomeroy].....	68.39	75.61	65.19	69.73	29	88	1	76.00	4	u 56	4	60.67	6.7
Milwaukee, [Winkler].....	68.26	79.35	65.16	70.92	15	89	■	78.83	4	u 58	12	62.67	3.8
New Danemora (v).....	65.27	75.54	72.66	71.16	7	85½	7	78.66	11	55½	11	59.44	-----
New London.....	62.03	76.77	66.19	68.33	■	89	8	75.67	13	50	13	60.00	4.3
Platteville.....	70.51	85.84	73.12	76.49	1	96	1	84.67	13	62	11	67.33	6.0
Waukesha.....	69.39	81.97	68.06	73.14	1	92	2	g 80.00	12	58	12	65.33	4.3
IOWA—													
Bellevue.....	69.42	81.29	69.68	73.46	21	92	6	79.57	13	61	11	67.33	6.7
Border Plains.....	71.65	80.87	70.65	74.39	7	l 92	30	84.00	11	61	11	67.00	6.5

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Same temperature on the 23d.

c Same temperature on the 24d.

d Same temperature on the 25th.

e Same temperature on the 21st.

f Same temperature on the 13th.

g Same temperature on the 7th.

h Same temperature on the 10th.

i Same temperature on the 31st.

j Same temperature on the 6th, 7th, and 8th.

k Same temperature on the 28th.

l Same temperature on the 30th.

m Observations taken at morning, 1 p. m., and sunset.

n Same temperature on the 14th and 27th.

o Same temperature on the 12th.

p Same temperature on the 24th.

q Same temperature on the 9th.

r Same temperature on the 9th, 11th, and 12th.

s Observations interrupted in the latter part of the month.

t Same temperature on the 15th and 30th.

u Same temperature on the 11th and 12th.

v Observations taken at 6 a. m., noon, and 6 p. m.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	W'n temp	Date.	Temp.	Date.	Mean temp	
Iowa—Continued.	°	°	°	°		■		■		□		°	
Dubuque	69.94	79.26	71.23	73.48	6	90	6	80.67	11	61	11	63.33	5.3
Fairfield	73.55	81.37	72.71	75.88	31	92	6	84.33	12	60	11	66.67	6.1
Fort Madison (z)	72.13	82.13	74.35	76.20	1	94	1	84.00	11	b 64	11	66.00	5.4
Franklin	68.39	79.00	69.65	72.35	8	88	1	78.33	11	58	11	62.00	5.5
Iowa City	71.68	80.53	71.05	74.42	6	92	6	83.00	14	63	11	b 66.50	6.2
Muscatine	67.55	80.45	69.71	72.57	7	c 89	7	80.33	13	52	12	61.67	6.1
Pleasant Plain	72.93	85.29	71.16	76.46	9	96	22	84.67	13	60	13	66.67	5.6
Poultney	68.92	79.70	66.17	71.60	1	93	1	82.33	13	55	11	62.00	6.7
Sioux City	68.92	79.61	69.35	72.63	19	90	30	81.50	12	d 59	---	?	5.9
MINNESOTA—													
Burlington	53.70	67.10	60.26	60.35	6	95	6	77.33	11	d 46	9	49.00	---
Forest City	66.97	76.58	66.58	70.04	20	86	6	78.00	8	52	11	56.33	2.3
Hazlewood	67.93	77.61	68.13	71.32	6	88	6	80.00	8	57	11	63.00	4.6
Lapham (e)	65.61	77.40	66.57	69.86	19	98	21	86.00	7	f 50	9	57.33	5.4
Wabashaw	68.26	80.19	68.03	72.16	7	93	17	78.67	12	56	11	59.33	4.5
NEBRASKA—													
Bellevue	71.23	79.65	71.87	74.25	30	g 88	7	c 81.00	26	62	26	63.37	4.3
Brownville	76.32	87.74	74.61	79.56	19	98	19	87.33	3	65	26	67.67	4.6
Elkham	71.93	85.55	72.23	76.57	14	98	9	85.00	10	h 63	26	67.67	5.5
Omaha	73.35	84.67	72.03	76.68	14	94	7	84.67	26	63	26	67.33	4.9
KANSAS—													
Burlingame	73.06	85.19	73.00	77.08	20	95	20	82.67	12	66	11	71.67	3.8
Lawrence	76.32	88.58	77.45	80.78	20	96	20	87.00	11	i 69	11	72.33	3.6
Leavenworth City, [McCarty]	77.45	87.45	75.39	80.10	19	96	7	88.33	9	66	10	72.00	5.1
Manhattan	78.94	91.23	76.52	82.23	25	100	19	90.33	4	j 63	10	72.67	4.4
Mapleton	79.29	92.96	76.54	82.93	18	102	19	89.33	12	k 69	10	74.33	2.6
MEXICO—													
Cordova (l)	70.61	73.38	71.06	71.91	26	78.44	---	---	12	68	---	---	---
Minatitlan (m)	74.79	83.00	---	78.59	9	86	10	80.50	7	71	1	n 76.50	---
Mirador (o)	66.74	75.58	68.33	70.22	---	---	---	73.58	---	---	---	66.67	---
Vera Cruz (p)	80.08	---	80.92	80.50	---	---	---	---	---	---	---	---	---
CALIFORNIA—													
Marysville	68.77	89.09	76.45	78.10	10	103	10	90.67	28	q 60	28	68.33	0.6
Sacramento	65.97	77.35	69.39	70.90	11	97	11	85.67	24	q 59	29	62.67	0.4
San Francisco	56.65	66.52	54.48	59.22	1	82	1	67.00	9	52	26	56.00	3.8
WEST INDIES—													
Nassau, Bahamas (r)	---	---	---	88.50	---	---	29	c 90.00	---	---	17	86.00	---
CENTRAL AMERICA—													
Guatemala (s)	57.74	71.60	61.70	66.27	?	79.3	---	---	?	51.1	---	---	---
SOUTH AMERICA—													
Caracas, Venezuela	69.00	79.30	71.70	73.33	6	t 82	24	75.67	15	65	11	70.00	6.3
Catharina Sophia, Surinam (u)	74.39	85.72	80.07	80.06	22	91	22	82.00	9	72	7	76.33	4.7

a Observations taken at 6 a. m., noon, and 7 p. m.

b Same temperature on the 12th.

c Same temperature on the 30th.

d Same temperature on the 13th.

e For the first 23 days of the month.

f Same temperature on the 4th.

g Same temperature on the 31st.

h Same temperature on the 12th and 25th.

i Same temperature on the 25th.

j Same temperature on the 11th.

k Same temperature on the 14th and 15th.

l Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 72.41, and at 6 p. m., 72.11.

m Observations taken at 7 a. m. and 3 p. m.

n Same temperature on the 5th.

o Observations taken at 7 a. m., 2 p. m., and 8 p. m.

p Observations taken at 7 to 8 a. m., and at 9 p. m. to 11 p. m.

q Same temperature on the 29th.

r Mean obtained from daily maximum and minimum.

s Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.

Mean at 9 a. m., 68.18; mean at noon, 72.14.

t Same temperature on the 10th and 24th.

u Observations taken at 6 a. m., 2 p. m., and 6 p. m.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Moon cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a).....	72.00	.....	70.84	71.42	11	84	10	82.50	23	58	23	59.50	.....
Montreal.....	62.08	71.95	65.08	66.37	18	84	10	77.67	23	52	23	54.67	5.1
Moose Factory (c).....	.....	.....	.....	56.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
Red River Settlement.....	59.97	72.67	.....	66.32	11	d 82	.....	?	28	40	.....	?	4.2
St. John's.....	60.42	67.77	59.13	62.44	12	83	12	74.67	1	e 50	2	52.00	.....
St. Martin (f).....	58.51	77.12	63.31	66.31	14	94	10	74.73	19	39	24	55.17	.....
Stanbridge.....	61.87	72.97	61.97	65.60	11	83	11	75.33	23	47	23	49.67	4.5
Toronto (f).....	61.62	73.97	65.37	66.99	6	g 82	10	77.07	24	45	23	59.00	4.2
Windsor.....	59.50	68.80	61.27	63.19	10	82	10	72.60	24	48	21	53.20	6.4
Wolfville.....	61.07	68.57	61.87	63.84	15	80	15	73.00	26	49	21	53.33	6.1
MAINE—													
Cornish, [Guptill].....	62.00	71.12	65.58	66.23	19	80	29	71.66	20	51	24	54.00	4.9
Cornish, [West].....	59.80	69.83	60.16	63.26	18	80	18	72.33	23	45	23	51.00	4.9
Gardiner.....	60.85	70.02	71.21	67.36	6	h 77	18	71.00	26	42	23	54.67	6.6
Perry.....	57.26	66.17	56.81	60.8	11	77	11	67.17	25	48	21	54.00	5.3
Portland.....	61.92	(9.26	62.18	64.45	6	79	6	71.33	24	49	4	59.00	5.6
Steuben.....	58.29	66.61	56.29	60.40	8	j 73	6	69.33	23	k 47	23	53.33	6.4
NEW HAMPSHIRE—													
Concord.....	60.97	75.14	61.31	65.81	18	86	18	73.67	24	45	23	56.00	4.9
Shelburne.....	60.06	77.44	61.15	66.22	11	92	11	76.33	26	45	23	51.67	5.3
Stratford.....	58.58	71.42	58.58	62.86	18	83	18	72.33	23	44	23	49.00	5.4
West Enfield.....	60.19	74.06	62.13	65.46	13	83	17	74.33	22	47	22	52.67	4.3
VERMONT—													
Brandon.....	60.45	74.32	62.26	65.68	11	87	11	74.16	23	46	23	51.16	4.5
Burlington.....	61.47	70.16	62.87	64.83	11	l 78	18	71.33	23	48	23	51.50	3.9
Craftsbury.....	58.29	71.16	61.10	63.52	10	m 81	10	m 71.00	23	44	23	48.00	4.7
Rupert.....	62.84	79.00	69.94	70.59	18	90	18	78.67	23	n 50	23	60.00	4.5
St. Johnsbury.....	57.68	72.33	59.10	63.04	9	o 82	18	71.33	24	40	23	46.33	5.4
MASSACHUSETTS—													
Amherst (p).....	63.32	75.23	65.00	67.85	.....	?	.....	?	.....	?	.....	?	.....
Cambridge.....	62.19	73.52	63.00	66.24	18	85	18	76.00	24	50	23	57.00	5.3
Florida.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.8
Lawrence.....	59.45	73.13	63.00	65.19	18	85	18	73.33	24	44	23	54.00	5.4
Mendon.....	61.45	72.51	63.09	65.68	18	b 81	29	73.33	24	49	23	56.33	4.9
Nantucket.....	65.66	71.44	64.31	67.14	6	80	6	73.50	26	58	23	62.00	5.0
New Bedford.....	63.70	71.60	63.40	66.23	6	82	6	72.80	24	51	24	57.30	6.3
Newburyport (q).....	61.65	71.43	61.04	64.71	31	86	.....	?	24	49	.....	?	?
Westfield.....	59.65	73.48	63.06	65.40	18	84	11	72.67	20	49	23	55.33	4.8
Williamstown.....	59.94	71.11	63.90	64.98	17	r 82	17	r 72.00	24	43	23	54.33	4.4
Worcester.....	62.59	72.93	63.50	66.34	18	81	18	75.67	23	52	.....	?	5.3
RHODE ISLAND—													
Providence (s).....	62.20	73.10	64.00	66.43	18	b 80	18	76.67	24	49	.....	?	5.2
CONNECTICUT—													
Columbia.....	62.16	74.42	62.33	66.30	16	86	17	73.00	23	50	23	55.33	5.2
Pomfret.....	60.94	70.22	61.78	64.31	18	78	18	72.10	23	50	23	54.70	5.3
Saybrook.....	66.35	74.13	65.69	68.72	18	84	18	77.33	24	52	3	62.33	5.0
Wallingford.....	60.63	74.97	64.44	66.68	16	83	18	75.17	24	45	23	55.17	3.7
NEW YORK—													
Bellport.....	66.03	73.00	65.90	68.31	6	82	17	74.33	19	53	23	58.33	4.6
Buffalo (u).....	67.97	74.24	69.90	70.70	12	82	10	77.00	29	56	29	59.67	3.7
Canton.....	63.36	74.73	63.80	67.30	10	88	10	77.33	19	44	23	49.67	4.8
Clinton.....	66.41	78.16	64.45	69.67	18	92	11	79.67	19	48	19	54.67	5.1

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 29th.

c Observations taken at sunrise, 2 and 10 p. m.

d Same temperature on the 12th.

e Same temperature on the 2d, 3d, and 21st.

f Observations taken at 6 a. m., 2 p. m., and 6 p. m.

g Same temperature on the 9th.

h Same temperature on the 13th and 18th.

i Same temperature on the 18th.

j Same temperature on the 13th.

k Same temperature on the 25th.

l Same temperature on the 8th.

m Same temperature on the 11th and 12th.

n Same temperature on the 24th.

o Same temperature on the 11th.

p Observations interrupted from the 13th to the 28th, inclusive.

q Incomplete.

r Same temperature on the 2d.

s Observations taken at 6 a. m., 1 p. m., and 10 p. m.

t Same temperature on the 23d.

u Observations taken at 4 a. m., 2 p. m., and 9 p. m.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Fishkill Landing.....	63. 61	75. 97	67. 61	69. 06	5	a 84	6	75. 33	24	48	23	57. 67	3. 8
Flatbush.....	66. 34	76. 78	66. 68	69. 60	16	86	18	77. 90	24	54	23	59. 80	4. 5
Fort Edward.....	62. 36	74. 55	65. 81	67. 57	11	84	18	73. 67	20	50	19	60. 00	4. 7
Houssville.....	60. 70	72. 77	60. 77	64. 75	10	89	10	76. 67	23	44	19	49. 00	5. 1
Nicho's.....	62. 65	79. 06	61. 10	67. 60	11	92	10	77. 00	23	44	23	53. 67	5. 0
Rochester.....	64. 32	75. 87	68. 35	69. 51	9	89	9	78. 33	30	50	19	56. 67	4. 2
Sag Harbor.....	66. 19	78. 52	66. 58	70. 43	1	b 85	18	76. 67	24	54	23	62. 33	4. 6
Waterford.....	64. 74	76. 42	66. 19	69. 12	11	c 85	11	76. 67	24	52	23	59. 00	4. 1
NEW JERSEY—													
Bloomfield.....	65. 39	78. 42	66. 13	69. 98	5	89	5	77. 67	24	47	23	58. 17	3. 7
Freehold.....	67. 15	77. 58	67. 30	70. 68	18	88	18	80. 00	23	52	23	58. 25	----
Lambertville.....	66. 09	81. 59	66. 37	71. 35	17	92. 5	-----	-----	24	40	-----	-----	----
Newark (d).....	-----	-----	-----	69. 41	18	84	12	76. 12	24	48	24	59. 35	----
PENNSYLVANIA—													
Bedford.....	65. 96	80. 69	69. 04	71. 90	10	89	5	80. 00	24	48	24	61. 00	5. 0
Berwick.....	64. 97	77. 55	67. 58	70. 03	11	92	11	77. 67	20	52	19	60. 33	3. 8
Cannonsburg.....	64. 70	78. 65	71. 19	71. 51	5	e 88	5	79. 33	25	50	30	58. 33	4. 7
Chambersburg.....	71. 74	80. 55	71. 03	74. 44	17	93	6	84. 33	24	54	24	63. 33	4. 7
Easton (f).....	64. 52	77. 35	64. 85	68. 91	16	90	16	c 76. 33	24	48	24	54. 00	4. 8
Fleming.....	63. 81	78. 90	65. 45	69. 39	11	89	5	77. 00	24	44	24	53. 33	4. 5
Gettysburg.....	66. 29	80. 77	70. 07	72. 38	17	90	17	82. 67	24	48	23	62. 33	4. 4
Harrisburg, [Heisely].....	70. 50	80. 55	75. 57	75. 54	18	91	11	83. 33	24	56	24	66. 67	4. 3
Harrisburg, [Hickok].....	66. 02	78. 05	70. 74	71. 60	18	91	18	80. 00	24	50	24	61. 00	5. 2
Indiana.....	66. 90	78. 29	67. 61	70. 93	9	87	9	78. 33	19	g 55	23	58. 67	4. 9
Lewisburg.....	64. 88	77. 25	67. 07	69. 73	18	90	6	79. 10	24	46	24	57. 77	6. 0
Meadville.....	62. 87	78. 23	62. 68	67. 93	9	h 90	10	78. 33	23	i 46	23	54. 67	4. 1
Morrisville.....	65. 81	78. 52	67. 97	70. 77	5	c 86	4	j 78. 00	24	54	23	62. 00	3. 1
Mount Joy.....	70. 84	80. 56	72. 76	74. 72	11	96	11	83. 50	24	57	23	65. 00	4. 4
Murrysville.....	65. 32	79. 13	65. 97	70. 14	11	89	5	80. 00	26	49	24	56. 33	4. 8
Norristown.....	65. 92	76. 63	68. 65	70. 40	17	89	5	k 77. 30	24	49	24	60. 33	5. 0
North Whitehall (l).....	63. 16	77. 06	71. 77	70. 66	11	90	11	79. 67	24	43	20	i 59. 00	3. 8
Paradise.....	-----	-----	-----	77. 00	-----	-----	-----	-----	-----	-----	-----	-----	----
Philadelphia.....	70. 08	81. 06	73. 81	74. 93	17	90	8	82. 30	20	i 58	23	65. 00	5. 4
Pittsburg, [Martin].....	68. 67	79. 19	71. 64	73. 17	11	89	5	82. 33	24	51	24	60. 33	5. 0
Pittsburg, [Wilson].....	66. 39	81. 42	71. 23	73. 01	8	m 94	10	83. 00	24	51	29	58. 67	----
Pocopson.....	69. 26	81. 77	69. 23	73. 42	5	b 90	18	80. 67	24	54	24	63. 00	5. 2
Shamokin (n).....	56. 10	74. 71	66. 03	65. 61	18	88	18	76. 00	24	28	24	52. 00	5. 3
Somerset.....	62. 74	78. 42	65. 61	68. 92	10	88	5	o 76. 33	24	46	23	55. 33	5. 8
Tarentum.....	65. 68	79. 77	66. 00	70. 48	10	p 90	5	79. 67	24	46	23	57. 33	4. 6
Westtown.....	67. 21	78. 01	67. 46	70. 89	6	88	6	o 78. 67	20	53	23	58. 53	5. 3
DELAWARE—													
Georgetown (q).....	72. 74	82. 03	77. 19	77. 32	5	93	5	88. 33	23	62	14	69. 33	----
MARYLAND—													
Annapolis.....	69. 90	80. 80	75. 70	75. 47	5	92	5	83. 00	24	57	23	66. 67	3. 6
Baltimore.....	68. 72	79. 63	73. 18	73. 84	5	c 89	5	82. 00	24	55	24	63. 83	5. 4
Bladensburg.....	67. 15	84. 77	67. 79	73. 24	4	93	-----	?	24	51	-----	?	4. 6
Frederick.....	68. 52	79. 19	70. 70	72. 80	5	88	5	82. 00	24	53	24	63. 17	4. 3
Leitersburg.....	67. 65	82. 13	69. 45	73. 08	5	93	5	82. 00	24	48	23	59. 67	3. 0
Sykesville.....	66. 71	76. 68	69. 61	71. 00	11	85	6	78. 00	24	r 55	23	61. 33	4. 4
DISTRICT OF COLUMBIA—													
Washington.....	70. 03	80. 05	74. 03	74. 70	5	90	5	82. 67	24	57	23	63. 67	4. 3
VIRGINIA—													
Buffalo.....	77. 03	86. 32	77. 06	80. 14	8	p 94	11	86. 67	30	63	30	69. 33	4. 2
Crichton's Store (s).....	73. 77	88. 31	82. 77	81. 62	12	100	-----	?	26	34	-----	?	4. 0

a Same temperature on the 6th and 11th.

b Same temperature on the 16th.

c Same temperature on the 18th.

d Observations taken at 7 a. m. and 6 p. m.

e Same temperature on the 9th, 11th, 17th, and 18th.

f Observations taken at 7 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 23d and 24th.

h Same temperature on the 10th and 11th.

i Same temperature on the 24th.

j Same temperature on the 5th and 6th.

k Same temperature on the 6th and 17th.

l Observations taken at sunrise, noon, and sunset.

m Same temperature on the 10th, 11th, and 12th.

n Observations taken in the night. Mean, 49.58.

o Same temperature on the 11th.

p Same temperature on the 11th and 18th.

q Observations taken at 8 a. m., 1 p. m., and 6 p. m.

r Same temperature on the 25th and 26th.

s Incomplete. Observations taken at 7 a. m., noon, and 6 p. m.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.	LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—Continued.	°	°	°	°		°		°		°			
Hartwood	73.10	85.74	73.19	77.34	11	98	11	85.00	23	a 62	23	68.67	---
Holliday's Cove (b)		83.27			10	c 99			29	62			---
Kanawha	69.75	81.55	70.00	73.77	17	91	13	80.67	25	57	23	63.33	5.3
Lewinsville	68.42	82.08	71.31	73.94	16	94	18	84.16	24	55	23	64.00	4.0
Lewisburg	65.00	83.94	67.39	72.11	8	92	5	78.67	23	51	23	59.33	3.2
Meadow Dale	57.26	74.71	66.68	66.22	11	d 83	6	73.33	24	41	23	54.00	---
Montross	70.74	82.06	71.87	74.89	5	92	5	83.67	24	54	23	e 64.67	4.1
Poplar Grove	68.19	85.39	67.90	73.83	17	94	12	f 80.00	24	50	31	61.00	4.9
Portsmouth	73.64	86.19	72.58	77.47	2	g 100	4	88.33	25	56	25	65.33	2.5
Rose Hill (h)	72.88	81.40	76.43	76.90	5	90	5	84.00	24	63		?	4.5
Rougemont	73.30	85.00	78.40	78.90	5	95	11	87.33	24	60	30	67.00	5.2
Smithfield	70.40	81.14	75.01	75.52	2	i 91	2	86.40	25	57	25	64.50	4.8
Wirt Court-House	68.29	81.29	69.10	72.89	11	93	9	81.67	24	j 54	30	60.00	4.4
NORTH CAROLINA—													
Chapel Hill	72.55	88.68	74.52	78.58	11	98	1	k 85.67	25	l 64	23	70.33	4.4
Davidson College (m)	73.72	88.16	79.10	80.33	3	n 93	2	84.50	15	67		?	3.0
Gaston	71.68	86.77	72.81	77.09	2	o 100	5	87.00	24	58	24	64.67	---
Marlborough	74.72	87.68	74.88	79.09	1	p 98	2	q 86.33	26	63	27	68.00	5.3
Murfreesborough	73.68	85.82	75.22	78.24	4	98	4	88.67	24	58	24	65.33	3.9
SOUTH CAROLINA—													
Aiken	72.27	87.64	73.50	77.80	4	100	4	83.33	24	j 62	24	65.33	5.0
All Saints	77.45	83.68	80.32	80.48	7	100	7	r 84.33	24	s 71	24	74.67	4.3
Charleston, [Dawson]	78.22	85.25	80.67	81.38		93				72			---
Charleston, [Johnson]	78.23	85.26	80.68	81.39	3	r 93	3	87.00	23	72	24	74.67	---
Columbia	74.23	87.87	78.71	80.27	3	99	3	91.00	30	65	24	69.00	4.7
St. John's	74.68	93.15	73.80	80.54	3	108		?	23	s 66		?	4.8
GEORGIA—													
Athens	72.97	84.13	73.91	77.00	12	92	8	83.57	30	62	30	69.60	4.3
Savannah	76.50	86.50	78.90	80.63	3	96	3	86.87	30	69	24	73.80	4.8
Sparta	71.71	87.61	77.10	78.81	3	98	3	84.67	30	59	25	67.53	4.7
Whitemarsh Island	78.42	84.48	78.23	80.38	7	92	3	85.67	24	a 71	24	73.67	5.0
FLORIDA—													
Alachua County (t)	74.87	84.73	76.97	78.86	3	92	3	83.00	31	88	28	71.67	4.1
Alligator	75.23	88.58	78.52	80.78	2	100	2	89.33	31	70	28	74.67	5.2
Atsena	80.16	84.74	80.74	81.88	4	u 90	1	86.00	16	71	30	78.67	4.7
Belair	75.97	88.47	79.73	81.39	3	g 96	3	87.00	31	60	31	67.67	4.8
Jacksonville	79.33	86.48	80.23	82.01	3	94	3	87.00	24	v 75	29	77.33	4.1
Micanopy	77.32	89.18	77.34	81.28	3	s 96	3	86.00	31	71	29	74.00	5.5
St. Augustine	81.74	85.61	80.61	82.65	3	92	3	85.33	29	a 76	30	78.33	3.7
Salt Ponds	82.71	88.68		85.70	2	q 92	2	q 88.00		80		83.50	3.9
ALABAMA—													
Carlowville	75.42	87.13	74.87	79.14	8	93	21	84.67	30	s 58	30	60.67	3.6
Greene Springs	71.21	87.62	75.41	78.08	7	95	7	85.00	30	55	30	64.33	4.0
Selma	75.55	88.77	76.03	80.12	7	96	7	87.67	30	61	30	67.67	4.7
MISSISSIPPI—													
Columbus	72.25	88.45	75.50	78.73	8	96	1	84.27	30	58	30	64.67	2.9
Natchez	74.78	86.32	81.71	80.94	7	91	22	w 85.00	30	s 58	30	68.00	3.7
Paulding	75.13	90.45	79.69	81.76	2	97	2	84.17	30	60	30	68.50	3.7
LOUISIANA—													
Black River	76.45	88.84	79.42	81.57	8	95	8	86.00	30	s 62	30	68.67	3.3
New Orleans (x)	85.00	88.00	88.90	87.30	1	q 95	2	y 91.33	30	75	30	77.67	---

a Same temperature on the 30th and 31st.

b For the last 22 days of the month.

c Same temperature on the 11th.

d Same temperature on the 6th and 17th.

e Same temperature on the 24th.

f Same temperature on the 18th.

g Same temperature on the 4th.

h Incomplete.

i Same temperature on the 6th.

j Same temperature on the 25th.

k Same temperature on the 2d, 3d, and 4th.

l Same temperature on the 29th and 30th.

m For the first 23 days of the month.

n Same temperature on the 4th, 6th, 7th, and 12th.

o Same temperature on the 6th and 12th.

p Same temperature on the 2d and 4th.

q Same temperature on the 3d.

r Same temperature on the 7th.

s Same temperature on the 31st.

t Observations taken at 5 a. m., 2 p. m., and 9 p. m.

u Same temperature on the 8th.

v Same temperature on the 25th and 26th.

w Same temperature on the 13th.

x Observations taken at 9 a. m., noon, and 3 p. m.

y Same temperature on the 2d and 27th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—	°	°	°	°		°		°		°		°	
Austin, [Palm]-----	78.13	93.48	82.39	84.67	14	a 98	19	b 88.67	29	68	29	79.00	3.2
Austin, [Van Nostrand]-----	79.08	93.79	81.44	84.77	20	98	20	c 89.83	30	70	29	79.08	3.5
Goliad-----	78.40	91.36	80.56	83.44	20	c 96	21	d 85.33	29	72	29	80.00	4.1
Larissa-----	76.43	92.90	80.13	83.15	14	e 100	22	f 87.67	29	g 63	29	72.67	1.7
New Braunfels-----	77.06	97.29	83.00	85.78	14	h 102	20	i 88.33	29	70	29	79.00	2.0
Union Hill-----	69.90	90.26	69.90	76.69	14	f 98	27	82.67	9	j 65	1	k 74.67	3.6
TENNESSEE—													
Glenwood-----	68.84	81.71	71.01	73.85	13	90	13	80.93	31	54	29	60.07	4.3
Memphis-----	74.87	85.61	75.61	78.70	1	l 95	3	86.67	29	59	29	62.00	3.3
KENTUCKY—													
Bardstown-----	70.77	83.16	71.82	75.25	12	93	2	m 83.50	31	53	28	60.33	4.3
Danville-----	72.32	83.93	72.50	76.25	7	n 93	17	83.00	30	60	28	j 64.33	2.8
Louisville (o)-----	70.42	82.45	75.52	76.13	1	k 93	2	85.00	30	55	29	61.67	4.2
Paris-----	67.42	81.87	71.23	73.51	5	p 91	1	81.67	31	50	28	q 61.33	5.4
Springdale (r)-----	64.24	86.95	76.48	75.89	7	98	2	85.67	24	s 47	28	61.67	4.7
Ohio—													
Bellefontaine-----	67.42	77.10	65.21	69.91	7	t 91	7	82.33	30	51	29	55.00	5.2
Bowling Green-----	66.83	79.91	67.26	71.33	10	92	10	82.50	24	45	23	51.00	3.7
Cincinnati, [Harper]-----	77.38	82.37	80.23	79.99	5	u 89	6	86.67	31	60	30	66.00	4.6
Cleveland-----	67.27	75.71	66.65	69.88	8	90	8	80.67	24	53	29	55.67	4.8
Cleveland, (near)-----				72.00									
Collingwood-----	67.19	76.68	69.13	71.00	8	v 88	5	81.00	24	50	23	55.33	---
Dayton-----	65.75	82.85	68.45	72.72	6	97	6	83.01	25	50.4	23	58.32	4.8
Edinburg-----	66.19	76.13	63.94	68.75	11	w 88	11	79.09	23	46	24	53.00	4.7
Hillsborough-----	66.39	78.15	69.98	71.51	5	88	5	79.67	24	53	30	59.33	3.9
Hiram-----	65.38	75.52	65.06	68.65	8	x 85	10	77.33	24	50	29	54.33	4.9
Hudson-----	66.06	75.78	67.09	69.64	11	86	11	78.50	25	51	30	54.50	4.4
Jackson, (Monroe county)-----	69.73	82.11	67.47	67.47	5	92	12	81.33	23	54		?	4.6
Jefferson-----	74.00	82.23	77.61	77.95	5	y 86	7	82.67	26	aa 68	26	bb 72.00	7.7
Lancaster-----	68.38	81.39	67.21	72.33	5	93	11	81.63	24	53	24	57.27	4.1
Madison, [Atkins]-----	67.65	75.62	64.55	69.27	8	88	8	79.00	24	50	29	55.33	3.9
Madison, [King]-----	67.55	76.27	62.35	68.72	10	88	10	78.33	23	cc 49	29	54.67	4.7
Medina-----	68.29	76.55	65.10	69.98	10	88	7	81.00	23	44	23	54.50	4.8
New Lisbon-----	70.45	84.61	71.10	75.39	10	98	10	84.67	24	50	24	63.00	3.2
Ripley (dd)-----	68.21	84.56	73.05	75.27	7	97	7	84.67	24	54		?	5.4
Savannah-----	68.26	80.45	66.61	71.77	10	96	8	83.33	24	44	23	54.67	5.7
Urbana-----	66.23	81.97	67.68	71.96	4	94	7	82.67	24	47	24	58.67	4.9
Welchfield-----	67.74	78.93	63.61	70.09	8	90	10	81.00	23	50	29	53.33	3.4
Westerville-----	67.66	78.28	68.35	71.43	11	91	8	81.33	24	52	24	57.33	4.5
Windham-----	63.13	76.68	64.77	68.19	7	87	5	76.33	24	44	23	54.67	---
MICHIGAN—													
Battle Creek-----	66.19	79.19	67.10	70.83	7	97	7	85.67	23	50	23	57.00	3.0
Cooper-----	67.55	75.26	65.35	69.39	7	u 94	7	84.67	23	ee 50	23	54.00	0.5
Detroit-----	70.35	80.90	68.90	73.38	9	98	10	87.67	29	48	29	49.67	5.5
Grand Rapids, [Streng]-----	63.13	80.48	65.68	69.76	11	98	7	87.00	24	44	28	55.00	4.6
Marquette-----	61.17	72.19	60.30	64.55	13	90	13	80.03	30	40	27	45.27	4.7
Monroe-----													3.7
New Buffalo (ff)-----	63.26	75.29	63.94	69.16	6	90	5	gg 82.00	23	46	23	53.33	5.5

a Same temperature on the 20th and 21st.

b Same temperature on the 29th.

c Same temperature on the 28th.

d Same temperature on the 25th and 27th.

e Same temperature on the 20th, 26th, and 27th.

f Same temperature on the 26th.

g Same temperature on the 30th.

h Same temperature on the 20th and 27th.

i Same temperature on the 27th.

j Same temperature on the 23th.

k Same temperature on the 2d.

l Same temperature on the 4th.

m Same temperature on the 12th.

n Same temperature on the 12th and 17th.

o Observations taken at 7 a. m., 3 p. m., and 9 p. m.

p Same temperature on the 3d.

q Same temperature on the 2d and 27th.

r Observations taken at 5 a. m., 2 p. m., and 6 p. m.

s Same temperature on the 31st.

t Same temperature on the 9th.

u Same temperature on the 8th.

v Same temperature on the 9th, 11th, and 13th.

w Same temperature on the 17th.

x Same temperature on the 10th and 11th.

y Same temperature on the 6th, 7th, 8th, 9th, 10th, 11th, 12th, and 13th.

z Same temperature on the 8th, 9th, and 10th.

aa Same temperature on the 27th, 28th, 29th, 30th, and 31st.

bb Same temperature on the 27th, 28th, and 29th.

cc Same temperature on the 24th.

dd Incomplete.

ee Same temperature on the 25th, 28th, and 29th.

ff Observations taken at 7 a. m., 1 p. m., and 9 p. m.

gg Same temperature on the 6th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°		°		°		°		°	
Port Huron .....	67.04	77.48	64.85	69.79	7	92	8	78.67	23	53	23	58.67	4.2
Thunder Bay Island (b) .....	63.22	69.39	67.32	67.04	14	c 79	9	76.50	28	51	28	52.50	4.2
INDIANA—													
Cannelton .....	70.15	81.80	70.94	74.30	5	92	12	82.37	30	56	28	57.93	2.8
Evansville .....	72.78	81.64	76.69	77.03	11	91	11	86.33	30	59	30	61.00	4.8
Logansport .....	67.68	83.45	70.58	73.90	11	99	9	85.33	24	48	30	60.67	4.3
Madison .....	70.77	77.85	73.90	74.17	8	89	6	d 83.00	30	e 54	28	f 60.33	3.7
Michigan City .....	66.09	74.98	67.10	69.39	7	89	7	81.67	23	47	23	54.50	4.3
New Harmony .....	72.81	84.13	73.74	76.89	12	94	11	g 86.00	30	57	28	60.00	4.0
Richmond, [Austin] (h) .....	64.13	80.61	.....	74.37	6	93	11	85.50	30	53	30	59.50	7.1
Richmond, [Moore] .....	64.12	76.50	67.47	69.36	11	92	6	82.30	24	42	24	56.00	.....
ILLINOIS—													
Athens .....	69.55	85.52	68.23	74.43	5	i 97	8	85.00	28	j 50	28	54.33	3.2
Augusta .....	66.26	79.35	71.09	72.23	9	i 91	9	83.34	24	50	28	51.67	3.0
Aurora .....	64.74	77.48	65.09	69.07	9	92	9	81.67	28	j 49	28	52.33	4.1
Batavia, [Capon] .....	65.48	78.48	67.06	70.34	5	94	5	a 84.00	28	f 48	28	52.67	4.6
Batavia, [Mead] .....	63.97	81.35	65.55	70.29	10	102	6	i 84.33	30	47	29	51.67	4.3
Brighton .....	67.19	84.61	77.48	76.43	9	96	9	88.33	28	45	28	54.67	3.3
Carthage (k) .....	71.65	82.94	73.74	76.11	11	g 96	12	89.00	24	54	28	57.33	.....
Edgington .....	66.77	82.63	69.52	72.97	9	100	8	86.33	24	47	28	55.33	4.3
Elgin .....	64.35	77.68	65.90	69.31	5	a 93	5	82.00	29	48	29	55.67	4.3
Jacksonville (m) .....	68.84	84.79	72.19	75.33	10	100	8	84.00	30	49	28	56.00	.....
Manchester (n) .....	67.77	81.58	69.97	73.11	8	94	8	85.00	27	50	28	54.33	4.2
Marengo .....	70.65	80.68	64.97	72.10	11	100	5	84.00	27	46	28	50.33	4.3
Ottawa .....	66.16	78.89	68.70	71.22	10	94	5	84.00	24	p 47	28	53.33	3.8
Pekin .....	68.10	80.71	69.12	72.64	11	i 94	5	i 84.67	29	48	29	54.00	3.4
Peoria .....	70.10	84.45	73.20	75.92	8	102	8	88.92	28	50	28	56.00	3.4
Riley .....	65.68	75.74	64.48	68.63	11	a 90	5	82.33	29	44	27	50.00	3.3
Upper Alton .....	69.42	80.33	70.45	73.40	11	89	8	82.67	30	50	29	58.00	.....
Waynesville .....	63.48	82.68	73.48	73.21	5	97	8	84.67	23	q 46	28	53.00	4.1
West Salem .....	70.84	86.39	72.00	76.41	5	99	5	86.33	30	55	28	59.67	3.8
West Urbana .....	71.16	82.10	71.48	74.91	5	r 96	5	87.33	28	51	28	55.00	3.8
Wheaton .....	66.05	77.70	67.20	76.98	9	93	5	83.93	30	48	28	52.67	5.0
Winnebago .....	66.32	78.96	67.53	70.94	5	a 93	11	84.00	29	47	28	55.16	4.1
MISSOURI—													
St. Louis .....	74.00	86.40	75.70	78.70	1	98	1	89.83	28	57	28	59.50	3.3
WISCONSIN—													
Appleton .....	63.81	77.65	64.48	68.65	6	s 92	6	82.33	29	45	27	49.33	3.4
Bay City .....	60.10	70.03	59.58	63.24	6	91	13	77.67	28	j 44	27	47.00	3.1
Beloit .....	66.06	79.35	65.42	70.28	11	t 94	6	84.67	28	47	28	51.00	2.9
Green Bay .....	66.48	78.19	64.45	69.71	9	94	8	82.33	30	49	27	54.67	4.0
Janesville .....	64.71	79.42	68.00	70.71	9	u 95	5	83.00	27	v 50	28	52.33	4.8
Kenosha .....	67.40	74.41	66.92	69.58	9	88	6	82.17	28	48	28	52.33	3.0
Manitowoc .....	65.45	75.32	63.26	68.01	11	91	11	81.67	30	49	27	53.33	5.4
Milwaukee, [Lapham] .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	42	.....	.....
Milwaukee, [Pomeroy] .....	67.58	74.10	65.23	68.97	7	89	7	83.33	27	48	27	50.33	6.5
Milwaukee, [Winkler] .....	65.45	76.71	64.39	68.85	11	93	9	81.33	28	45	28	51.67	3.4
New Danemora (w) .....	59.71	77.96	63.42	66.43	.....	.....	.....	.....	.....	.....	.....	.....	.....
New London .....	57.22	79.48	63.80	66.83	9	95	11	81.00	29	45	28	53.33	3.2
Platteville .....	68.39	84.74	71.26	74.80	5	102	5	89.33	28	48	28	53.33	4.0
Waukesha .....	65.61	79.13	65.68	70.14	11	u 94	6	84.67	19	x 48	28	52.00	4.3

a Same temperature on the 9th.

b Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 68.23.

c Same temperature on the 8th and 9th.

d Same temperature on the 8th.

e Same temperature on the 31st.

f Same temperature on the 30th.

g Same temperature on the 12th.

h Observations taken at 6 a. m. and 1 p. m.

i Same temperature on the 10th.

j Same temperature on the 29th.

k Observations taken at 7 a. m., 1 p. m., and 7 p. m.

l Same temperature on the 17th.

m Observations taken at morning, 1 p. m., and sunset.

n Observations taken at 7 a. m., 1 p. m., and 9 p. m.

o Same temperature on the 6th.

p Same temperature on the 25th and 31st.

q Same temperature on the 24th and 31st.

r Same temperature on the 2d, 7th, and 10th.

s Same temperature on the 7th and 9th.

t Same temperature on the 7th.

u Same temperature on the 5th.

v Same temperature on the 25th, 29th, 30th, and 31st.

w Imperfect.

x Same temperature on the 26th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
IOWA—	°	°	°	°		°		°		°		°	
Bellevue.....	67.49	81.65	65.49	71.54	9	96	6	a84.67	28	b48	28	55.00	4.5
Border Plains.....	69.52	82.90	69.45	73.96	9	98	9	88.67	28	51	28	57.00	4.8
Dubuque.....	68.19	79.26	69.39	72.28	9	96	6	85.67	28	49	28	54.67	3.5
Fairfield.....	71.09	79.59	69.42	73.34	10	94	10	87.67	23	c53	28	56.33	4.5
Fort Madison (d).....	67.64	81.77	72.48	73.96	12	95	8	86.67	30	46	28	57.00	3.5
Franklin.....	66.81	79.19	68.68	71.56	9	e92	9	84.00	28	48	28	53.67	4.2
Iowa City.....	68.87	80.87	68.90	72.88	9	95	9	86.33	28	50	28	53.33	3.8
Muscatine.....	64.06	79.32	67.03	70.14	9	93	7	81.33	30	46	28	56.00	3.0
Pleasant Plain.....	69.26	81.45	67.55	72.75	9	95	8	85.67	29	48	29	54.67	4.1
Poultney (f).....	67.56	82.56	60.21	70.11	9	96	9	84.00	21	g46	31	59.00	?
Rossville.....	65.96	78.65	64.96	69.86	9	93	6	83.03	29	44	28	51.30	3.3
Sioux City.....	66.70	77.84	66.74	70.43	13	90	13	83.17	29	48	28	54.87	4.5
MINNESOTA—													
Burlington.....	55.61	71.70	61.96	63.09	16	86	26	77.33	23	35	27	50.00	---
Forest City.....	66.03	77.55	63.16	68.91	13	92	12	81.33	28	44	28	52.33	2.1
Hazlewood.....	62.87	77.57	66.10	68.85	12	h90	13	82.33	28	35	28	50.33	4.4
Princeton.....	66.84	78.23	66.39	70.49	5	94	5	88.00	28	44	27	51.67	3.7
Wabashaw.....	67.70	78.22	69.37	71.76	7	93	6	84.67	27	c50	27	53.67	3.2
NEBRASKA—													
Bellevue.....	67.26	78.06	69.81	71.71	9	i90	9	84.00	28	j50	28	56.33	3.2
Brownsville.....	71.45	86.52	71.61	76.53	8	k100	10	88.67	29	50	29	60.00	3.3
Elkham.....	66.48	82.71	63.10	72.43	9	l96	12	h83.33	29	47	27	c56.33	3.8
Omaha.....	68.90	82.94	68.87	73.57	9	96	9	e85.00	28	j51	28	56.33	3.6
KANSAS—													
Burlingame.....	68.71	81.26	68.06	72.68	9	m92	9	81.67	30	51	29	55.67	2.8
Lawrence.....	70.16	84.16	73.23	75.85	11	98	11	88.00	28	j55	28	57.00	3.9
Leavenworth City, [Berthold]													2.3
Leavenworth City, [McCarty]	72.81	81.65	70.94	75.13	8	n94	8	86.33	28	o54	28	56.00	4.3
Manhattan.....	72.39	86.13	69.94	76.15	11	100	11	91.33	30	50	28	58.67	4.0
Mapleton.....	72.19	84.74	72.29	79.74	20	98	7	86.67	28	49	28	53.00	2.9
OREGON—													
Fort Snyder (p).....				53.50?									---
MEXICO—													
Cordova (q).....	70.87	74.32	71.33	72.54	6	79.70			2	68.36			---
Minatitlan (r).....	73.83	82.67		78.25	2	s86	25	81.50	10	t71	10	75.50	---
Mirador (u).....	67.14	76.01	68.38	70.51				73.15				68.71	---
Vera Cruz (v).....	78.13		79.94	79.03									---
CALIFORNIA—													
Marysville.....	69.19	87.93	75.61	77.58	30	98	31	84.67	21	62	21	68.33	1.7
Sacramento.....	65.55	76.29	69.87	70.57	30	85	30	77.33	22	t61	21	65.00	1.3
San Francisco.....	57.00	65.74	55.97	59.57	23	c71	14	62.33	29	o53	11	57.67	5.0
WEST INDIES—													
Nassau, Bahamas (w).....				88.64			30	90.50			14	86.00	---
St. George's, Bermuda (x).....				81.30									---
Turk's Island, Bahamas (y).....	81.28	84.71	82.43	82.81									---
CENTRAL AMERICA—													
Guatemala (z).....	57.38	72.32	62.06	66.60	?	77.4			?	54			---
SOUTH AMERICA—													
Caracas, Venezuela.....	68.69	78.30	71.00	72.63	20	82	20	74.67	27	65	16	70.33	5.5
Cathar'a Sophia, Surinam (aa).....	75.20	87.30	80.50	81.00	18	bb90	16	cc82.33	19	dd74	20	78.67	4.1

a Same temperature on the 9th.  
b Same temperature on the 29th and 30th.  
c Same temperature on the 28th.  
d Observations taken at 6 a. m., noon, and 7 p. m.  
e Same temperature on the 10th.  
f Incomplete.

g Same temperature on the 22d, 28th, and 29th.  
h Same temperature on the 13th.  
i Same temperature on the 17th.  
j Same temperature on the 29th.  
k Same temperature on the 9th, 12th, and 13th.  
l Same temperature on the 12th and 13th.  
m Same temperature on the 12th.  
n Same temperature on the 9th, 10th, and 11th.  
o Same temperature on the 30th.

p For the last 14 days of the month, with interruptions.  
q Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.  
Mean at 12 m., 73.02; mean at 6 p. m., 73.17.

r Observations taken at 7 a. m. and 3 p. m.

s Same temperature on the 6th.

t Same temperature on the 23d.

u Observations taken at 7 a. m., 2 p. m., and 8 p. m.

v Observations taken at 6 a. m. to 8 a. m. and 10 p. m. to 11 p. m.

w Mean obtained from daily maximum and minimum.

x Observations taken at 9.30 a. m. and 3.30 p. m.

y Observations taken at 6 a. m., noon, and 6 p. m. For the last 14 days of the month only.

z Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.

Mean at 9 a. m., 67.64; mean at noon, 73.58.

aa Observations taken at 6 a. m., 2 p. m., and 6 p. m.

bb Same temperature on the 30th and 31st.

cc Same temperature on the 18th.

dd Same temperature on the 21st, 22d, and 26th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Fort Simpson (a).....				45.96	10	70	22	655.00	20	29	27	38.00	---
Hamilton.....	63.53	---	62.86	63.19	8	c 80	22	80.00	22	d 48	25	49.00	---
Montreal.....	55.48	64.13	57.65	59.09	8	82	8	72.73	23	40	24	43.33	5.7
Moose Factory (e).....	41.32	55.30	46.23	47.62	---	75	---	---	---	26	---	---	---
Red River Settlement (f).....	46.56	59.39	---	---	27	70	---	?	12	g 34	---	?	---
St. John's.....	55.53	59.93	53.17	56.21	5	72	12	66.33	16	h 42	27	46.00	5.0
St. Martin (i).....	51.75	69.85	56.15	59.25	8	89	10	76.07	23	31	22	42.27	---
Stanbridge.....	53.83	64.90	54.63	57.79	8	83	8	75.67	25	33	25	41.00	5.2
Toronto (i).....	52.60	65.95	57.15	58.57	8	79	22	70.98	23	37	22	46.32	4.1
Windsor.....	51.96	66.17	55.10	57.74	8	87	8	74.00	26	34	23	42.30	5.1
Wolfville.....	55.58	67.37	54.95	59.27	8	84	4	71.00	30	38	23	44.33	5.0
MAINE—													
Cornish, [Guptill].....	55.06	66.76	57.56	59.79	22	84	22	77.33	23	38	23	44.00	3.8
Cornish, [West].....	53.83	65.93	56.57	58.78	22	84	22	75.67	24	37	24	44.00	3.0
Dexter.....	---	---	---	---	---	---	---	---	---	---	---	---	4.4
Gardiner.....	54.53	67.44	56.23	59.40	22	85	22	75.17	26	34	28	43.67	4.7
Perry.....	58.62	63.43	52.38	58.14	8	85	8	73.50	23	j 37	25	42.67	3.8
Portland.....	55.62	67.93	58.40	60.65	8	87	9	76.67	23	40	23	47.50	3.9
Steuben.....	52.96	62.73	52.93	56.21	22	84	22	72.67	25	37	23	42.33	4.1
NEW HAMPSHIRE—													
Concord.....	54.34	69.53	55.10	59.99	22	90	9	75.67	29	36	23	k 47.33	3.7
Shelburne.....	51.50	70.43	54.04	58.66	9	94	22	80.67	25	l 34	24	43.00	4.6
Stratford.....	51.30	64.33	52.17	55.93	22	84	10	72.67	25	b 32	23	39.33	4.4
West Enfield.....	53.23	65.73	54.70	57.92	22	84	9	76.00	23	34	23	m 40.33	3.5
VERMONT—													
Brandon.....	53.61	68.30	56.65	59.52	10	87	10	76.67	25	30	25	41.33	3.0
Burlington.....	54.52	64.72	56.88	58.70	10	82	10	75.67	25	35	22	41.80	4.3
Craftsbury.....	51.20	64.17	54.13	56.50	8	82	22	n 74.00	25	b 33	22	39.00	3.7
Rupert.....	56.27	72.33	65.80	64.80	1	n 86	10	80.00	23	36	23	41.33	3.1
St. Johnsbury.....	48.13	66.33	51.97	55.47	22	87	22	72.00	23	26	23	38.33	4.9
MASSACHUSETTS—													
Amherst.....	54.38	68.15	59.70	60.74	9	85	10	74.80	29	37	23	46.60	3.8
Bridgewater (o).....	57.03	67.70	59.17	61.30	9	83	22	73.67	26	36	23	46.00	2.9
Cambridge.....	56.33	69.30	58.93	61.85	9	84	22	74.67	27	39	23	47.00	3.1
Florida.....	---	---	---	---	---	---	---	---	---	---	---	---	4.6
Lawrence.....	52.60	70.07	58.90	60.52	22	87	9	74.67	27	34	23	46.33	3.5
Mendon.....	55.56	69.80	58.33	61.23	9	86	22	74.00	23	35	23	42.67	2.9
Nantucket.....	62.58	69.03	61.43	64.35	8	78	11	72.83	25	48	25	51.67	2.4
New Bedford.....	58.30	68.70	59.00	62.00	10	83	10	73.50	23	40	23	46.67	3.5
Newburyport.....	57.35	68.76	58.34	61.48	9	70	---	?	23	40	---	?	?
Westfield.....	52.23	68.73	57.13	59.36	9	85	9	70.33	29	34	23	45.00	4.0
Williamstown.....	55.72	66.02	54.81	58.85	8	83	10	73.33	26	38	23	44.33	4.1
Worcester.....	56.14	68.06	57.31	60.50	9	85	9	74.33	29	41	23	46.67	3.2
RHODE ISLAND—													
Providence (p).....	56.60	70.60	59.30	62.17	9	85	10	73.67	23	30	23	46.33	2.4
CONNECTICUT—													
Columbia.....	59.57	69.47	56.37	61.80	9	88	10	74.33	28	38	24	48.00	3.0
Middletown.....	54.67	73.09	57.58	61.78	9	90	10	74.70	23	34	23	44.80	2.5
Pomfret.....	54.68	64.79	56.43	58.63	22	79	10	69.00	23	37	23	43.70	3.4
Saybrook.....	59.73	70.90	61.60	64.08	11	81	10	q 74.00	23	b 43	23	50.67	2.7
Wallingford.....	54.08	70.10	58.18	60.79	22	84	10	73.33	26	35	23	45.83	2.8
NEW YORK—													
Bellport.....	59.97	67.80	60.67	62.81	10	77	10	71.33	23	44	23	44.67	2.6
Buffalo (r).....	61.40	66.90	62.20	63.50	7	s 79	8	76.33	23	48	22	51.33	2.9

a Register thermometer. Very few observations before the 19th.

b Same temperature on the 26th.

c Same temperature on the 9th and 10.

d Same temperature on the 25th and 26th.

e Observations taken at sunrise, 2 p. m., and 10 p. m.

f Incomplete.

g Same temperature on the 16th.

h Same temperature on the 27th.

i Observations taken at 6 a. m., 2 p. m., and 10 p. m.

j Same temperature on the 25th.

k Same temperature on the 24th and 28th.

l Same temperature on the 26th and 29th.

m Same temperature on the 24th.

n Same temperature on the 10th.

o Observations taken at 7 a. m., 2 p. m., and 7 p. m.

p Observations taken at 6 a. m., 1 p. m., and 10 p. m.

q Same temperature on the 3d.

r Observations taken at 8 a. m., 2 p. m., and 9 p. m.

s Same temperature on the 8th and 9th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	□	°	°		°		°		°	■		
Canton (a) -----	61.18	72.12	61.35	64.88	■	86	10	77.67	18	42	17	54.67	5.4
Clinton -----	57.40	72.80	58.17	62.79	9	94	10	81.00	23	33	22	43.33	4.2
Fishkill Landing -----	57.07	70.40	61.87	63.11	10	84	10	75.00	23	38	23	47.33	3.0
Flatbush -----	58.68	70.55	59.85	63.03	9	82	10	73.00	23	42	23	46.90	2.8
Fort Edward -----	55.07	68.87	58.60	60.85	10	86	10	76.67	25	36	25	45.00	3.5
Houseville -----	53.56	67.70	56.26	59.17	8	b 86	9	77.33	23	c 37	22	40.00	4.8
Nichols -----	53.43	72.67	52.74	59.61	9	92	10	79.33	22	c 34	22	c 44.33	3.9
Rochester -----	57.03	69.40	61.43	62.62	8	89	9	d 80.67	23	e 41	24	48.33	4.5
Sag Harbor -----	60.67	74.61	61.57	65.62	7	f 86	3	g 74.67	26	42	23	51.33	2.9
Waterford -----	56.68	71.18	61.05	62.64	9	89	10	79.00	25	37	25	46.00	4.1
NEW JERSEY--													
Bloomfield -----	59.18	73.74	58.33	63.75	21	89	21	77.83	23	36	23	45.67	2.2
Freehold -----	59.86	71.67	60.59	64.04	5	99	5	77.00	23	h 44	23	49.67	---
Lambertville -----	55.34	76.41	59.30	63.68	9	89.5	---	---	28	34.5	---	---	---
Newark (i) -----	---	---	---	62.94	10	82	4	73.25	23	39	23	47.75	---
PENNSYLVANIA--													
Bedford -----	52.96	75.15	61.61	63.24	10	92	10	77.33	23	38	23	49.67	3.6
Berwick -----	57.00	72.57	61.47	63.68	9	89	10	78.33	23	39	23	49.00	2.3
Cannonsburg -----	56.37	75.10	65.20	65.66	8	88	9	76.00	23	42	17	55.67	3.2
Carlisle -----	57.20	70.24	62.31	63.25	10	83	10	77.20	23	42	23	48.80	2.6
Chambersburg -----	61.53	74.97	62.40	66.30	10	90	9	83.33	23	42	23	50.00	3.0
Chromedale -----	59.96	73.89	61.52	65.12	8	88	10	77.33	23	j 46	23	52.00	?
Easton -----	56.62	75.18	59.23	63.68	10	k 90	10	76.67	29	39½	23	51.00	2.5
Fleming -----	54.60	69.81	57.96	60.79	8	l 85	10	74.00	23	40	22	c 49.33	3.8
Gettysburg -----	55.77	73.18	61.37	63.44	10	86	10	76.33	23	40	23	49.33	2.6
Harrisburg, [Heisely] -----	61.10	74.62	67.97	67.90	10	90	10	82.00	26	m 48	23	56.00	2.4
Harrisburg, [Hickok] -----	56.20	72.27	62.98	63.82	10	87	10	77.67	23	40	23	48.17	2.9
Lewisburg -----	54.37	70.72	59.14	61.41	10	85	10	78.53	23	37	23	46.03	4.1
Meadville -----	53.73	72.53	56.37	62.88	8	88	9	74.67	26	38	25	48.33	3.6
Morrisville -----	57.50	73.73	60.73	63.98	10	86	3	75.00	23	42	23	49.67	1.9
Mount Joy -----	59.52	77.95	64.62	67.36	9	92	10	81.50	26	41	23	54.00	2.2
Murrysville -----	52.39	73.04	57.55	60.99	9	d 85	10	76.33	23	35	23	47.67	3.0
Norristown -----	57.77	71.39	61.90	63.69	3	d 85	3	77.70	29	41	23	48.00	2.7
North Whitehall (n) -----	52.03	72.10	61.63	62.92	10	85	3	76.00	23	o 34	23	45.67	?
Paradise -----	---	---	---	71.00	---	---	---	---	---	---	---	---	---
Philadelphia -----	61.32	76.03	66.37	67.90	9	d 87	8	79.80	23	44	23	53.50	3.4
Pittsburg, [Martin] -----	56.60	72.03	62.16	63.60	9	d 86	10	78.00	23	41	23	51.00	3.6
Pittsburg, [Wilson] -----	59.03	75.77	64.80	66.53	8	91	9	80.33	23	40	23	54.33	---
Pocopson -----	59.33	74.67	60.73	64.91	9	87	3	77.33	25	p 46	23	51.33	2.8
Shamokin (q) -----	45.83	70.63	60.00	58.81	9	86	10	74.00	26	21	23	40.67	3.2
Somerset -----	53.90	71.73	58.80	61.48	9	d 85	9	74.33	23	36	23	49.33	4.3
Tarentum -----	54.10	74.32	57.60	62.01	9	89	10	76.67	23	36	22	50.33	3.2
Westtown -----	57.36	72.38	59.87	63.20	10	84	3	76.83	24	41	23	46.63	2.7
DELAWARE--													
Georgetown (r) -----	66.37	77.83	71.07	71.76	9	d 92	9	d 84.00	23	50	23	59.33	---
MARYLAND--													
Annapolis -----	61.10	73.40	68.30	67.60	3	85	3	80.67	23	47	23	53.33	2.4
Baltimore -----	59.97	72.82	65.42	66.07	9	d 85	3	78.50	23	45	23	52.16	3.3
Bladensburg (s) -----	56.96	76.11	59.12	64.06	3	88	---	?	28	41	---	?	3.4
Chestertown -----	63.39	74.15	62.34	66.63	3	86	3	78.67	28	47	---	?	2.6
Frederick -----	62.48	70.89	58.11	63.83	10	84	10	76.17	28	43	28	52.00	2.8
Leitersburg -----	56.60	73.20	60.83	63.54	10	87	10	77.67	23	m 40	23	47.67	2.7
Sykesville -----	59.37	71.33	61.97	64.22	21	84	3	74.67	23	45	23	50.67	3.2
DISTRICT OF COLUMBIA--													
Washington -----	60.27	73.30	65.93	66.50	3	d 85	3	78.67	27	46	23	53.00	2.8

a For the first 18 days of the month.

b Same temperature on the 9th.

c Same temperature on the 23d.

d Same temperature on the 10th.

e Same temperature on the 24th.

f Same temperature on the 8th.

g Same temperature on the 8th and 10th.

h Same temperature on the 25th.

i Observations taken at 7 a. m. and 6 p. m.

j Same temperature on the 26th and 29th.

k Same temperature on the 21st.

l Same temperature on the 9th and 10th.

m Same temperature on the 27th.

n Observations taken at sunrise, noon, and sunset.

o Same temperature on the 26th.

p Same temperature on the 28th.

q Observations taken in the night; mean, 38.30.

r Observations taken at 8 a. m., 1 p. m., and 6 p. m.

s Incomplete.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
VIRGINIA—	°	°	■	°		°		°	■		°		
Crichton's Store (a).....	63.97	78.30	74.14	72.14	10	b 89	10	80.67	28	50	—	?	3.5
Hartwood.....	64.00	76.70	64.73	68.48	21	92	10	79.00	23	c 48	24	54.00	—
Holliday's Cove.....	54.67	79.23	57.37	63.76	■	93	10	78.33	28	38	26	51.00	—
Lewinsville.....	60.47	76.23	64.80	67.17	10	90	10	78.16	23	c 45	23	53.00	2.9
Lewisburg.....	54.77	73.07	60.07	62.64	9	84	7	72.67	22	40	27	52.67	3.0
Meadow Dale.....	47.50	69.20	61.87	59.52	22	82	11	70.00	24	30	24	48.00	—
Montross.....	62.57	76.90	65.57	68.35	3	d 88	2	79.67	29	46	23	51.67	3.1
Poplar Grove.....	57.20	79.10	60.70	65.67	8	93	10	75.33	28	43	23	55.00	3.5
Portsmouth.....	64.80	78.43	65.00	69.41	11	96	4	82.00	23	44	28	58.00	2.2
Rougemont.....	61.67	76.75	67.53	68.65	10	90	10	79.33	23	45	25	54.00	3.5
Smithfield.....	60.77	74.39	66.97	67.35	3	86	3	79.90	24	44	23	54.20	3.7
Stribling Springs.....	52.80	72.88	51.48	59.05	21	87	10	73.67	27	e 30	27	41.33	2.9
Wirt Court House.....	56.10	76.13	60.97	64.40	7	f 88	10	76.00	18	c 44	23	g 56.00	2.8
NORTH CAROLINA—													
Chapel Hill.....	61.20	77.37	64.73	67.77	2	93	2	80.33	23	h 46	22	i 54.67	3.7
Davidson College (j).....	56.81	72.09	63.83	64.24	22	80	—	?	28	48	—	?	3.5
Gaston.....	61.73	76.30	62.37	66.80	3	92	3	78.33	23	44	23	51.00	—
Murfreesborough.....	63.00	76.57	64.36	67.98	3	92	4	79.67	23	k 50	23	54.00	2.9
SOUTH CAROLINA—													
Aiken.....	63.24	77.81	65.80	68.95	■	92	—	?	28	50	28	57.00	4.5
All Saints.....	68.97	76.90	73.17	73.01	4	85	10	80.33	28	54	28	62.00	4.3
Charleston, [Dawson].....	70.33	77.46	73.43	73.74	—	87	—	—	—	57	—	—	—
Charleston, [Johnson].....	70.03	77.47	73.50	73.67	3	l 87	4	82.33	28	57	28	63.33	—
Columbia.....	65.93	81.90	71.20	73.01	3	97	2	82.33	29	49	28	61.67	3.7
St. John's.....	64.28	77.37	66.43	69.36	3	94	—	?	28	50	28	57.00	4.1
GEORGIA—													
Athens.....	62.98	75.87	66.35	68.40	3	86	7	76.10	29	51	28	58.27	4.2
Augusta.....	69.99	80.47	74.62	75.03	3	92	3	83.33	29	56	28	61.17	3.7
Savannah.....	68.43	77.56	72.02	72.67	3	90	4	82.47	29	56	28	62.77	5.0
Sparta.....	63.60	80.23	68.63	70.82	3	92	3	m 78.33	29	48	28	60.67	4.2
Whitemarsh Island.....	69.90	77.37	71.80	73.02	3	l 87	3	n 81.33	28	58	28	63.67	5.1
FLORIDA—													
Alachua County (o).....	70.30	79.53	73.33	74.39	4	87	8	79.00	29	59	28	67.00	4.5
Alligator.....	71.00	82.67	73.63	75.77	7	90	3	n 81.33	29	58	28	68.33	4.7
Atsena.....	74.30	80.40	76.40	77.03	3	p 86	3	82.33	29	62	30	70.33	3.7
Belair.....	69.17	84.30	69.70	74.39	4	p 90	5	83.67	29	56	27	67.33	—
Jacksonville.....	73.50	78.93	74.17	75.53	3	n 86	■	81.00	28	k 64	28	67.67	5.0
Micanopy.....	72.41	83.69	74.64	76.91	3	n 91	4	82.00	29	60	—	?	4.8
St. Augustine.....	77.47	81.30	77.30	78.69	16	86	6	q 82.67	25	72	28	74.67	5.7
Salt Ponds.....	80.13	85.40	—	82.76	3	90	3	86.50	29	76	29	78.50	4.8
ALABAMA—													
Carlowlville.....	68.20	88.27	71.40	72.62	7	93	7	80.67	16	54	18	64.67	2.6
Greene Springs.....	68.10	84.28	69.33	73.90	6	94	10	82.33	29	53	17	63.67	1.9
Selma.....	66.90	83.57	68.40	72.96	2	r 93	7	82.00	17	s 53	29	63.67	3.0
MISSISSIPPI—													
Columbus.....	64.93	84.17	70.51	73.20	6	92	7	81.47	18	55	17	65.57	2.5
Natchez.....	68.60	82.50	77.77	76.29	3	f 88	10	81.33	13	t 60	17	71.33	2.4
Paulding.....	66.79	87.26	76.86	76.97	2	95	2	85.50	17	63	—	?	2.6
LOUISIANA—													
Black River.....	68.17	84.83	74.97	75.99	2	r 90	2	82.33	13	u 62	12	71.00	2.1
New Orleans (v).....	80.13	83.23	84.37	82.58	2	92	2	89.00	18	w 74	18	77.00	—
TEXAS—													
Austin, [Palm].....	70.20	86.47	73.63	76.77	1	r 97	3	87.00	24	61	21	71.33	3.0

a Incomplete. Observations taken at 7½ a. m., noon, and 5½ p. m.

b Same temperature on the 11th.

c Same temperature on the 27th.

d Same temperature on the 5th.

e Same temperature on the 28th.

f Same temperature on the 10th.

g Same temperature on the 25th and 27th.

h Same temperature on the 27th and 29th.

i Same temperature on the 25th.

j For the last 17 days of the month.

k Same temperature on the 29th.

l Same temperature on the 4th and 5th.

m Same temperature on the 10th and 11th.

n Same temperature on the 4th.

o Observations taken at 6 a. m., 2 p. m., and 9 p. m.

p Same temperature on the 5th.

q Same temperature on the 9th.

r Same temperature on the 3d.

s Same temperature on the 18th.

t Same temperature on the 17th.

u Same temperature on the 20th and 21st.

v Observations taken at 9 a. m., noon, and 3 p. m.

w Same temperature on the 20th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'a temp.	Date.	Temp.	Date.	Mean temp	
TEXAS—Continued.	°	□	°	°		□		°		□		°	
Austin, [Van Nostrand]-----	71.10	86.53	74.63	77.42	2	a 97	1	87.33	20	60	20	70.50	3.2
Goliad-----	71.99	87.00	75.80	78.23	1	b 93	2	85.00	23	62	21	72.67	3.2
Lorissa-----	68.93	85.89	75.84	76.89	3	93	1	80.67	20	c 62	20	d 72.33	1.9
New Braunfels-----	69.67	88.23	78.27	78.72	2	e 95	3	83.67	22	59	22	73.67	1.3
Union Hill-----	71.13	87.30	75.73	78.05	2	a 96	2	a 84.67	15	f 65	20	72.67	4.1
TENNESSEE—													
Glenwood-----	60.57	77.05	65.04	67.55	30	86	30	76.17	17	48	17	57.03	2.7
Memphis-----	66.20	79.70	69.73	71.88	2	90	2	81.67	18	g 58	17	h 65.67	2.2
KENTUCKY—													
Bardstown-----	60.50	76.97	65.38	67.62	7	89	8	78.33	17	46	17	56.09	2.8
Louisville (i)-----	60.77	78.67	67.60	69.01	20	89	8	78.33	17	48	17	59.67	2.6
Paris-----	56.38	75.07	62.37	64.61	7	j 85	8	75.33	23	42	23	54.00	3.2
Springdale (k)-----	53.07	79.83	71.25	68.05	20	90	8	78.33	24	37	17	57.00	2.4
OHIO—													
Bellefontaine-----	58.94	74.83	61.62	65.13	20	88	9	77.80	23	44	17	51.60	3.3
Bowling Green-----	53.91	75.14	59.76	62.94	8	l 87	8	76.30	23	38	26	52.00	2.7
Cincinnati, [Harper]-----	64.03	79.60	70.73	71.45	20	89	8	m 81.00	23	g 52	17	61.67	2.5
Cleveland-----	58.75	72.57	60.03	63.78	7	n 87	11	78.67	26	42	26	50.67	3.7
Cleveland, (near)-----				67.00									
Collingwood-----	58.73	71.57	59.73	63.34	8	88	8	81.33	22	40	22	48.67	---
Dayton-----	56.22	77.45	60.57	64.85	20	o 89	30	73.02	27	44	17	53.98	3.3
Edinburg-----	58.53	71.50	58.63	62.89	8	l 84	9	76.67	24	42	25	51.00	3.1
Hillsborough-----	58.18	71.77	63.32	64.42	30	82	8	m 74.70	26	46	23	53.67	2.5
Hiram-----	58.27	71.13	59.87	63.09	7	86	8	76.67	25	47	25	51.67	3.7
Jackson, [Monroe county]-----	58.50	77.13	59.62	65.08	11	89		?	27	45		?	2.6
Jefferson-----	77.57	81.60	79.23	79.47	4	p 86	11	q 84.67	2	r 74	26	74.67	2.8
Lancaster-----	58.24	74.26	61.47	64.66	8	86	8	75.87	23	44	23	53.20	2.5
Madison, [Atkins]-----	64.04	72.78	63.04	66.62	7	j 87	25	?	25	s 48	25	53.33	3.0
Madison, [King]-----	58.60	71.83	56.83	62.42	9	88	9	77.33	25	40	25	46.67	3.6
Medina-----	58.13	70.93	60.23	63.10	8	l 84	9	74.33	22	g 46	22	h 52.00	3.5
New Lisbon-----	57.66	78.73	59.63	65.34	9	94	9	82.33	23	t 36	22	h 51.33	2.0
Northwood-----													2.6
Ripley (u)-----	58.39		66.90	62.64		?		?		?		?	4.6
Savannah-----	56.33	75.97	58.83	63.71	8	v 90	8	79.33	25	35	25	49.33	3.9
Urbana-----	56.22	78.07	59.63	64.64	20	o 90	11	76.67	23	38	17	52.00	2.6
Welchfield-----	58.23	73.20	57.23	62.89	8	88	8	79.33	26	43	26	50.33	2.1
Westerville-----	57.00	75.05	61.32	64.46	8	l 88	8	78.00	23	w 44	26	54.00	3.1
Windham-----	54.70	71.80	59.77	62.09	8	85	8	73.33	26	x 40	26	52.00	---
MICHIGAN—													
Battle Creek-----	58.40	72.93	61.23	64.19	7	j 86	8	77.33	25	42	25	50.67	2.1
Cooper-----	59.20	68.27	57.90	61.79	15	y 74	8	67.33	2	z 50	4	53.33	1.4
Detroit-----	61.50	75.10	59.96	65.52	7	aa 85	20	75.67	26	44	26	55.00	3.7
Fort Gratiot (bb)-----	43.90	57.30	52.80	51.08	18	75			22	31			
Grand Rapids, [Streng]-----	53.16	71.57	57.76	60.83	7	89	20	76.67	25	37	25	47.33	4.7
Marquette-----	52.43	61.83	51.81	55.36	19	83	7	68.60	24	34	24	43.30	5.6
New Buffalo (cc)-----	59.00	70.86	58.37	62.74	8	88	8	77.67	22	42	25	49.00	4.6
Ottawa Point (dd)-----	54.35	62.60	61.30	58.75	20	79	20	71.25	25	45	23	ee 51.75	4.9
Port Huron-----	57.50	73.35	61.05	63.97	20	90	8	78.33	23	41	25	50.67	4.4
Thunder Bay Island (ff)-----	54.53	61.71	58.43	58.47	20	gg 73	20	68.00	23	43	23	ee 49.00	5.7

- a Same temperature on the 3d.  
 b Same temperature on the 2d and 3d.  
 c Same temperature on the 21st.  
 d Same temperature on the 4th.  
 e Same temperature on the 3d and 8th.  
 f Same temperature on the 23d and 24th.  
 g Same temperature on the 27th.  
 h Same temperature on the 25th.  
 i Observations taken at 7 a. m., 3 p. m., and 9 p. m.  
 j Same temperature on the 8th.  
 k Observations taken at 5 a. m., 2 p. m., and 6 p. m.  
 l Same temperature on the 20th.  
 m Same temperature on the 9th.  
 n Same temperature on the 8th, 9th, and 20th.  
 o Same temperature on the 30th.  
 p Same temperature on the 5th, 11th, 22d, and 23d.  
 q Same temperature on the 24th.  
 r Same temperature on the 10th, 17th, and 26th.

- s Same temperature on the 26th.  
 t Same temperature on the 26th and 28th.  
 u Incomplete.  
 v Same temperature on the 20th and 30th.  
 w Same temperature on the 28th.  
 x Same temperature on the 27th and 28th.  
 y Same temperature on the 19th and 20th.  
 z Same temperature on the 3d and 4th.  
 aa Same temperature on the 8th and 20th.  
 bb Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 50.40.  
 cc Observations taken at 7 a. m., 1 p. m., and 9 p. m.  
 dd Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 56.75.  
 ee Same temperature on the 24th.  
 ff Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 59.23.  
 gg Same temperature on the 25th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—	°	°	°	°		□		°		□		□	
Cannelton .....	60.99	75.32	64.09	66.80	8	86	8	a76.63	23	48	17	56.73	1.6
Evansville .....	65.23	75.43	70.99	70.55	8	85	7	81.33	27	55	27	61.75	2.5
Logansport.....	59.40	77.60	65.00	67.33	7	b90	8	80.00	17	44	17	56.67	3.4
Madison .....	57.70	73.20	61.47	64.12	7	c84	8	76.00	17	44	17	51.67	2.7
Michigan City .....	58.28	71.88	61.32	63.83	7	88	7	78.00	26	44	25	49.67	3.6
New Harmony.....	62.37	77.87	66.27	68.84	7	d88	8	80.67	26	50	17	59.00	2.5
Notre Dame.....	61.28	69.52	64.35	65.05	7	85	9	79.00	25	48	22	52.67	4.4
Richmond, [Austin] (e) .....	58.40	75.27	-----	66.83	8	b86	-----	?	17	f46	-----	?	4.1
Richmond, [Moore] (g) .....	52.27	74.33	60.60	62.40	20	87	8	74.00	23	h37	17	49.67	-----
ILLINOIS—													
Athens .....	61.10	78.46	60.86	66.81	8	99	6	79.67	16	h44	16	53.00	3.4
Augusta .....	58.10	74.16	62.80	65.02	8	i86	7	77.33	26	44	25	55.33	2.3
Aurora .....	57.77	73.03	58.93	63.24	7	86	7	76.00	25	46	25	52.33	3.8
Batavia, [Capon] .....	56.83	72.33	58.37	62.51	7	87	7	75.67	12	j44	25	49.67	4.4
Batavia, [Mead] .....	56.76	75.00	58.43	63.40	8	92	8	88.00	13	41	25	51.00	3.9
Brighton .....	55.13	76.17	67.62	66.31	30	86	8	74.67	27	40	26	k60.67	1.5
Carthage (l) .....	62.47	75.93	65.17	67.86	20	90	20	77.67	3	45	25	56.67	-----
Edgington .....	57.00	75.17	61.93	64.70	7	m87	7	78.00	26	42	16	52.33	3.9
Elgin .....	56.10	72.17	59.30	62.52	7	87	7	76.33	12	n45	12	52.33	3.9
Jacksonville (o) .....	59.43	77.63	67.00	68.02	8	89	7	80.11	13	p45	16	54.00	-----
Manchester (q) .....	59.57	76.37	63.50	66.48	7	88	7	78.00	13	r48	25	56.00	3.0
Marengo .....	60.40	72.60	59.93	64.31	6	s86	7	78.00	16	44	16	48.00	4.3
Ottawa .....	57.20	71.77	60.65	63.20	7	87	7	76.33	25	42	25	50.67	4.0
Pekin .....	57.60	74.36	61.40	64.45	7	86	8	76.33	17	42	16	53.00	3.0
Peoria .....	61.43	76.65	64.70	67.59	7	90	7	80.58	16	h48	16	53.75	3.0
Riley .....	55.50	71.80	56.50	61.27	7	85	7	75.33	12	36	-----	?	3.2
Upper Alton .....	59.37	76.07	64.33	66.59	7	t84	7	76.67	17	44	26	56.67	1.3
Waynesville.....	55.27	75.18	67.50	65.98	7	88	7	77.67	17	41	16	54.67	3.3
West Salem .....	61.93	81.67	64.87	69.49	8	u91	7	80.67	26	50	16	58.67	2.6
West Urbana .....	62.33	74.47	62.13	66.31	7	88	8	77.67	17	49	25	58.67	3.4
Wheaton .....	57.50	70.99	59.76	62.75	7	86	7	77.27	25	47	25	52.00	4.5
Winnebago .....	56.95	72.40	59.93	63.09	8	87	7	78.83	25	43	16	51.83	4.0
MISSOURI—													
St. Louis .....	64.80	81.10	67.90	71.27	29	93	7	80.50	16	54	16	59.33	2.2
WISCONSIN—													
Appleton .....	55.43	69.07	57.23	60.58	7	v82	7	73.33	25	38	12	49.00	4.8
Bay City .....	50.67	61.30	51.80	54.59	19	82	6	70.00	24	38	24	44.67	3.9
Bayfield .....	51.73	58.87	51.70	54.10	19	73	8	b65.00	24	39	24	43.67	5.7
Beloit .....	56.46	72.93	58.53	62.64	7	89	8	75.67	12	40	12	51.00	2.9
Green Bay .....	59.03	70.37	56.53	61.98	7	91	7	79.00	24	42	24	52.00	3.8
Janesville.....	56.70	71.97	60.00	62.89	7	88	7	77.67	25	44	25	53.33	4.6
Kenosha .....	57.28	67.54	59.14	61.32	7	88	-----	?	16	47	16	53.00	3.4
Lind .....													4.9
Manitowoc .....	55.03	65.77	56.33	59.04	20	87	20	76.33	25	40	25	47.33	5.5
Milwaukee, [Pomeroy] .....	59.40	71.33	59.83	63.52	5	87	8	75.67	26	44	25	53.33	5.6
Milwaukee, [Winkler] .....	56.75	69.57	58.67	61.66	7	89	7	78.33	14	w45	22	50.50	3.4
New Danemora (x) .....	49.18	68.97	55.96	58.04									
Platteville .....	58.83	75.10	61.63	65.18	7	92	7	80.67	12	y48	16	55.33	4.2
Waukesha .....	56.60	71.60	59.73	62.64	7	90	7	79.33	25	43	16	49.67	4.2
IOWA—													
Bellevue .....	56.01	75.30	58.93	63.41	29	90	7	77.00	17	40	25	43.33	3.8
Border Plains.....	58.83	74.07	60.40	64.43	19	90	19	78.00	15	z50	15	53.67	3.6

- a Same temperature on the 9th.  
 b Same temperature on the 20th.  
 c Same temperature on the 8th and 80th.  
 d Same temperature on the 8th.  
 e Observations taken at 6 a. m. and 1 p. m.  
 f Same temperature on the 23d.  
 g Observations taken at sunrise, 2 p. m., and 9 p. m.  
 h Same temperature on the 17th.  
 i Same temperature on the 7th.  
 j Same temperature on the 25th.  
 k Same temperature on the 27th.  
 l Observations taken at 7 a. m., 1 p. m., and 7 p. m.  
 m Same temperature on the 20th and 29th.

- n Same temperature on the 13th.  
 o Observations taken at morning, noon, and sunset.  
 p Same temperature on the 26th.  
 q Observations taken at 7 a. m., 1 p. m., and 9 p. m.  
 r Same temperature on the 16th.  
 s Same temperature on the 7th, 19th, and 20th.  
 t Same temperature on the 29th and 30th.  
 u Same temperature on the 30th.  
 v Same temperature on the 19th and 20th.  
 w Same temperature on the 22d and 23d.  
 x Imperfect.  
 y Same temperature on the 16th and 26th.  
 z Same temperature on the 24th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Iowa—Continued.	°	°	°	°		°		°		°		°	
Dubuque .....	58.80	72.37	62.10	64.42	7	88	6	78.67	25	44	25	54.00	3.4
Fairfield .....	61.07	73.82	60.66	65.18	6	a 87	7	76.00	12	b 50	25	56.00	3.7
Fort Madison (c) .....	57.30	74.80	63.76	65.29	7	90	7	79.67	25	42	16	53.00	2.5
Franklin .....	58.23	72.70	60.33	63.75	6	88	6	76.67	12	45	12	53.00	2.9
Iowa City .....	58.43	73.53	59.86	63.94	6	d 88	7	78.33	17	44	17	52.00	2.8
Muscatine .....	55.77	72.97	61.67	63.47	20	87	7	76.33	12	e 42	12	52.00	1.7
Pleasant Plain .....	59.13	73.90	60.13	64.39	7	90	7	78.00	12	f 46	16	52.00	3.1
Rossville .....	54.04	68.70	56.73	59.82	6	85	6	76.87	12	40	16	50.13	3.9
Sioux City .....	57.72	69.46	59.35	62.18	19	87	—	?	15	47	—	?	?
MINNESOTA—													
Burlington .....	48.10	62.70	62.10	57.63	28	78	2	65.00	11	31	17	38.67	—
Forest City .....	51.50	64.43	52.87	56.27	19	84	19	72.00	22	40	11	47.00	2.3
Hazlewood .....	53.07	64.22	56.68	57.99	19	77	19	70.33	16	34	16	49.67	4.5
Princeton .....	53.43	68.73	55.46	59.21	19	88	19	76.00	12	36	11	50.00	3.8
NEBRASKA—													
Bellevue .....	59.90	72.40	61.77	64.69	19	86	6	74.33	12	48	10	57.00	2.4
Brownville .....	61.30	78.37	61.23	66.97	6	96	6	85.67	16	45	24	57.00	2.7
Elkham .....	56.40	74.09	60.40	63.63	6	a 90	6	75.00	16	43	16	55.67	2.7
Omaha .....	57.30	75.47	60.60	64.46	6	91	6	77.67	11	47	10	54.00	2.6
KANSAS—													
Burlingame .....	61.70	79.83	63.37	68.30	18	90	6	76.67	10	g 54	9	57.67	2.4
Lawrence .....	63.27	78.90	66.07	69.41	6	94	6	81.33	17	53	3	60.00	2.8
Leavenworth City, [Berthold] .....													2.7
Leavenworth City, [McCarty] .....	65.45	77.57	65.54	69.52	6	89	6	80.67	10	52	10	57.33	3.5
Manhattan .....	63.27	83.70	65.57	70.85	18	h 94	14	83.67	16	50	10	60.67	3.0
Mapleton .....	61.00	84.00	67.60	70.87	6	i 92	5	82.33	4	j 50	11	60.67	2.1
UTAH—													
Great Salt Lake City (k) .....	54.00	70.00	60.00	62.00	—	—	—	—	—	—	—	—	—
MEXICO—													
Cordova (l) .....	70.67	73.15	70.97	71.81	9	77.72	—	—	30	66.92	—	—	—
Minatitlan (m) .....	74.83	79.88	—	77.35	6	86	6	81.25	22	n 73	24	74.00	—
Mirador (o) .....	66.71	75.13	68.51	70.12	—	—	—	74.35	—	—	—	65.48	—
Vera Cruz (p) .....	80.12	—	80.87	80.50	—	—	—	—	—	—	—	—	—
CALIFORNIA—													
Sacramento .....	62.20	76.10	68.40	68.90	15	87	1	77.00	6	q 55	19	r 65.00	0.9
San Francisco .....	58.73	69.03	58.27	62.01	30	91	30	73.33	14	54	5	57.67	3.0
Marysville .....	66.03	85.50	73.60	75.04	3	97	2	83.67	27	58	5	66.67	2.0
WEST INDIES—													
Centre Sig'l Station, Ber'da(s) .....	—	—	—	78.67	—	—	—	—	—	—	—	—	—
Nassau, Bahamas (t) .....	—	—	—	85.11	—	—	1	u 89.50	—	—	4	76.00	—
Turk's Island, Bahamas (v) .....	81.17	85.03	82.45	82.85	21	88	4	w 83.67	8	80	8	81.67	—
CENTRAL AMERICA—													
Guatemala (x) .....	59.36	71.24	63.32	66.81	?	81.7	—	—	?	56.8	—	—	—
SOUTH AMERICA—													
Catharina Sophia, Surinam (y) .....	75.10	87.10	80.20	80.80	9	91	8	z 83.00	28	73	24	75.33	4.2
EASTERN CONTINENT—													
Jerusalem, Palestine .....	70.63	76.93	72.72	73.43	1	87	1	81.17	30	65	30	68.17	0.9

a Same temperature on the 19th.

b Same temperature on the 13th.

c Observations taken at 6 a. m., noon, and 7 p. m.

d Same temperature on the 7th.

e Same temperature on the 17th and 26th.

f Same temperature on the 16th and 25th.

g Same temperature on the 16th and 17th.

h Same temperature on the 20th and 29th.

i Same temperature on the 18th.

j Same temperature on the 11th.

k Observations taken at 6 and 9 a. m. and 3 and 9 p. m. Mean at 9 a.

m. 64.

l Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 72.45; at 6 p. m., 71.83.

m Observations taken at 7 a. m. and 3 p. m.

n Same temperature on the 24th, 25th, 29th, and 30th.

o Observations taken at 7 a. m., 2 p. m., and 8 p. m.

p Observations taken at 7 a. m. to 9 a. m., and at 9 p. m. to 11 p. m.

q Same temperature on the 27th.

r Same temperature on the 20th.

s Observations taken at noon for 21 days only.

t Mean obtained from daily maximum and minimum.

u Same temperature on the 15th and 16th.

v Observations taken at 6 a. m., noon, and 6 p. m.

w Same temperature on the 5th, 12th, and 22d.

x Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.

Mean at 9 a. m., 68.18; mean at noon, 71.96.

y Observations taken at 6 a. m., 2 p. m., and 6 p. m.

z Same temperature on the 9th.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Fort Simpson (a).....				25.72	1	42	1	39.00	3	4	25	12.50	
Hamilton.....	53.03		52.61	52.82	3	75	3	73.50	8	42	8	42.50	
Montreal.....	43.90	52.33	44.56	46.93	19	70	19	63.00	26	31	25	35.67	5.0
Moose Factory (b).....	31.29	44.13	35.97	37.13		68				15			
St. John's.....	45.00	50.03	44.26	46.43	1	64	1	59.33	29	24	29	25.33	
St. Martin (c).....	38.70	54.71	45.02	46.14	19	71	19	54.13	26	24	25	34.97	
Stanbridge.....	39.74	52.55	42.90	45.06	19	73	18	60.33	26	d 23	26	31.67	5.2
Toronto (c).....	45.05	53.78	47.48	48.77	3	76	19	54.68	26	34	26	39.87	6.0
Windsor.....	41.55	52.58	43.74	45.96	19	70	4	57.00	13	26	29	31.60	5.6
Wolfville.....	44.03	52.33	43.97	46.78	19	70	14	60.17	29	27	29	32.00	5.8
MAINE—													
Cornish, [Guptill].....	44.22	53.45	46.22	47.96	19	e 71	19	64.67	25	f 30	25	35.33	5.1
Cornish, [West].....	43.09	52.83	45.19	47.04	19	e 72	19	62.00	26	28	25	34.67	4.6
Dexter.....													5.4
Gardiner.....	42.40	54.66	46.70	47.92	20	71	20	58.33	29	23	29	35.33	5.8
Perry.....	41.37	49.02	43.08	44.49	14	58	14	56.00	29	25	29	31.33	5.1
Portland.....	44.94	54.90	47.87	49.24	4	68	4	59.33	29	31	25	d 38.50	5.5
Steuben.....	41.32	51.39	44.06	45.59	20	71	20	56.33	29	22	29	31.33	5.6
NEW HAMPSHIRE—													
Shelburne.....	40.52	54.60	43.24	46.12	19	76	4	e 58.33	12	24	25	35.33	5.5
Stratford.....	38.42	50.45	40.32	43.06	19	72	20	55.00	26	20	25	31.33	5.5
West Enfield.....	43.20	52.84	43.77	46.60	3	g 72	19	61.67	26	25	25	32.33	5.3
VERMONT—													
Brandon.....	41.02	55.05	46.19	47.42	19	72	4	61.67	27	23	26	33.33	5.2
Burlington.....	43.63	53.31	47.42	48.12	19	69	19	61.67	26	24	26	33.17	5.2
Craftsbury.....	39.61	50.61	43.52	44.58	19	73	19	60.00	26	23	25	32.00	5.7
Rupert.....	45.77	61.35	55.20	54.10	19	74	19	66.00	24	34	8	44.00	4.9
St. Johnsbury.....	38.84	51.03	42.14	44.00	20	70	4	57.00	28	23	26	33.00	6.0
MASSACHUSETTS—													
Amherst.....	45.58	58.64	50.93	51.72	19	73	4	66.20	26	31	26	40.70	5.0
Bridgewater (h).....	47.07	60.20	51.58	52.95	4	80	4	70.33	26	31	26	39.33	4.9
Cambridge.....	47.81	59.81	51.58	53.07	4	g 75	4	69.00	26	30	25	38.33	4.8
Florida.....													6.0
Lawrence.....	45.45	60.39	50.06	51.97	19	86	4	67.00	29	30	26	40.00	5.2
Mendon.....	47.71	60.13	50.26	52.70	4	75	4	68.33	26	32	25	39.33	5.1
Nantucket.....	54.37	59.52	54.61	56.17	4	72	4	65.83	26	43	25	45.33	4.0
New Bedford.....	50.10	60.40	51.80	54.10	4	76	4	69.33	26	32	26	39.67	5.1
Richmond.....	40.26	60.00	49.74	50.00	20	76	4	64.33	26	22	26	36.67	5.3
Westfield.....	43.39	58.20	48.10	49.90	18	72	4	64.67	26	28	26	36.33	4.9
Williamstown.....	44.03	53.97	46.77	48.26	3	71	3	61.67	27	22	27	32.33	6.1
Worcester.....	47.43	60.07	52.60	53.37	19	75	4	67.33	26	33	25	39.17	5.2
RHODE ISLAND—													
Providence (i).....	49.00	61.90	51.60	54.17	4	82	4	67.33	26	33	25	40.00	4.3
CONNECTICUT—													
Columbia.....	48.84	61.51	49.16	53.17	20	84	4	66.67	25	32	25	33.33	4.4
Middletown.....	45.68	63.71	49.93	53.11	4	84	4	70.60	26	26	26	37.80	4.6
New London.....	49.26	60.50	50.03	53.26	4	81	4	73.33	26	34	26	40.00	4.8
Pomfret.....	45.71	58.06	49.02	50.93	4	71	4	65.00	26	30	8	42.50	4.9
Saybrook.....	51.24	67.23	52.46	56.98	4	76	4	68.67	25	34	25	41.00	4.5
Wallingford.....	45.56	62.06	49.86	52.49	4	84	4	71.17	26	29	26	38.33	4.1
NEW YORK—													
Bellport.....	51.08	60.11	52.21	54.47	4	74	4	66.67	26	34	26	38.33	4.7
Buffalo (j).....	51.58	56.84	52.40	53.61	3	71	3	69.00	26	39	8	44.00	5.5
Clinton.....	46.51	60.63	48.22	51.80	3	k 80	3	69.67	25	27	25	36.33	5.5
Fishkill Landing.....	48.84	61.20	53.50	54.51	4	76	4	69.67	26	32	26	38.67	4.0
Flatbush.....	50.33	62.21	53.80	55.45	4	84	4	73.90	26	34	26	41.70	4.9
Fort Edward.....	44.10	56.90	48.45	49.82	19	70	4	63.67	26	4 30	26	37.67	5.3

a Register thermometer; observations very much interrupted after the 11th.

b Observations taken at sunrise, 2 p. m., and 10 p. m.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Same temperature on the 29th.

e Same temperature on the 30th.

f Same temperature on the 26th and 29th.

g Same temperature on the 19th.

h Observations taken at 7 a. m., 2 p. m., and 7 p. m.

i Observations taken at 6 a. m., 1 p. m., and 10 p. m.

j Observations taken at 8 a. m., 2 p. m., and 9 p. m.

k Same temperature on the 18th.

l Same temperature on the 27th and 28th.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°			
Houseville .....	43.83	56.96	46.45	49.08	3	76	3	65.67	26	25	26	36.00	5.9
Nichols .....	45.00	62.55	47.71	51.75	3	a 79	3	67.67	27	23	26	36.00	5.3
Rochester .....	46.51	56.00	50.13	50.88	3	78	3	70.00	14	26	26	37.33	5.9
Sag Harbor .....	52.00	65.33	55.00	57.44	4	87	4	74.00	27	38	25	45.33	4.6
Waterford .....	45.40	59.13	49.92	51.52	19	73	4	63.67	26	28	26	37.00	5.0
NEW JERSEY—													
Freehold .....	48.23	65.55			4	89	4	78.50	26	32	26	43.00	---
Lambertville .....	47.78	65.71	52.34	55.28	4	88.6			26	25.8			---
Newark (b) .....				55.11	4	83	4	75.00	27	35	26	42.62	---
PENNSYLVANIA—													
Bedford .....	46.54	65.61	54.42	55.52	4	83	4	76.00	28	24	27	42.00	4.7
Berwick .....	49.00	64.57	53.85	55.80	4	82	4	69.33	27	30	26	42.33	3.6
Cannonsburg .....	50.32	62.67	56.22	56.40	3	81	3	72.67	8	c 40	8	44.33	5.9
Carlisle .....	48.58	62.35	53.27	54.73	4	81	4	74.33	27	28	26	40.00	4.1
Chambersburg .....	49.52	65.39	53.84	56.25	3	86	4	78.67	27	30	26	41.33	4.4
Chromedale .....	53.06	66.32	57.03	58.80	4	90	4	79.00	26	35	26	43.67	---
Easton .....	47.42	63.93	51.35	54.23	4	87	4	74.00	27	27	26	38.83	4.1
Fleming .....	45.35	63.20	47.80	52.12	3	d 82	4	74.00	27	22	27	37.00	4.3
Gettysburg .....	50.64	66.58	57.30	58.17	4	86	4	76.33	27	34	26	46.67	3.6
Harrisburg, [Heisely] .....	53.07	65.00	59.13	59.07	4	86	4	76.67	27	37	26	45.00	3.8
Harrisburg, [Hickok] .....	49.85	64.11	55.06	56.34	4	85	4	72.83	27	33	26	40.33	4.8
Lewisburg .....	45.75	62.42	50.50	52.87	4	82	4	72.47	27	23	27	37.37	5.5
Morrisville .....	49.20	64.84	53.58	55.87	4	88	4	74.67	27	32	26	41.00	3.6
Mount Joy .....	51.00	68.60	56.64	58.74	4	89	4	78.00	27	28	25	33.50	3.8
Murrysville .....	47.71	62.61	50.00	53.44	3	d 80	3	71.33	27	29	27	42.33	4.9
Norristown .....	48.71	62.25	54.00	54.99	4	84	4	75.67	26	30	26	39.00	4.1
North Whitehall (e) .....	46.81	64.71	56.78	56.10	4	86	4	79.33	27	27	26	43.33	---
Paradise .....				62.00									
Philadelphia .....	51.40	63.49	55.66	56.85	4	90	4	77.33	26	39	26	46.33	5.2
Pittsburg, [Martin] .....	50.22	61.83	54.12	55.39	4	81	4	72.00	27	38	24	47.33	6.3
Pocopson .....	50.60	65.03	53.68	56.44	4	87	4	78.33	27	27	26	40.33	5.0
Shamokin (f) .....	44.68	62.22	53.10	53.33	4	82	4	72.67	27	11	26	37.33	4.3
Somerset .....	46.32	62.40	51.10	53.27	3	d 79	4	71.33	10	g 34	9	42.67	5.6
Tarentum .....	47.55	63.58	50.42	53.85	3	d 82	3	71.00	27	31	15	44.33	5.2
West Haverford .....	50.64	64.32		57.48	4	86	4	77.00	26	34	26	42.00	4.0
Westtown .....	50.72	63.94	53.32	55.99	4	86	4	75.50	27	29	26	39.63	5.3
DELAWARE—													
Georgetown (h) .....	57.00	66.68	62.77	62.15	4	93	4	84.33	27	38	28	48.33	---
MARYLAND—													
Annapolis .....	52.61	61.93	60.26	59.27	4	86	4	77.33	27	33	27	45.16	4.5
Baltimore .....	52.32	64.06	57.20	57.86	4	84	4	73.83	27	36	26	44.00	5.2
Bladensburg .....	49.08	65.77	54.27	56.37	3	80		?	27	25		?	5.1
Chestertown .....	52.34	65.10	55.74	57.73	4	82	4	70.83	27	35	27	42.33	4.4
Frederick .....	49.56	63.06	54.02	55.55	4	83	4	73.00	27	32	27	41.67	4.3
Leitersburg .....	47.30	63.90	50.64	53.95	3	d 86	4	74.00	27	26	27	39.33	3.7
Sykesville .....	50.55	64.64	55.00	56.76	3	76	4	73.33	27	31	26	42.67	4.3
DISTRICT OF COLUMBIA—													
Washington .....	52.23	65.33	57.62	58.39	4	84	4	74.67	27	33	26	i 45.00	4.1
VIRGINIA—													
Crichton's Store (j) .....	58.06	69.48	67.81	65.12	4	88		?	26	i 47		?	4.3
Hartwood .....	56.00	69.70	56.35	60.68	4	91	4	80.00	27	k 40	26	48.37	---
Holliday's Cove .....	46.45	66.43	50.20	54.36	3	85	5	69.33	10	30	25	41.33	---
Kanawha (l) .....	52.08	66.03	56.86	58.32	3	d 83	?	?	9	m 37		?	4.1
Lewinsville .....	53.55	67.84	57.85	59.75	4	91	4	78.50	27	34	26	46.67	3.9
Lewisburg .....	45.22	68.71	51.84	55.26	4	80	5	65.67	9	n 36	9	46.33	3.0
Meadow Dale .....	44.80	61.20	54.20	53.40	18	77	4	67.67	10	30	26	39.67	---
Montross .....	52.60	65.70	56.83	58.38	3	82	3	79.00	26	i 34	26	43.33	3.8

*a* Same temperature on the 20th.*b* Observations taken at 7 a. m. and 6 p. m.*c* Same temperature on the 9th, 10th, and 15th.*d* Same temperature on the 4th.*e* Observations taken at sunrise, noon, and sunset.*f* Observations in the night. Mean, 38.03.*g* Same temperature on the 14th.*h* Observations taken at 8 a. m., 1 p. m., and 6 p. m.*i* Same temperature on the 27th.*j* Observations taken at 8 a. m., noon, and 5 p. m.*k* Same temperature on the 28th.*l* Incomplete.*m* Same temperature on the 10th.*n* Same temperature on the 21st.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—Continued.	°	°	■	°	°	°	°	°	°	°	°	°	
Point Pleasant.....	70.13	79.43	70.37	73.31	26	87	26	79.67	2	61	3	69.00	3.9
Poplar Grove.....	49.80	68.71	53.20	57.24	3	85	4	68.67	9	34	9	45.00	5.2
Portsmouth.....	57.87	71.84	58.16	62.62	4	90	4	77.67	28	35	27	48.33	2.9
Rougemont (a).....	55.65	71.52	61.83	63.00	4	89	4	77.33	11	44	9	51.33	4.1
Smithfield.....	54.14	68.58	60.23	60.98	4	84	4	76.40	28	32	27	45.67	4.4
Stribling Springs.....	41.67	63.51	43.96	49.71	4	83	3	65.67	25	28	25	39.33	4.7
Winchester.....	51.03	68.81	55.13	58.32	4	89	4	78.33	27	32	27	44.00	3.7
Wirt Court-House.....	50.32	63.64	53.03	55.66	4	80	4	66.33	15	34	11	46.00	4.6
NORTH CAROLINA—													
Chapel Hill.....	55.42	71.00	59.67	62.03	5	89	4	76.00	15	45	26	50.33	4.3
Davidson College.....	54.23	69.20	59.85	61.09	4	87	4	75.63	10	42	28	49.00	3.7
Gaston.....	56.10	71.36	56.45	61.30	4	c88	4	74.67	15	d41	26	48.67	---
Goldsborough.....	57.64	72.61	61.90	64.05	4	88	4	79.10	10	41	10	52.33	3.9
Murfreesborough (e).....	53.60	69.16	59.68	60.81	8	84	8	75.00	28	38	26	50.67	4.0
SOUTH CAROLINA—													
Aiken.....	58.29	74.81	61.84	64.98	7	87	7	77.00	15	f48	27	52.00	4.0
All Saints.....	63.71	72.93	69.03	68.56	4	c82	7	77.33	10	g52	9	60.00	3.8
Charleston, [Dawson].....	66.64	74.22	69.86	70.24	---	82	---	---	---	57	---	---	---
Charleston, [Johnson].....	66.06	74.22	69.81	70.03	4	h82	7	77.33	15	g57	15	g63.00	---
Columbia.....	60.20	76.39	66.71	67.77	4	90	4	79.67	15	48	27	55.33	4.1
St. John's.....	59.37	73.61	63.07	66.35	3	84	---	?	16	47	---	?	4.1
GEORGIA—													
Athens (i).....	50.19	74.64	61.57	62.13	11	85	---	?	15	49	---	?	2.5
Augusta.....	66.02	77.30	71.67	71.66	4	89	7	81.50	15	54	---	?	3.9
Savannah.....	64.90	75.81	69.40	70.04	7	88	7	79.07	15	54	15	61.10	5.0
Sparta.....	57.74	76.20	64.55	66.16	6	89	6	78.67	15	42	27	55.33	3.8
Whitemarsh Island.....	66.55	74.90	69.10	70.18	2	j84	7	77.67	15	56	15	61.67	4.6
FLORIDA—													
Alachua County (k).....	67.32	78.58	71.87	72.59	5	l85	5	m79.00	9	n59	---	?	3.5
Alligator.....	66.80	81.40	71.80	73.33	4	o90	8	80.33	10	56	10	68.33	4.4
Atsena.....	71.64	78.50	75.26	75.13	4	86	4	p80.00	15	f63	24	70.67	2.8
Belair.....	66.70	79.93	72.71	73.11	8	88	8	81.00	10	55	31	65.00	---
Jacksonville.....	70.06	76.77	72.26	73.03	7	85	7	79.67	11	62	9	67.00	4.8
Micanopy.....	70.13	81.05	74.20	75.12	5	87	7	80.33	24	62	9	69.00	4.1
St. Augustine.....	74.51	79.51	74.93	76.32	4	c85	6	c80.67	9	67	9	71.67	4.2
Salt Ponds.....	78.84	83.87	---	81.35	5	q88	6	85.00	19	r76	19	s77.00	3.3
ALABAMA—													
Carlowville.....	63.90	79.16	68.64	70.57	4	90	4	82.67	8	t56	31	58.00	3.7
Greensborough (u).....	58.09	74.53	62.14	64.92	19	80	---	?	15	42	29	57.33	4.3
Greene Springs.....	58.93	77.08	62.63	66.23	5	89	5	77.67	15	39	15	v55.50	4.2
Selma.....	59.10	77.74	64.84	67.23	3	90	7	77.33	15	37	15	56.00	5.0
MISSISSIPPI—													
Columbus.....	58.55	75.88	64.02	66.15	2	89	6	76.23	15	43	8	56.27	3.8
Natchez.....	60.77	76.40	69.40	68.86	1	w84	5	m78.00	30	49	29	60.33	3.6
Paulding.....	65.25	79.59	70.77	71.87	1	x90	4	80.50	8	y55	---	---	4.4
LOUISIANA—													
Black River.....	61.58	76.87	67.77	68.74	5	86	11	78.00	9	z52	29	60.67	3.8
New Orleans (aa).....	74.35	78.00	79.80	77.38	7	87	7	83.67	29	y65	29	69.00	---
TEXAS—													
Austin, [Palm].....	65.10	81.90	69.51	72.17	4	m90	6	81.00	28	49	28	58.67	3.5

a For the first 23 days of the month.

b Same temperature on the 15th.

c Same temperature on the 7th.

d Same temperature on the 27th.

e For the last 25 days of the month.

f Same temperature on the 16th.

g Same temperature on the 25th.

h Same temperature on the 6th and 7th.

i For the first 17 days of the month.

j Same temperature on the 3d and 7th.

k Observations taken at 6 a. m., 2 p. m., and 9 p. m.

l Same temperature on the 6th and 8th.

m Same temperature on the 6th.

n Same temperature on the 10th.

o Same temperature on the 8th.

p Same temperature on the 5th and 7th.

q Same temperature on the 6th, 10th, and 11th.

r Same temperature on the 20th, 21st, 22d, and 23d.

s Same temperature on the 21st, 22d, and 23d.

t Same temperature on the 31st.

u For the last 20 days of the month.

v Same temperature on the 29th.

w Same temperature on the 5th and 6th.

x Same temperature on the 2d.

y Same temperature on the 30th.

z Same temperature on the 15th, 29th, and 30th.

aa Observations taken at 9 a. m., noon, and 3 p. m.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.	LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
TEXAS—Continued.	°	°	°	°		■		°		°		°	
Austin, [Van Nostrand] .....	63.93	81.68	69.82	71.81	3	a 90	4	80.33	28	b 51	19	59.67	3.7
Goliad .....	68.60	72.35	63.48	68.14	6	92	4	82.67	27	57	27	62.00	3.6
Larissa .....	63.32	75.71	68.42	69.15	5	93	5	82.00	20	49	20	57.33	3.2
New Braunfels .....	63.01	83.51	71.55	72.69	6	90	6	80.00	28	48	27	62.58	1.5
Union Hill .....	66.26	82.03	70.32	72.87	5	93	6	80.33	20	52	20	64.00	4.9
Washington (c) .....	69.52	82.72	70.85	74.36	5	d 92	6	82.67	11	58	---	?	4.2
TENNESSEE—													
Glenwood .....	54.24	69.50	58.16	60.63	■	86	5	74.93	15	37	20	48.63	4.9
Memphis .....	58.30	71.58	61.45	63.78	2	e 85	2	d 76.67	15	42	20	53.31	4.4
KENTUCKY—													
Bardstown .....	52.26	67.60	57.01	58.96	3	85	3	76.00	9	f 32	9	44.33	4.5
Louisville (g) .....	52.42	68.37	57.71	59.50	3	a 87	3	77.00	15	37	9	50.00	4.8
Paris .....	52.26	64.76	55.81	57.61	3	84	3	75.00	10	a 35	---	?	5.2
Springdale (h) .....	49.37	68.31	62.10	59.93	3	a 87	3	77.17	9	28	9	46.67	6.1
OHIO—													
Avon (i) .....	50.10	61.00	53.72	54.94	18	77	17	62.00	27	42	27	46.50	6.2
Bellefontaine .....	50.08	64.42	51.83	55.44	3	a 83	3	73.20	22	33	9	44.33	5.8
Bowling Green .....	49.11	62.46	51.90	54.49	3	83	3	75.10	10	j 32	8	41.80	5.5
Cincinnati, [Harper] .....	54.40	71.03	60.35	61.93	3	86	■	79.67	9	f 41	9	53.00	5.4
Cleveland .....	50.00	61.06	52.26	54.44	3	82	3	75.80	8	37	8	42.80	6.5
Cleveland, (near) .....				59.00									
Collingwood .....	50.90	61.16	52.39	54.82	3	82	3	75.67	10	34	8	45.00	---
Dayton .....	49.77	64.17	57.35	57.30	3	85	3	73.23	15	35	8	45.43	5.7
Edinburg .....	51.16	60.29	51.35	54.27	3	80	3	71.67	8	34	8	40.00	5.1
Hillsborough .....	49.76	60.73	54.40	54.96	3	80	3	72.50	9	35	■	43.33	5.2
Hiram .....	50.77	60.09	52.22	54.36	3	80	3	71.97	8	32	8	42.67	6.1
Hudson .....	49.73	59.91	53.20	54.28	3	77	3	70.90	8	36	8	42.30	5.7
Jackson, (Monroe county) .....	49.35	64.87	54.00	56.07	4	83	---	?	15	j 37	---	?	5.6
Jefferson .....	61.35	64.07	62.19	62.54	16	k 68	17	l 66.00	7	m 50	7	50.67	8.2
Lancaster .....	49.90	63.45	52.65	55.33	3	82	3	72.03	9	36	24	44.17	4.7
Madison, [Atkins] .....	49.20	57.80	50.50	52.50	2	80	2	75.00	27	28	7	41.67	6.0
Madison, [King] .....	49.77	59.86	49.81	52.81	3	83	3	75.67	27	30	27	41.33	6.2
Medina (n) .....	50.40	59.06	50.50	53.32	3	79	3	72.16	8	37	14	42.67	---
Montville .....	50.11	58.70	51.40	53.40	3	79	3	72.00	8	37	8	42.33	5.6
New Lisbon .....	50.51	69.61	54.26	58.13	3	83	3	73.00	17	34	15	o 48.33	4.3
Northwood .....													5.0
Ripley (p) .....	51.90	---	56.90	54.40	4	73	---	?	10	37	---	?	6.1
Savannah .....	48.87	68.97	51.55	56.46	3	87	3	78.33	10	f 31	8	40.67	6.9
Urbana .....	49.10	65.52	51.86	55.49	3	86	3	76.00	10	q 33	8	43.67	5.2
Welchfield .....	47.61	60.93	49.80	52.78	3	81	3	71.67	8	33	8	40.33	4.5
Westerville .....	50.43	64.05	53.93	56.12	3	a 83	3	71.67	15	34	8	r 45.33	6.1
Windham .....	46.55	61.35	50.90	52.93	3	82	3	73.67	27	34	8	41.67	---
MICHIGAN—													
Battle Creek .....	47.50	56.45	49.61	51.19	3	76	3	69.33	8	s 37	8	40.67	5.5
Cooper .....	51.10	56.80	51.10	53.00	17	t 70	17	60.67	8	f 38	8	40.00	2.7
Detroit .....	51.03	65.13	51.03	55.73	3	85	3	75.67	8	32	8	38.33	6.1
Grand Rapids, [Streng] .....	45.68	56.90	48.51	50.36	17	79	3	70.00	10	32	8	u 41.67	7.2
Marquette .....	42.41	50.93	44.52	45.95	17	73	17	64.87	20	22	7	38.07	7.0
Monroe .....													6.1
New Buffalo (v) .....	46.40	58.30	48.22	50.97	3	79	3	68.33	9	30	8	42.67	6.9
Ottawa Point (w) .....	49.71	52.71	51.84	51.22	3	69	3	66.25	8	39	8	40.75	7.4

a Same temperature on the 4th.

b Same temperature on the 29th.

c For the first 23 days of the month.

d Same temperature on the 6th.

e Same temperature on the 3d.

f Same temperature on the 15th.

g Observations taken at 7 a. m., 3 p. m., and 9 p. m.

h Observations taken at 7 a. m., 2 p. m., and 5 p. m.

i For the last 16 days of the month.

j Same temperature on the 22d.

k Same temperature on the 17th, 18th, 19th, 20th, 21st, 22d, 26th, 27th, and 28th.

l Same temperature on the 28th.

m Same temperature on the 8th.

n For the first 15 days of the month.

o Same temperature on the 27th.

p Incomplete.

q Same temperature on the 15th and 22d.

r Same temperature on the 14th.

s Same temperature on the 10th.

t Same temperature on the 18th.

u Same temperature on the 9th.

v Observations taken at 7 a. m., 1 p. m., and 9 p. m.

w Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 50.64.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
MICHIGAN—Continued.	°	°	°	°		°		°		°			
Port Huron	49.08	59.00	49.48	52.52	18	76	18	65.33	8	34	8	40.33	6.
Thunder Bay Island (a)	46.69	50.19	48.06	48.57	3	66	3	62.62	7	36	8	41.50	6.9
INDIANA—													
Cannelton	55.08	65.82	56.46	59.12	11	80	3	75.17	11	37	9	46.00	5.2
Logansport	49.84	62.42	53.97	55.41	11	87	3	78.33	21	37	7	45.00	6.0
Madison	50.03	61.74	52.45	54.74	4	84	3	73.67	9	33	21	40.67	5.3
Michigan City (b)	48.78	61.00	52.35	54.04	3	81	3	73.67	8	35	8	43.33	5.4
New Harmony	52.74	65.45	57.00	58.40	3	85	3	76.67	9	36	21	43.33	4.7
Notre Dame	53.03	58.16	53.95	55.05	3	78	3	73.33	19	41	8	45.33	6.6
Richmond, [Austin] (d)	50.13	63.29		56.71	3	83	3	77.00	10	33	10	44.50	6.8
Richmond, [Moore]	46.36	61.66	52.31	53.44	4	80	4	68.67	11	32	8	41.33	6.2
ILLINOIS—													
Athens	50.29	62.75	49.90	54.31	11	88	3	76.33	8	30	19	40.33	6.0
Augusta	48.32	60.45	52.74	53.84	2	85	3	75.33	9	31	8	42.33	5.3
Aurora	47.68	58.87	50.40	52.32	2	80	3	69.67	8	34	8	40.00	5.7
Batavia, [Capon]	45.51	56.51	47.84	49.95	2	81	17	69.67	8	31	2	68.33	6.4
Batavia, [Mead]	44.25	57.61	47.55	49.80	2	81	2	67.00	9	29	8	37.67	6.1
Brighton	46.61	71.45	63.90	60.65	3	84	7	73.67	20	28	9	44.00	5.1
Carthage (f)	48.65	61.58	51.68	53.97	2	88	3	74.67	21	35	8	44.67	
Edgington	47.20	59.51	51.35	52.69	2	83	2	71.33	7	32	8	40.67	6.8
Elgin	45.71	57.30	48.64	50.55	2	79	11	67.00	8	32	8	39.33	6.4
Jacksonville (h)	50.10	62.61	55.80	56.17	3	85	3	75.11	11	32	20	42.22	
Manchester (i)	48.30	62.74	60.80	57.28	3	87	3	75.33	9	30	19	40.33	5.6
Marengo	47.35	60.22	47.94	51.77	2	80	3	69.33	8	32	8	38.67	6.4
Ottawa	46.19	57.20	50.27	51.22	3	80	3	72.33	9	31	8	39.00	5.4
Pekin	48.03	59.64	50.67	52.78	2	83	3	71.33	9	30	8	41.00	5.9
Peoria	48.90	59.51	52.03	53.48	3	86	3	75.17	9	34	20	40.67	5.6
Riley	44.53	58.00	47.94	50.16	2	76	2	66.67	8	30	8	37.00	5.4
Upper Alton	49.22	64.40	53.70	55.77	2	84	2	74.00	20	34	20	43.00	4.4
Waynesville	47.00	58.00	55.45	53.48	3	83	3	75.00	9	31	19	41.67	6.5
West Salem	52.58	66.99	55.35	58.28	3	90	3	77.33	9	39	20	46.33	5.0
West Urbana	50.16	61.10	53.00	54.75	3	84	3	74.67	9	33	20	41.00	6.0
Wheaton	46.76	57.35	49.77	51.29	2	79	3	69.17	8	32	8	38.67	7.1
Winnebago	45.35	57.73	49.03	50.70	2	83	2	70.67	9	30	8	38.83	6.0
MISSOURI—													
St. Louis	53.20	65.87	56.77	58.61	2	89	3	77.50	9	40	16	50.33	5.2
WISCONSIN—													
Appleton	44.42	52.76	47.58	48.25	2	77	2	67.00	8	31	8	34.33	5.9
Bay City	40.42	47.89	41.84	43.38	17	70	17	64.00	19	28	19	34.00	5.8
Bayfield	40.61	47.84	42.35	43.60	17	69	17	61.33	19	30	19	39.67	7.4
Beloit	46.16	58.61	49.00	51.26	2	80	3	70.33	8	32	8	39.00	5.1
Green Bay	47.58	54.26	47.87	49.90	17	74	17	68.33	8	32	8	36.33	6.9
Janesville	45.93	56.03	48.70	50.22	17	78	17	67.33	7	30	7	33.33	6.3
Kenosha	47.83	56.37	49.69	51.30	2	78	2	69.33	8	33	8	39.00	5.0
Lind													6.6
Madison, [Sterling]	45.85	50.71	46.50	47.69	1	74	1	66.33	7	35	20	39.33	7.2
Manitowoc	45.52	52.35	47.58	48.48	2	74	2	63.33	10	32	7	39.67	7.0
Milwaukee, [Comeroy]	50.00	55.06	50.32	51.79	5	74	3	69.67	8	31	8	37.00	7.2
Milwaukee, [Winkler] (p)	45.97	54.10	47.84	49.30	2	78	2	66.67	8	32	8	39.33	5.5
Platteville	46.71	58.93	50.13	51.92	2	83	2	74.00	8	29	8	37.00	6.3
Waukesha	46.61	51.74	48.84	49.06	17	78	17	69.67	8	32	8	39.33	6.2
IOWA—													
Bellevue	44.10	59.39	48.19	50.56	2	84	2	72.33	9	27	7	39.67	6.3
Border Plains	45.06	59.58	47.84	50.83	2	87	2	73.67	14	31	8	43.00	5.8

a Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 49.35.

b For the first 17 days of the month.

c Same temperature on the 9th.

d Observations taken at 6 a. m. and 1 p. m.

e Same temperature on the 3d.

f Observations taken at 7 a. m., 1 p. m., and 7 p. m.

g Same temperature on the 5th and 9th.

h Observations taken at sunrise, 1 p. m., and sunset.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Same temperature on the 15th.

k Same temperature on the 21st.

l Same temperature on the 18th.

m Same temperature on the 24th.

n Same temperature on the 2th.

o Same temperature on the 6th and 20th.

p Observations taken at 3 p. m.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
IOWA—Continued.	°	°	■	°		°		°		°		°	
Dubuque .....	46.45	56.68	50.26	51.13	2	82	2	73.00	9	33	7	39.67	5.5
Fairfield .....	46.45	60.17	51.22	52.61	2	88	2	75.33	8	32	8	40.33	6.0
Fort Madison (a) .....	46.29	58.90	52.93	52.70	3	82	3	71.33	8	29	8	39.67	5.4
Iowa City .....	45.61	58.20	49.25	51.02	2	86	2	72.67	8	27	18	39.00	6.2
Muscatine .....	46.00	59.81	50.70	52.17	2	85	2	72.67	8	30	8	40.00	5.8
Pleasant Plain .....	46.06	60.13	50.32	52.17	2	88	2	74.00	9	30	8	39.00	5.4
Rossville .....	42.70	54.35	46.96	48.00	2	83	2	71.97	9	29	7	35.03	5.6
MINNESOTA—													
Burlington .....	38.30	49.06	43.93	43.76	17	62	17	56.33	19	25	19	32.33	6.9
Forest City .....	39.81	53.13	43.35	45.43	16	70	16	60.67	20	22	8	33.33	2.4
Hazlewood .....	41.06	53.48	45.50	46.68	2	74	2	63.67	9	24	■	32.00	4.9
Lapham (c) .....	39.60		37.06	38.33	18	68			21	22			
Princeton .....	40.06	54.52	44.90	46.49	2	75	2	63.33	20	26	18	33.33	5.0
NEBRASKA—													
Bellevue .....	47.20	60.00	50.72	52.64	2	85	2	73.33	27	28	8	40.00	4.0
Brownville .....	48.81	62.16	48.10	53.02	16	84	16	73.00	8	32	31	43.33	5.8
Elkham .....	42.97	58.90	47.93	49.93	2	91	17	74.00	15	27	10	38.33	4.9
KANSAS—													
Burlingame .....	50.69	65.55	53.61	56.62	3	88	17	73.00	14	34	19	46.67	4.6
Lawrence (e) .....	50.09	62.74	52.78	55.20	17	82	---	?	20	36	30	46.00	6.2
Leavenworth City, [Berthoud] .....						?		?		?		?	6.0
Leav'nwth City, [McCarty] (f) .....	55.50	63.17	56.67	58.45									
Manhattan .....	50.81	67.22	53.74	57.26	2	92	2	80.67	20	30	30	45.33	5.0
UTAH—													
Great Salt Lake City (h) .....	52.00	62.00	53.00	55.00		87				26			
MEXICO—													
Cordova (i) .....	70.01	73.62	71.11	71.86	26	78.44			2	66.20			
Minatitlan (j) .....	74.06	81.76		77.91	25	89	25	83.00	1	71	3	74.50	
Mirador (m) .....	65.99	75.60	69.10	70.23				77.47				66.67	
Vera Cruz (n) .....	79.30		79.61	79.45									
CALIFORNIA—													
Marysville .....	55.35	72.29	61.64	63.09	3	85	3	75.00	25	46	25	53.67	2.4
Sacramento .....	54.16	65.26	58.50	59.31	13	79	1	71.33	19	43	25	51.67	3.1
San Francisco .....	55.50	64.71	57.00	59.07	12	82	12	70.67	19	50	25	55.33	4.1
WEST INDIES—													
Centre Sig'l Stat'n, Ber'da (o) .....				71.74	14	79			28	60			
Nassau, Bahamas (p) .....				82.57			6	85.50			22	78.50	
Turk's Island, Bahamas (q) .....	79.68	82.81	80.94	81.14	1	86	4	84.00	28	72	27	74.33	
CENTRAL AMERICA—													
Guatemala (r) .....	58.64	71.93	62.60	66.02	?	80.8			?	53.2			
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (u) .....	75.10	87.20	80.60	80.97	15	90	15	82.67	17	72	7	75.67	3.7
EASTERN CONTINENT—													
Jerusalem, Palestine .....	67.69	77.37	69.65	61.57	27	80	27	75.33	9	62	2	68.00	0.8

- a Observations taken at 6 a. m., noon, and 7 p. m.  
b Same temperature on the 9th.  
c For the last 17 days of the month. Observations taken at sunrise and sunset.  
d Same temperature on the 19th.  
e Observations interrupted from the 2d to the 9th, inclusive.  
f Observations omitted from the 5th to the 25th.  
g Same temperature on the 3d.  
h Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 53.  
i Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m. Mean at 12 m., 72.34, and at 6 p. m., 72.23.  
j Observations taken at 7 a. m. and 3 p. m.

- k Same temperature on the 26th.  
l Same temperature on the 23d.  
m Observations taken at 7 a. m., 2 p. m., and 8 p. m.  
n Observations taken at 7 a. m. to 9 a. m., and at 10 p. m. to 11 p. m.  
o Observations taken at noon.  
p Mean obtained from daily maximum and minimum.  
q Observations taken at 6 a. m., noon, and 6 p. m.  
r Same temperature on the 4th, 5th, 13th, and 14th.  
s Same temperature on the 5th.  
t Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m. Mean at 9 a. m., 65.84. Mean at noon, 71.06.  
u Observations taken at 6 a. m., 3 p. m., and 6 p. m.  
v Same temperature on the 21st, 23d, and 28th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°	°		°		°		°		
Fort Simpson (a).....				—4. 87	b 1	24	2	19. 50	4	—25	21	—22. 00	
Hamilton.....	36. 30		37. 20	36. 75	1	52	4	50. 00	15	25	15	26. 00	
Montreal.....	30. 17	35. 80	31. 86	32. 61	20	57	1	44. 40	15	19	14	21. 67	7. 9
Moose Factory (c).....	13. 42	23. 95	18. 25	18. 54		39				—17			
Red River Settlement (d).....	11. 57	20. 35	14. 58	15. 17	19	31	11	29. 33	30	—19	30	0. 33	7. 5
Rigolet (e).....	22. 03		25. 13	23. 58	21	35	21	32. 50	28	— 4	30	— 2. 00	
St. John's.....	35. 00	36. 63	32. 10	34. 58	1	55	1	52. 33	28	22	28	27. 00	
St. Martin's (f).....	25. 12	35. 36	27. 47	29. 32	24	55	1	42. 67	15	6	15	54. 13	
Stanbridge.....	26. 23	31. 70	26. 53	28. 15	1	47	5	42. 33	15	11	14	15. 67	8. 2
Toronto (f).....	32. 30	36. 58	33. 95	34. 28	1	52	1	47. 93	14	g 20	15	23. 47	8. 1
Windsor.....	31. 78	36. 76	33. 45	33. 99	1	58	1	52. 20	23	18	12	23. 70	8. 0
Wolfville.....	34. 07	38. 51	35. 19	35. 92	1	59	1	53. 17	12	17. 5	12	24. 67	8. 4
MAINE—													
Cornish, [Guptill].....	28. 16	34. 96	28. 83	30. 65	1	58	1	47. 33	12	h 16	12	19. 33	5. 5
Cornish, [West].....	26. 00	33. 63	27. 80	29. 14	1	56	1	44. 67	30	10	12	i 17. 67	5. 1
Dexter.....													6. 6
Gardiner.....	27. 75	33. 52	30. 17	30. 48	1	60	1	46. 00	30	3	30	20. 00	6. 5
Perry.....	26. 93	34. 12	28. 24	29. 76	1	56	1	48. 33	29	12	29	18. 67	5. 2
Portland.....	29. 88	37. 42	32. 60	33. 30	1	58	1	49. 67	15	16	30	23. 33	6. 0
Steuben.....	26. 30	35. 27	30. 87	30. 81	1	57	1	50. 00	13	11	30	20. 33	6. 1
NEW HAMPSHIRE—													
Shelburne.....	27. 07	36. 13	27. 73	30. 31	1	55	1	47. 33	15	11	29	18. 00	7. 7
Stratford.....	24. 30	30. 50	24. 80	26. 55	1	j 46	1	41. 33	15	5	14	14. 67	8. 2
West Enfield.....	25. 37	32. 00	25. 67	27. 68	1	52	1	44. 00	29	11	14	15. 00	6. 5
VERMONT—													
Brandon.....	26. 91	35. 35	28. 86	30. 37	1	49	5	43. 33	14	12	14	16. 16	7. 7
Burlington.....	28. 18	33. 22	29. 38	30. 36	5	47	1	44. 00	15	11	14	19. 33	7. 5
Craftsbury.....	24. 83	30. 73	25. 23	26. 93	1	47	1	43. 00	15	8	14	14. 00	8. 2
Rupert.....	28. 67	40. 67	33. 67	34. 34	1	62	1	52. 00	13	12	13	22. 00	8. 6
St. Johnsbury.....	26. 57	34. 13	26. 73	29. 14	1	k 48	1	42. 67	15	— 2	30	15. 33	8. 1
MASSACHUSETTS—													
Amherst.....	29. 81	39. 18	32. 55	33. 85	1	59	1	50. 10	29	14	29	20. 80	5. 8
Bridgewater (l).....	32. 90	40. 80	36. 07	36. 59	1	61	1	52. 00	16	16	29	26. 00	6. 2
Cambridge.....	32. 37	40. 37	33. 53	35. 42	1	62	1	51. 00	29	16	29	21. 67	6. 0
Florida.....													8. 3
Lawrence.....	31. 00	38. 97	33. 10	34. 36	1	60	1	49. 33	29	14	29	20. 00	5. 5
Mendon.....	30. 30	38. 97	33. 20	34. 16	1	60	1	52. 67	29	10	29	18. 67	5. 5
Nantucket.....	40. 58	44. 15	40. 23	41. 65	1	58	1	54. 00	16	28	16	33. 00	6. 2
New Bedford.....	34. 30	41. 82	36. 18	37. 43	1	62	1	53. 80	16	19	12	26. 20	6. 7
Richmond.....	27. 53	38. 73	31. 77	32. 68	2	61	2	48. 33	14	14	14	19. 00	6. 1
Westfield.....	30. 00	38. 70	32. 53	33. 74	1	60	1	48. 67	29	7	29	17. 00	6. 5
Williamstown (m).....	31. 88	36. 42	32. 08	33. 46	2	53	1	45. 67	24	21	25	25. 00	8. 4
Worcester.....	32. 32	39. 54	32. 89	34. 92	1	61	1	52. 33	29	13	29	22. 00	6. 2
RHODE ISLAND—													
Providence (n).....	34. 30	41. 70	35. 70	37. 23	1	63	1	53. 67	16	o 21	29	26. 00	5. 3
CONNECTICUT—													
Columbia.....	33. 23	41. 20	30. 77	35. 07	1	68	1	53. 00	29	8	12	i 25. 33	5. 9
Middletown.....	30. 33	41. 79	32. 24	34. 79	1	62	1	49. 70	15	o 11	29	22. 70	5. 5
New London.....	34. 63	42. 53	37. 20	38. 12	1	62	1	54. 00	16	p 18	28	27. 33	5. 5
Pomfret.....	29. 67	37. 62	32. 14	33. 14	1	57	1	50. 50	16	14	14	o 23. 10	5. 7
Saybrook.....	35. 30	42. 13	35. 63	37. 69	1	61	1	52. 67	16	19	29	26. 33	5. 6
Wallingford.....	30. 15	40. 78	31. 78	34. 24	1	61	1	49. 17	29	95	29	22. 00	5. 5
NEW YORK—													
Bellport.....	37. 98	43. 07	37. 12	39. 39	1	62	1	53. 33	16	19	29	27. 67	5. 7
Buffalo (q).....	36. 67	38. 90	37. 27	37. 61	1	55	1	51. 67	11	24	15	29. 33	7. 9

a Register thermometer.

b Same temperature on the 2d.

c Observations taken at sunrise, 2 p. m., and 10 p. m.

d For the last 21 days of the month.

e Observations at sunrise and sunset.

f Observations taken at 6 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 15th.

h Same temperature on the 14th, 15th, and 29th.

i Same temperature on the 14th.

j Same temperature on the 5th.

k Same temperature on the 21st.

l Observations taken at 7 a. m., 2 p. m., and 7 p. m.

m Observations interrupted from the 12th to the 17th of the month.

n Observations taken at sunrise, 1 p. m., and 10 p. m.

o Same temperature on the 29th.

p Same temperature on the 20th.

q Observations taken at 8 a. m., 2 p. m., and 9 p. m.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	°
Clinton.....	32.80	37.76	32.93	34.50	1	56	1	51.67	14	a 17	14	23.00	8.8
Fishkill Landing.....	34.00	41.53	35.43	36.99	1	63	1	53.00	29	19	29	25.00	5.8
Flatbush.....	36.41	42.71	37.25	38.79	1	63	1	54.00	29	21	29	27.10	6.4
Fort Edward.....	29.33	37.20	31.00	32.51	1	52	1	45.00	16	13	29	21.67	7.2
Houseville.....	26.56	34.73	27.83	29.70	2	56	1	b 44.67	15	6	16	18.67	8.5
Nichols.....	32.17	40.17	32.97	35.10	1	60	1	48.67	20	19	29	29.33	8.2
Rochester.....	34.60	37.53	35.53	35.89	5	55	1	b 50.00	15	13	14	26.00	8.8
Sag Harbor (c).....	37.79	45.33	39.08	40.73	1	67	1	53.67	29	22	29	29.33	6.0
Waterford.....	30.83	39.96	32.42	34.40	1	61	1	49.67	29	13	29	20.00	7.1
NEW JERSEY—													
Freehold.....	37.14	44.52			1	66	1	57.00	16	20	16	29.00	---
Lambertville.....	33.81	44.39	37.72	38.64	1	66			10	19.5			---
Newark (d).....				38.68	1	61	1	54.25	30	22	16	28.25	---
PENNSYLVANIA—													
Bellefonte (e).....	38.00	38.44	34.19	36.88	29	44	23	39.00	20	22	20	f 31.00	7.6
Berwick.....	36.30	42.30	37.37	38.66	1	64	2	51.67	15	27	15	31.00	6.0
Cannonsburg.....	35.46	39.73	38.30	37.83	2	g 56	2	54.00	20	24	19	29.00	8.8
Carlisle.....	35.43	42.45	37.87	38.58	1	60	2	50.70	20	22	14	h 31.33	7.2
Chambersburg.....	35.57	42.70	38.87	39.05	1	62	2	52.33	20	20	16	i 30.33	7.5
Chromedale.....	38.47	46.70	39.50	41.56	1	67	1	57.67	14	28	14	32.00	6.1
Easton.....	33.43	42.22	35.42	37.02	1	63	1	50.67	16	22	28	a 29.50	7.5
Fleming.....	34.86	41.53	36.50	37.63	1	58	2	50.33	20	19	14	28.67	8.5
Gettysburg.....	33.43	42.83	36.47	37.58	1	63	1	j 51.67	20	17	16	28.67	6.7
Harrisburg, [Heisely].....	39.20	44.93	41.64	41.92	1	62	1	55.33	16	29	16	f 34.33	7.1
Harrisburg, [Hickok].....	37.00	43.53	39.93	40.15	1	61	2	52.33	20	26	16	32.67	7.8
Lewisburg.....	34.54	41.53	36.55	37.54	1	59	2	50.33	20	19	14	29.03	8.1
Linden.....	32.46	37.86	34.12	34.81	5	k 49	5	46.67	20	21	28	28.80	8.2
Morrisville.....	33.93	43.80	36.33	38.02	1	68	1	56.00	16	20	16	28.33	5.2
Mount Joy.....	37.07	47.18	39.93	41.39	24	67	1	53.50	16	24	16	30.50	6.2
Murrysville.....	33.67	39.83	34.60	36.03	1	60	2	53.00	20	11	20	26.33	8.6
Norristown.....	36.39	43.21	38.35	39.32	1	56	1	51.33	16	25	16	25.90	6.5
North Whitehall (l).....	33.53	42.20	38.87	38.20	1	64	1	53.00	20	22	16	29.67	---
Paradise.....				36.00									
Philadelphia.....	38.52	46.23	41.90	42.22	1	66	1	58.00	26	16	29	33.00	5.8
Pittsburg, [Martin].....	36.30	41.43	37.50	38.41	2	59	2	56.00	20	19	20	28.67	8.3
Pocopson.....	36.33	44.57	38.90	39.93	1	65	1	53.00	20	22	16	30.33	6.4
Shamokin (m).....	32.23	39.83	36.70	36.25	1	58	2	49.33	20	10	14	28.67	7.1
Somerset.....	31.73	39.00	33.33	34.69	1	58	2	47.67	20	15	20	26.00	9.0
Tarentum.....	35.33	42.57	37.17	38.36	1	61	2	54.67	20	11	19	28.00	8.8
West Haverford.....	36.53	45.37		41.45	1	60	1	56.00	16	24	16	30.00	6.6
Westtown.....	35.15	42.57	37.46	38.39	1	62	1	54.17	20	22	16	29.17	6.9
DELAWARE—													
Georgetown (n).....	40.67	48.10	44.53	44.43	1	68	1	62.33	20	26	16	33.00	---
MARYLAND—													
Annapolis.....	37.98	46.73	43.40	42.70	1	63	2	57.67	20	22	16	33.16	6.5
Baltimore.....	38.95	45.97	41.93	42.28	1	62	1	56.33	20	26	16	32.16	6.8
Bladensburg.....	32.00	44.94	35.79	37.58	7	54		?	20	20		?	6.8
Chestertown.....	37.93	45.10	39.93	40.99	1	65	1	j 55.33	16	25	16	30.83	6.6
Frederick.....	37.34	43.98	38.78	40.03	1	61	1	j 53.50	16	24	16	31.50	6.9
Leitersburg.....	33.45	43.73	36.57	37.92	1	64	2	54.33	20	15	16	28.00	6.7
Leonardtown (o).....	37.04	44.83	39.26	40.38	8	54		?	21	26	17	34.33	5.7
Sykesville.....	36.13	45.63	39.00	40.25	1	68	1	57.00	16	19	16	30.33	6.0
DISTRICT OF COLUMBIA—													
Washington (p).....	36.17	46.48	41.83	41.49	1	65		?	20	27	16	33.33	6.3

<sup>a</sup> Same temperature on the 29th.<sup>b</sup> Same temperature on the 5th.<sup>c</sup> Observations interrupted from the 18th to the 25th of the month.<sup>d</sup> Observations taken at 7 a. m. and 6 p. m.<sup>e</sup> For the last 16 days of the month.<sup>f</sup> Same temperature on the 28th.<sup>g</sup> Same temperature on the 3d.<sup>h</sup> Same temperature on the 16th.<sup>i</sup> Same temperature on the 20th.<sup>j</sup> Same temperature on the 2d.<sup>k</sup> Same temperature on the 8th.<sup>l</sup> Observations taken at sunrise, noon, and sunset.<sup>m</sup> Observations taken also in the night. Mean, 25.73.<sup>n</sup> Observations taken at 8 a. m., 1 p. m., and 6 p. m.<sup>o</sup> For the last 23 days of the month.<sup>p</sup> Observations at 7 a. m. wanting for the first seven days of the month.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA--	°	°	°	°		°		°		°		°	
Crichton's Store (a).....	43.43	51.77	49.95	48.38	11	71	---	?	20	30	---	?	5.2
Cross Creek.....	31.32	39.86	32.83	34.67	1	61	4	48.67	20	10	19	24.67	---
Hartwood.....	40.20	50.43	41.23	43.95	1	68	1	62.00	20	20	17	32.00	---
Kanawha.....	37.50	45.18	40.04	40.91	2	65	---	?	17	22	16	29.33	8.2
Lewinsville.....	39.97	46.13	41.13	42.41	1	66	2	57.16	16	28	15	33.00	5.9
Lewisburg.....	35.70	46.43	37.40	39.84	2	65	2	59.67	16	22	20	27.33	6.6
Meadow Dale.....	30.17	38.17	34.67	34.34	1	58	2	50.00	20	10	16	20.00	---
Montross.....	39.40	47.27	41.07	42.58	1	66	3	59.67	20	22	20	32.00	6.3
Point Pleasant.....	36.07	42.87	36.13	38.36	1	69	2	60.67	17	18	16	24.67	7.8
Poplar Grove.....	36.97	46.30	40.03	41.10	2	66	2	55.67	16	21	18	31.00	8.3
Portsmouth.....	42.17	52.23	43.10	45.83	3	73	3	66.33	17	c 26	17	30.67	4.6
Rougemont (d).....	32.94	46.13	37.94	39.00	18	52	9	45.00	16	e 25	16	30.33	5.7
Smithfield (f).....	37.28	47.26	40.17	41.57	28	56	28	50.67	17	25	16	e 32.20	6.0
Stribling Springs.....	28.30	42.13	30.66	33.70	6	65	2	47.33	20	6	19	19.67	7.6
Winchester.....	37.00	45.97	39.17	40.71	1	64	1	55.33	20	22	16	31.33	5.6
Wirt Court-House.....	33.13	41.57	36.23	37.64	2	g 60	2	56.00	17	15	16	25.00	8.6
NORTH CAROLINA--													
Chapel Hill.....	40.52	53.93	43.34	45.93	3	68	2	62.00	17	26	20	35.33	6.1
Davison College.....	37.89	51.54	41.88	43.77	2	70	2	63.33	17	21	20	32.00	4.9
Gaston.....	40.23	51.97	40.03	44.08	3	73	2	65.33	27	23	16	32.00	---
Goldsborough.....	42.85	54.02	45.67	47.51	3	72	2	67.10	17	24	16	32.90	5.6
Murfreesborough.....	41.80	51.72	44.45	45.99	3	72	2	65.67	17	27	16	33.67	5.3
SOUTH CAROLINA--													
Aiken.....	39.55	53.48	42.36	44.13	2	70	1	h 63.00	17	26	26	33.33	5.4
All Saints.....	44.37	55.43	47.87	49.22	2	76	2	71.33	17	28	17	35.67	4.4
Charleston, [Dawson].....	49.30	57.23	52.90	53.14	---	76	---	---	---	35	---	---	---
Charleston, [Johnson].....	49.30	57.23	52.90	53.14	2	76	2	72.33	17	35	17	41.33	---
Columbia.....	40.47	55.80	46.60	47.62	3	78	2	68.00	17	25	17	35.33	4.0
St. John's.....	45.00	55.07	44.76	48.28	2	75	2	?	18	24	17	34.33	5.5
GEORGIA--													
Savannah.....	47.50	58.00	52.40	52.63	2	80	2	72.53	25	34	17	42.77	5.0
Sparta.....	40.80	54.50	44.90	46.73	1	h 70	1	64.67	18	28	17	37.67	4.9
Whitemarsh Island.....	49.23	58.63	52.50	53.45	2	79	2	72.67	17	35	17	43.00	5.1
FLORIDA--													
Alachua County (i).....	52.23	61.40	55.53	56.39	22	75	---	?	10	37	25	46.67	3.5
Alligator.....	48.57	64.47	54.37	55.80	1	h 82	1	73.33	25	32	24	43.33	4.5
Atsena.....	55.07	60.77	58.79	58.21	1	76	2	73.67	10	j 42	9	48.67	4.3
Belair.....	46.90	62.27	53.90	54.36	1	h 74	1	68.67	25	30	24	j 44.33	4.6
Jacksonville.....	54.20	62.77	55.83	57.60	2	79	1	73.00	27	38	25	44.33	7.0
Micanopy.....	51.52	67.30	54.00	57.60	2	81	2	73.50	25	l 32	---	?	4.9
Salt Ponds.....	71.22	75.87	---	73.54	1	h 86	1	h 82.50	10	60	25	m 63.00	5.0
ALABAMA--													
Carlowville.....	38.73	53.80	44.37	45.63	1	76	1	65.00	11	n 32	17	35.67	3.4
Greene Springs.....	38.96	51.52	41.93	44.14	1	71	1	63.67	17	24	17	35.83	5.6
Greensborough.....	40.39	50.12	43.92	44.81	1	72	1	65.00	17	27	---	?	5.7
Montgomery.....	39.93	56.47	47.20	47.87	1	78	1	69.67	25	28	24	38.33	5.2
Selma.....	41.53	53.50	47.50	47.51	1	70	1	65.33	25	30	24	39.67	5.3
MISSISSIPPI--													
Columbus.....	39.15	50.84	43.76	44.58	1	70	1	61.57	25	25	24	36.87	5.8
Natchez.....	41.13	55.97	47.96	48.35	1	o 70	28	65.67	17	29	9	38.00	4.8
Pauiding.....	42.73	54.05	47.74	48.17	1	77	1	66.83	19	32	24	41.00	5.5
LOUISIANA--													
Black River.....	41.00	56.10	46.50	47.87	28	74	28	68.67	17	29	11	37.33	5.1
New Orleans (p).....	54.07	58.57	60.23	57.62	1	77	1	73.00	10	45	16	48.67	---

a Observations taken at 9 a. m., noon, and 4 p. m.

b Same temperature on the 16th.

c Same temperature on the 18th.

d Observations interrupted from the 1st to the 8th, and from the 20th to

the 23d, both inclusive.

e Same temperature on the 17th.

f For the last 19 days of the month.

g Same temperature on the 3d.

h Same temperature on the 2d.

i Observations taken at 6 a. m., 2 p. m., and 9 p. m.

j Same temperature on the 25th.

k Same temperature on the 23d.

l Same temperature on the 26th and 27th.

m Same temperature on the 26th.

n Same temperature on the 12th, 14th, and 17th.

o Same temperature on the 27th and 28th.

p Observations taken at 9 a. m., noon, and 3 p. m.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—	°	°	°	°	°	°	°	°	°	°	°	°	
Austin, [Palm] .....	45.43	61.50	49.10	52.01	27	76	27	68.00	20	30	16	41.67	3.8
Austin, [Van Nostrand] .....	43.75	62.14	49.49	51.79	12	75	26	66.75	11	27	20	41.41	4.5
Goliad (a) .....	55.63	62.67	56.90	58.40	14	78	27	69.67	16	34	16	45.00	6.2
Larissa .....	42.10	55.33	48.28	48.57	27	72	27	65.83	16	c 29	16	39.33	3.7
New Braunfels .....	44.51	62.79	49.96	52.42	25	77	27	67.75	20	27	16	39.18	0.3
Union Hill .....	42.47	58.67	50.17	50.44	26	76	26	68.67	20	24	20	39.67	4.7
TENNESSEE—													
Glenwood .....	36.89	44.34	38.86	40.03	27	63	1	56.60	19	21	16	30.37	7.4
Memphis .....	39.03	48.03	42.50	43.19	1	63	1	58.00	19	35	16	34.33	6.5
KENTUCKY—													
Bardstown .....	35.07	43.12	37.96	38.72	27	58	1	52.50	17	d 16	16	24.00	7.8
Danville .....	38.87	48.00	42.00	42.96	1	66	1	58.33	16	21	16	31.00	6.9
Louisville (e) .....	37.43	43.67	39.17	40.09	1	57	1	53.33	15	f 24	15	29.33	7.9
Paris .....	35.93	42.32	37.73	38.66	2	57	2	52.33	16	g 18	19	26.00	8.0
Springdale (h) .....	34.72	42.93	39.72	39.12	2	54	1	52.17	16	15	19	27.67	8.3
OHIO—													
Avon .....	36.05	39.53	36.94	37.51	1	58	3	52.16	20	22	19	29.00	9.3
Bellefontaine .....	34.92	40.55	33.89	36.45	2	56	4	50.50	30	19	20	24.90	6.8
Bowling Green .....	33.69	41.50	35.17	36.79	1	58	1	53.50	20	17	15	24.80	8.2
Cincinnati, [Harper] .....	38.63	48.07	40.70	42.47	26	j 62	1	57.33	16	24	20	33.00	8.0
Cleveland .....	34.78	39.20	36.22	36.73	1	k 57	3	51.67	20	18	19	27.50	9.4
Cleveland, (near) .....				40.00									
College Hill .....	35.23	40.50	35.30	37.01	2	59	28	58.33	16	20	19	25.00	7.3
Collingwood .....	34.87	39.27	35.87	36.67	1	58	1	54.67	20	18	16	26.00	---
Dayton .....	35.46	42.27	36.62	38.12	1	59.4	1	54.27	19?	23	19	27.21	8.7
Edgington .....	31.03	38.17	32.67	33.96	2	52	2	49.33	15	g 8	15	12.67	8.3
Edinburg .....	34.47	39.37	35.50	36.45	3	58	1	51.67	20	12	20	26.00	9.3
Hillsborough .....	33.30	37.95	35.07	35.44	1	57	1	53.00	16	17	19	25.00	7.5
Hiram .....	33.23	37.13	33.50	34.62	1	59	1	50.33	20	20	15	25.00	9.2
Hudson .....	34.25	38.93	35.16	36.11	3	57	3	52.00	20	19	19	26.20	9.0
Jackson, (Monroe county) ..	34.62?	42.96	37.35	38.31	2	62	?	?	17	21	?	?	8.6
Jefferson .....	37.59	40.21	37.38	38.39	1	l 46	2	45.33	13	m 30	23	n 32.67	1.0
Lancaster .....	32.88	39.60	34.33	35.60	1	59	1	52.53	16	19	16	24.97	8.0
Madison, [Atkins] .....	35.53	38.63	36.30	36.82	1	k 54	3	52.00	20	20	20	29.00	9.0
Madison, [King] .....	35.30	39.57	35.17	36.68	3	55	3	51.00	20	22	15	29.67	9.1
Montville .....	33.82	37.87	34.78	35.49	3	55	1	50.50	20	19	19	22.67	8.5
New Lisbon .....	37.47	46.57	39.70	41.25	3	66	3	58.67	20	8	20	28.00	7.3
Northwood .....													8.5
Ripley (o) .....	36.00	38.59	38.00	37.53	---	?	---	?	16	20	---	?	?
Savannah .....	32.53	40.47	34.00	35.67	1	60	1	53.00	20	15	19	24.33	9.1
Urbana .....	32.43	41.33	32.27	35.34	2	59	1	54.33	17	13	30	24.00	8.5
Welchfield .....	32.53	39.00	32.90	34.81	1	k 60	3	52.33	20	16	19	24.67	8.1
Westerville .....	34.05	40.29	36.22	36.85	2	60	1	55.00	16	18	15	26.17	8.5
Windham .....	33.60	38.03	34.63	35.42	1	56	3	51.67	20	16	19	25.33	---
MICHIGAN—													
Battle Creek .....	32.33	40.30	34.63	35.75	4	56	2	51.33	29	11	30	24.00	7.6
Cooper .....	34.67	36.87	34.57	35.37	8	48	8	44.67	23	24	28	25.33	6.3
Detroit .....	34.17	42.22	35.63	37.34	2	60	2	55.00	30	20	16	26.33	7.0
Grand Rapids, [Streng] .....	31.70	39.30	34.40	35.13	1	k 51	3	48.67	14	20	30	25.67	8.0
Iansing (p) .....													6.8
Marquette .....	28.48	31.92	29.72	31.04	2	44	2	42.20	10	q 15	30	17.13	7.6
Monroe .....													8.8
New Buffalo (r) .....	33.77	40.12	33.63	35.84	1	i 53	2	49.33	16	g 18	15	27.00	9.2
Ottawa Point (s) .....	34.60	37.63	36.40	35.86	3	53	3	51.50	30	22	30	23.75	7.8

a Observations interrupted from the 4th to the 12th of the month.

b Same temperature on the 20th.

c Same temperature on the 9th.

d Same temperature on the 18th and 19th.

e Observations taken at 7 a. m., 3 p. m., and 9 p. m.

f Same temperature on the 16th and 18th.

g Same temperature on the 19th.

h Observations taken at 7 a. m., 2 p. m., and 5 p. m.

i Same temperature on the 2d.

j Same temperature on the 30th.

k Same temperature on the 3d.

l Same temperature on the 2d, 3d, 5th, and 8th.

m Same temperature on the 28th.

n Same temperature on the 27th, 28th, 29th, and 30th.

o Incomplete.

p Observations taken at 7 a. m., 2 p. m., and 8 p. m.

q Same temperature on the 15th.

r Observations taken at 7 a. m., 1 p. m., and 9 p. m.

s Observations taken at 6 and 9 a. m., and 3 and 9 p. m. Mean at 9 a. m., 34.73.

t Same temperature on the 4th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.	
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.		
MICHIGAN—Continued.	°	°	°	°		°		°		°		°		
Port Huron .....	34.85	41.60	38.05	38.17	3	58	3	54.67	17	18	13	29.00	8.0	
Thunder Bay Island (a) .....	32.68	35.25	34.20	34.01	4	48	4	46.62	30	21	30	21.87	8.1	
INDIANA—														
Cannelton .....	38.29	43.19	38.63	40.04	1	58	1	53.90	19	24	18	30.00	7.7	
Logansport .....	34.30	40.20	36.13	36.88	1	54	2	51.33	19	21	18	26.33	8.0	
Madison .....	35.55	39.77	36.42	37.25	1	b 54	2	51.33	16	c 21	19	25.33	8.5	
New Harmony .....	37.00	42.20	38.20	39.13	27	55	1	52.00	19	22	19	28.33	8.2	
Notre Dame .....	41.88	46.02	43.26	43.72	4	62	4	55.50	15	27	15	32.16	9.0	
Richmond, [Austin] (d) ..	33.67	41.04		37.35	2	57	2	53.50	17	20	20	27.50	8.9	
Richmond, [Moore] .....	34.77	39.36	36.92	37.02	2	56	1	b 52.20	17	21	16	24.80	8.3	
ILLINOIS—														
Athens .....	31.17	40.20	33.57	34.98	2	55	2	48.67	19	7	15	c 20.33	8.2	
Augusta .....	31.13	37.77	33.96	34.29	27	52	2	47.33	15	11	18	18.33	7.6	
Aurora .....	31.83	39.53	35.27	35.54	1	54	2	50.33	19	8	19	20.67	8.0	
Batavia, [Capon] .....	30.03	37.70	31.43	33.05	1	52	2	48.33	19	7	19	17.00	8.3	
Batavia, [Mead] .....	28.62	36.06	29.73	31.47	1	52	1	47.67	19	6	19	16.67	8.0	
Brighton .....	30.23	51.07	42.10	41.13	5	79	4	65.00	16	13	16	25.00	8.8	
Carthage (f) .....	31.33	38.17	35.33	35.28	2	49	2	47.00	18	10	18	16.33	---	
Edgington .....	31.03	38.17	32.67	33.96	2	52	2	49.33	19	8	15	12.67	8.3	
Elgin .....	30.43	36.60	31.37	32.80	2	53	2	48.67	19	7	19	18.67	8.5	
Jacksonville (g) .....	33.33	40.87	36.80	37.00	2	h 55	27	50.11	19	11	19	22.11	---	
Manchester (i) .....	30.97	39.50	33.37	34.61	27	54	27	49.67	19	10	15	j 21.00	7.8	
Marengo .....	30.20	38.43	30.60	33.08	1	54	2	49.33	19	4	19	14.00	8.2	
Ottawa .....	30.78	37.13	32.89	33.60	1	51	1	47.67	15	c 11	15	20.00	7.5	
Pekin .....	30.70	39.00	33.56	34.42	2	52	1	47.00	19	7	15	17.00	8.1	
Peoria .....	33.89	39.72	35.26	36.29	1	54	1	50.00	19	11	15	21.50	8.1	
Riley .....	30.26	37.17	30.33	32.59	1	k 48	2	47.00	19	0	19	11.33	8.0	
South Pass .....	34.23	42.77	36.03	37.68	27	l 57	1	53.00	19	15	18	c 27.67	7.3	
Upper Alton .....	32.62	40.93	35.37	36.30	2	h 54	27	51.67	19	12	19	23.00	7.5	
Waynesville .....	30.13	36.47	34.73	33.78	1	50	1	47.67	19	7	19	20.33	8.5	
West Salem .....	34.73	42.03	35.97	37.58	27	60	27	52.33	19	16	19	22.33	7.9	
West Urbana .....	33.50	39.17	35.10	35.92	28	59	2	51.33	15	13	15	21.33	8.2	
Wheaton .....	30.65	36.38	31.87	32.97	1	b 51	2	49.73	19	9	19	18.83	8.3	
Winnebago .....	29.66	35.63	30.57	31.95	2	51	2	49.33	16	2	15	15.33	7.9	
MISSOURI—														
St. Louis .....	34.70	41.00	37.08	37.59	28	57	28	52.83	19	17	19	25.00	---	
WISCONSIN—														
Appleton .....	29.23	36.10	31.50	32.28	2	m 47	1	m 45.00	19	10	19	18.33	7.0	
Bay City .....	24.33	31.03	26.00	27.12	1	42	1	39.33	16	n 30	30	15.33	6.2	
Bayfield .....	25.80	32.26	27.83	28.63	n 48	1	40.33	30	10	18	18	15.33	7.0	
Beloit .....	29.33	38.53	30.13	32.66	2	50	2	48.00	1	—	1	19	11.33	7.5
Green Bay .....	30.73	37.27	33.43	33.81	1	46	1	44.67	19	12	19	22.67	7.2	
Janesville .....	30.67	36.83	32.37	33.29	1	50	1	47.67	16	8	19	15.67	8.5	
Kenosha .....	33.00	38.26	35.17	35.48	3	52	1	49.33	19	9.5	19	?	7.3	
Madison, [Sterling] .....	30.10	34.10	31.00	31.73	3	49	3	45.67	19	7	19	14.00	7.8	
Manitowoc .....	31.50	39.83	34.93	35.42	4	52	3	48.67	19	14	19	23.33	7.7	
Milwaukee, [Pomeroy] .....	33.67	41.03	34.47	36.39	4	56	4	50.67	19	11	19	20.00	8.5	
Milwaukee, [Winkler] .....	31.45	36.93	32.41	33.60	3	50	2	46.33	19	10	19	18.33	7.4	
Platteville .....	28.33	37.57	30.00	31.97	1	50	4	46.00	19	—	1	19	12.33	7.8
Warsaw .....	23.57	37.73	32.70	31.33	1	n 45	1	40.67	14	—	2	14	18.00	3.2
Waukesha .....	31.27	36.23	33.13	33.54	3	52	2	m 47.33	20	10	16	17.67	7.4	
IOWA—														
Bellevue .....	28.60	36.86	30.10	31.85	2	51	2	47.67	19	4	19	14.00	7.9	
Border Plains .....	26.07	35.50	28.80	30.12	1	47	1	42.33	19	0	19	14.67	7.7	
Dubuque .....	30.10	36.07	32.53	32.90	2	49	2	46.33	19	5	19	15.33	7.3	

a Observations taken at 6 and 9 a. m. and 3 and 9 a. m. Mean at 9 a. m., 33.92.

b Same temperature on the 2d.

c Same temperature on the 19th.

d Observations taken at 6 a. m. and 1 p. m.

e Same temperature on the 5th.

f Observations taken at 7 a. m., 1 p. m., and 7 p. m.

g Observations taken morn., 1 p. m. and 6 p. m.

h Same temperature on the 27th.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Same temperature on the 18th.

k Same temperature on the 2d and 4th.

l Same temperature on the 28th.

m Same temperature on the 3d.

n Same temperature on the 9th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Iowa—Continued.	°	°	°	°		°		°		°		°	
Fairfield.....	28.93	35.86	31.57	32.12	1	47	1	45.33	15	5	18	11.67	8.2
Fort Madison (a).....	30.36	37.60	33.76	33.90	2	48	2	46.33	15	6	18	14.33	7.7
Iowa City.....	28.30	35.50	29.77	31.19	1	47	1	44.67	16	b 4	18	9.00	8.1
Muscatine.....	29.67	36.53	31.53	32.58	2	52	2	47.33	19	4	18	11.33	7.2
Pleasant Plain.....	28.37	36.03	31.53	31.98	1	48	2	46.00	19	2	18	11.00	7.5
Rossville.....	26.17	32.50	28.23	28.97	1	46	1	43.40	19	1	18	10.60	7.8
Sioux City.....	24.64	32.06	25.40	27.37	1	49	---	?	15	0	---	?	7.2
MINNESOTA—													
Beaver Bay (c).....	23.70	30.86	27.50	27.35	10	d 41	22	39.67	30	5	30	13.67	6.8
Burlington.....	23.20	33.20	26.30	27.57	5	48	1	40.00	14	— 1	30	13.67	5.9
Forest City.....	21.00	31.00	24.23	25.41	1	47	1	42.67	15	— 4 e	18	7.67	2.8
Hazlewood.....	24.74	29.32	25.34	26.47	1	43	1	42.00	15	— 5	18	?	6.8
Lapham (f).....	22.27	---	28.10	25.18	1	g 45	3	42.50	15	— 7	15	2.67	---
Princeton.....	23.20	32.50	25.93	27.21	1	44	1	40.00	19	0	18	8.00	6.8
Stillwater.....	24.40	33.13	27.50	28.34	1	47	1	42.00	19	1	18	13.00	7.5
NEBRASKA—													
Bellevue.....	28.73	35.60	30.63	31.65	1	50	1	43.67	15	6	18	16.00	6.5
Brownville.....	28.43	38.53	31.13	32.70	26	58	1	46.33	18	7	15	16.33	7.3
Elkham.....	25.03	33.57	26.87	28.49	1	51	1	42.33	15	3	18	13.33	7.4
KANSAS—													
Burlingame.....	30.93	39.43	32.90	34.42	25	49	27	45.67	15	14	18	22.00	6.1
Lawrence.....	30.77	40.30	33.13	34.73	27	54	27	49.00	18	14	18	21.33	6.9
Leavenworth City, [Berthoud]	---	---	---	---	---	---	---	---	---	---	---	---	7.8
Leavenworth City, [McCarty]	30.23	37.60	33.03	33.62	27	56	27	49.00	18	12	12	18.67	7.2
Manhattan.....	30.00	41.43	31.90	34.44	27	58	26	47.33	15	11	17	21.00	6.8
UTAH—													
Great Salt Lake City (h).....	31.00	44.00	37.00	37.75	---	---	---	---	---	---	---	---	---
MEXICO—													
Cordova (i).....	65.23	68.18	65.70	66.67	21	77.36	---	---	16	60.80	---	---	---
Minatitlan (j).....	68.93	75.37	---	72.15	21	83	1	78.50	25	k 64	9	66.50	---
Mirador (l).....	60.51	68.54	62.51	63.85	---	---	---	73.09	---	---	---	56.71	---
Vera Cruz (m).....	74.25	---	72.23	73.24	---	---	---	---	---	---	---	---	---
CALIFORNIA—													
Marysville.....	49.40	63.03	55.23	55.88	8	69	8	60.33	28	40	28	48.33	2.7
Sacramento.....	48.50	60.17	54.03	54.23	9	66	1	58.67	29	39	28	46.00	2.6
San Francisco.....	52.97	60.87	55.10	56.31	8	72	8	61.67	25	n 46	25	50.00	3.3
WEST INDIES—													
Centre Sig. Station, Ber. (o).....	---	---	---	69.04	2	p 74	---	---	18	b 63	---	---	---
Nassau, Bahamas (q).....	---	---	---	77.23	---	---	19	r 82.50	---	---	25	69.00	---
Turk's Island, Bahamas (s).....	78.43	81.50	79.20	79.71	3	t 84	3	u 82.00	28	72	27	74.33	---
CENTRAL AMERICA—													
Guatemala (v).....	55.58	70.34	59.72	63.18	?	80.6	---	---	?	48.4	---	---	---
SOUTH AMERICA—													
Catharina Sophia, Surinam (w).....	75.00	85.40	80.10	80.17	2	91	9	82.67	20	72	24	76.33	5.4
Chanarcillo, Chili (x).....	58.43	69.00	58.10	61.94	---	---	---	---	---	---	---	---	---
EASTERN CONTINENT—													
Jerusalem, Palestine.....	62.95	72.80	66.21	67.32	5	80	11	74.00	14	y 52	14	55.83	1.3

a Observations taken at 6 a. m., noon, and 7 p. m.

b Same temperature on the 19th.

c For the last 22 days of the month.

d Same temperature on the 22d.

e Same temperature on the 30th.

f Observations taken at sunrise and sunset.

g Same temperature on the 3d.

h Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean

at 9 a. m., 39.00.

i Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 67.46; and at 6 p. m., 66.79.

j Observations taken at 7 a. m. and 3 p. m.

k Same temperature on the 26th.

l Observations taken at 7 a. m., 2 p. m., and 8 p. m.

m Observations taken at 7 to 9 a. m., and at 10 to 11 p. m.

n Same temperature on the 29th.

o Observations taken at noon for 23 days only.

p Same temperature on the 3d, 6th, and 10th.

q Mean obtained from daily maximum and minimum.

r Same temperature on the 20th.

s Observations taken at 6 a. m., noon, and 6 p. m.

t Same temperature on the 7th and 11th.

u Same temperature on the 7th.

v Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.

Mean at 9 a. m., 62.06; mean at noon, 68.18.

w Observations taken at 6 a. m., 2 p. m., and 6 p. m.

x Observations taken at 6 a. m., noon, 6 p. m., and 10 p. m. Mean

at 6 p. m., 62.22.

y Same temperature on the 15th.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°	°	°	°	°	°	°	°	°	
Fort Simpson (a) .....				—25.55	3	8	3	3.00	28	—49	28	—46.50	
Hamilton (b) .....	30.61		31.23	30.92	14	50	14	47.00	9	14	9	16.00	
Montreal .....	13.90	20.10	17.08	17.03	14	42	14	38.80	30	—10	29	—2.33	5.4
Moose Factory (c) .....	—12.23	2.68	—4.06	—4.54		28				—38			
Red River Settlement .....	—5.07	4.08	—3.37	1.45	18	d 25	28	22.33	16	—33	15	—20.33	4.1
Rigolet (e) .....	—1.94		1.58	—0.18	23	32	23	31.00	30	—22	30	—21.50	
St. John's .....	21.52	24.84	21.39	22.58	15	39	15	37.00	21	8	20	12.33	6.1
St. Martin .....	6.64	19.45	12.66	12.92	16	38	14	33.63	30	—18	29	—5.40	5.1
Stanbridge .....	12.06	20.77	16.90	16.58	14	41	14	38.33	30	—21	30	—9.67	6.4
Toronto (f) .....	27.12	29.29	26.47	27.63	14	44	14	40.63	24	6	24	11.27	8.3
Windsor .....	19.35	25.17	22.40	22.31	22	43	15	36.50	13	0	18	9.00	7.6
Wolfville .....	19.84	25.65	21.87	22.45	27	44	15	36.80	13	3	18	6.83	7.9
MAINE—													
Cornish, [Guptill] .....	17.98	26.00	21.64	21.86	15	42	15	39.67	30	—2	30	4.67	5.5
Cornish, [West] .....	14.32	22.58	19.03	18.64	15	40	15	37.67	19	g —6	30	—0.67	5.3
Dexter .....													5.0
Gardiner .....	11.10	22.26	17.06	16.81	6	39	15	33.67	26	—13	30	—7.00	5.0
Perry .....	14.55	22.37	19.29	18.74	h	39	15	37.00	30	—8	30	—2.67	4.3
Portland .....	18.45	25.89	22.65	22.33	h	39	15	37.00	30	—1	18	9.83	5.9
Steuben .....	15.61	24.58	20.84	20.34	h	40	15	37.33	30	—7	30	—0.67	4.8
NEW HAMPSHIRE—													
Shelburne .....	12.90	25.16	18.55	18.87	3	48	15	39.33	30	—18	30	—1.33	6.0
Stratford .....	10.26	21.13	14.39	15.26	14	40	14	37.67	30	—18	24	—2.00	5.6
West Enfield .....	15.30	22.40	19.07	18.92	14	h 42	15	39.33	19	—8	18	—2.00	6.1
VERMONT—													
Brandon .....	17.29	25.43	20.35	21.02	15	42	14	38.16	25	—11	25	0.33	6.2
Burlington .....	17.15	22.97	19.93	20.02	14	42	14	39.00	30	—11	18	0.00	?
Craftsbury .....	12.16	21.32	15.68	16.39	14	h 40	14	37.00	30	—15	18	—2.00	5.8
Rupert .....	20.39	28.71	25.68	24.93	14	h 44	15	40.67	25	—4	25	6.00	6.2
St. Johnsbury .....	9.29	20.74	14.39	14.81	8	j 38	14	h 35.37	30	—25	25	—10.00	5.6
MASSACHUSETTS—													
Amherst .....	22.37	29.17	25.70	25.73	15	43	15	40.30	26	0	25	9.30	5.6
Bridgewater (k) .....	26.61	34.77	30.42	30.60	15	56	15	52.33	26	9	18	17.00	5.8
Cambridge .....	24.77	33.06	27.77	28.53	15	57	15	50.33	18	l 9	18	12.00	5.6
Danvers (m) .....	24.43	33.52	28.61	28.85	15	50	15	46.00	18	n 8	30	11.33	6.3
Florida .....													7.0
Lawrence .....	21.23	29.51	25.90	25.55	15	45	15	43.00	19	1	30	8.33	5.6
Mendon .....	23.32	30.75	27.23	27.10	14	53	15	50.67	25		18	11.33	6.2
Nantucket .....	35.00	39.50	38.30	37.60	15	54	15	51.50	11	22	25	27.00	5.9
New Bedford .....	28.80	36.20	32.50	32.50	15	51	15	51.20	25	7.5	25	16.70	6.5
Richmond .....	21.97	29.13	24.39	25.16	15	45	15	38.33	24	—2	24	2.67	6.9
Westfield .....	21.81	29.03	25.90	25.58	15	o 42	15	39.67	26	—3	25	10.33	6.6
Williamstown .....	21.26	26.68	22.81	23.58	15	45	15	41.33	25	—3	25	1.33	6.7
Worcester .....	25.03	32.45	28.48	28.65	15	52	15	48.67	18	85	18	12.00	5.9
RHODE ISLAND—													
Providence (p) .....	28.30	36.40	31.50	32.07	15	58	15	55.00	25	12	18	16.33	5.7
CONNECTICUT—													
Columbia .....	27.71	34.03	27.87	29.87	14	52	16	49.33	18	q 8	18	14.00	6.0
Middletown .....	24.82	33.59	28.14	28.85	15	53	15	50.90	26	3	25	13.70	5.4
Pomfret .....	23.43	30.27	27.07	26.92	15	52	15	48.80	19	6	18	10.60	5.8
Saybrook .....	28.90	35.23	31.39	31.84	14	h 49	15	47.00	18	12	18	17.33	5.9
Wallingford .....	23.92	33.69	27.35	28.32	15	51	15	49.67	26	4.5	18	15.50	5.3
NEW YORK—													
Bellport .....	32.23	38.15	34.10	34.82	14	h 50	15	49.33	18	14	18	19.67	5.7

a Register thermometer.

b Observations taken at 9 a. m. and 9 p. m.

c Observations taken at sunrise, 2 p. m., and 10 p. m.

d Same temperature on the 28th.

e Observations taken at sunrise and sunset.

f Observations taken at 6 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 30th.

h Same temperature on the 15th.

i Same temperature on the 29th.

j Same temperature on the 14th.

k Observations taken at 7 a. m., 2 p. m., and 7 p. m.

l Same temperature on the 19th, 25th, and 26th.

m Observations taken at 7 a. m., 1 p. m., and 9 p. m.

n Same temperature on the 19th.

o Same temperature on the 20th.

p Observations taken at sunrise, 1 p. m., and 10 p. m.

q Same temperature on the 25th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M <sup>n</sup> temp	Date.	Temp.	Date	Mean temp	
NEW YORK—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Buffalo (a) .....	32.45	34.87	33.10	33.47	14	51	14	49.00	25	16	9	18.33	7.5
Clinton .....	23.51	30.32	25.96	26.50	15	43	14	40.33	25	2	18	9.33	8.2
Fishkill Landing .....	25.68	32.90	28.55	29.04	15	48	15	46.00	25	8	25	12.00	6.3
Flatbush .....	30.28	36.49	32.68	33.15	15	54	15	52.40	19	14	18	19.20	6.1
Fort Edward .....	17.00	25.03	21.58	21.20	15	b 51	15	37.33	25	—12	25	—1.33	6.8
Houseville .....	19.00	26.69	20.41	22.03	15	45	15	40.33	25	—8	19	—1.00	7.1
Nichols .....	27.39	34.65	29.15	30.40	15	43	14	46.33	18	8	18	15.33	7.9
Rochester .....	27.81	32.87	30.13	30.27	14	54	14	48.60	18	12	18	15.33	8.5
Sag Harbor .....	31.94	39.65	35.71	35.76	14	c 55	14	53.33	18	d 17	18	20.00	6.0
Waterford .....	20.82	28.08	23.94	24.28	27	44	15	38.00	26	—3	25	3.67	6.8
NEW JERSEY—													
Freehold .....	32.13	37.39	36.74	35.42	15	67	15	59.67	10	15	10	25.67	---
Lambertville .....	28.77	38.42	33.85	33.68	15	56	---	---	19	10	---	---	---
Newark (e) .....	---	---	---	32.85	15	55	15	49.13	19	11	19	20.13	---
PENNSYLVANIA—													
Bellefonte .....	31.81	39.06	34.35	35.07	15	55	15	49.33	25	d 16	18	23.67	7.2
Berwick .....	30.25	37.00	32.22	33.16	15	54	15	48.67	25	15	9	22.00	5.7
Cannonsburg .....	35.87	42.26	39.54	39.22	5	59	5	53.33	9	14	9	18.67	7.9
Carlisle (f) .....	32.29	38.07	34.37	34.91	15	56	15	50.00	10	15	10	22.33	6.9
Chambersburg .....	32.45	38.29	34.55	35.10	15	52	15	47.00	10	15	9	21.33	7.1
Chromedale .....	33.81	40.90	36.29	37.00	15	56	14	55.33	10	17	10	23.67	5.9
Easton .....	27.73	35.47	29.84	31.01	15	52	15	48.67	10	g 30	30	18.17	7.1
Fleming .....	28.90	37.32	31.42	32.55	15	54	15	56.00	25	10	25	18.33	6.8
Gettysburg .....	30.65	38.71	33.19	34.18	15	60	15	53.33	10	11	9	18.33	6.6
Harrisburg, [Heisely] .....	33.90	38.16	35.87	35.98	15	54	15	51.00	10	21	9	25.33	7.0
Harrisburg, [Hickok] .....	32.57	37.81	34.50	35.00	15	56	15	52.33	10	18	9	22.67	6.3
Lewisburg .....	28.75	35.77	31.15	31.89	15	55	15	47.37	26	14	25	20.23	7.1
Morrisville .....	29.87	38.16	33.45	33.83	14	60	15	d 54.33	19	12	10	g 22.67	5.8
Mount Joy .....	32.60	39.35	34.82	35.59	15	57	15	54.00	10	15	10	20.83	6.4
Murrysville .....	32.20	41.10	35.06	36.12	5	62	---	?	10	6	9	16.33	7.2
Norristown .....	32.79	38.07	34.46	35.11	14	64	15	53.33	10	17	10	23.67	6.6
North Whitehall (h) .....	27.65	36.23	33.32	32.40	15	52	15	48.67	10	12	30	21.33	---
Paradise .....	---	---	---	28.00	---	---	---	---	---	---	---	---	---
Philadelphia .....	34.50	40.97	37.47	37.65	15	57	15	56.33	19	19	10	26.00	7.0
Pittsburg, [Martin & Speer] .....	34.87	41.29	37.48	37.88	5	62	5	56.33	10	14	9	19.67	6.7
Pocopson .....	31.71	39.48	34.58	35.26	14	61	15	54.33	10	d 15	10	23.00	6.7
Shamokin (i) .....	28.94	36.32	32.81	32.69	14	56	14	50.67	10	3	10	16.00	6.4
Somerset .....	31.90	40.06	35.13	35.70	5	62	5	55.67	10	8	9	12.67	8.2
Tarentum .....	32.70	41.52	37.06	37.09	5	62	5	f 56.00	10	8	9	18.00	7.3
West Haverford .....	33.48	41.03	---	37.25	14	c 57	15	55.50	19	17	10	24.00	6.8
Westtown .....	31.56	38.44	34.23	34.74	14	63	14	53.50	10	d 15	10	22.00	6.4
DELAWARE—													
Georgetown (k) .....	38.77	46.77	43.55	43.03	14	66	14	63.67	10	20	9	27.33	---
MARYLAND—													
Annapolis .....	35.00	42.26	41.20	39.49	5	57	15	54.33	10	15	9	26.33	7.2
Baltimore .....	35.89	41.82	39.32	39.01	14	60	15	56.67	10	19	9	25.33	7.1
Bladensburg .....	31.97	44.58?	36.27	37.61	14	63	---	?	10	13	---	?	7.6
Chestertown .....	34.86	42.34	37.94	38.38	14	64	14	57.67	11	18	9	23.67	6.8
Frederick .....	33.98	39.64	36.20	36.61	14	56	15	52.00	10	19	9	24.13	6.9
Leitersburg .....	31.87	39.97	33.71	35.18	14	62	14	56.00	10	10	10	18.00	6.6
Leonardtown .....	37.29	45.81	40.13	41.08	14	69	14	62.67	10	d 19	10	25.00	6.6
Sykesville .....	33.42	43.06	35.71	37.40	15	62	15	55.67	10	14	9	20.67	6.2
DISTRICT OF COLUMBIA—													
Washington .....	36.81	43.10	39.81	39.91	14	62	14	c 55.33	10	19	10	26.00	7.0
VIRGINIA—													
Crichton's Store (l) .....	42.89	46.18	48.73	45.93	14	c 70	14	68.00	10	22	10	29.00	6.0
Cross Creek .....	31.29	42.84	33.97	36.03	5	62	14	53.67	10	0	9	12.00	---

a Observations taken at 8 a. m., 2 p. m., and 9 p. m.

b Same temperature on the 27th.

c Same temperature on the 15th.

d Same temperature on the 26th.

e Observations taken at 7 a. m. and 6 p. m.

f For the first 24 days of the month.

g Same temperature on the 19th.

h Observations taken at sunrise, noon, and sunset.

i Observations taken also in the night. Mean, 21.81.

j Same temperature on the 14th.

k Observations taken at 8 a. m., 1 p. m., and 6 p. m.

l Observations taken at 9 a. m., noon, and 4 p. m.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp	
VIRGINIA—Continued.	°	°	°	°	°				°				
Hartwood .....	38.48	46.52	40.71	41.90	14	66	14	62.00	10	16	10	25.67	---
Lewinsville .....	39.31	44.94	40.76	41.67	14	65	14	59.83	10	21	9	25.33	7.2
Lewisburg .....	25.97	44.39	33.55	34.64	22	55	6	44.00	10	10	11	24.67	4.6
Meadow Dale .....	31.16	43.06	38.45	37.56	5	60	5	56.00	10	8	9	17.33	---
Point Pleasant .....	36.32	45.68	37.48	39.83	15	62	14	59.33	10	15	10	24.00	7.1
Poplar Grove .....	38.41	51.19	42.41	44.00	4	a 66	13	61.00	10	15	11	22.00	7.0
Portsmouth .....	42.77	52.10	43.55	46.14	15	75	5	67.67	10	23	10	27.00	5.1
Rougemont .....	35.87	46.43	40.65	40.98	5	66	15	61.33	10	11	10	22.33	7.0
Smithfield .....	38.60	48.40	42.00	43.00	5	64	5	59.70	10	19	10	27.33	6.3
Stribling Springs .....	28.78	43.22	31.77	34.59	5	63	5	54.67	10	4	9	17.67	5.7
Winchester .....	35.45	44.45	36.48	38.79	5	62	14	54.33	10	15	11	21.67	5.6
Wirt Court-House .....	36.03	45.68	39.03	40.25	5	64	5	60.67	10	12	9	20.00	6.8
NORTH CAROLINA—													
Chapel Hill .....	43.23	52.65	44.19	46.69	15	73	14	68.00	10	21	10	27.00	6.6
Davidson College .....	40.83	50.71	43.00	44.85	15	65	---	?	10	22	---	?	6.8
Gaston .....	40.35	50.06	42.13	44.18	15	c 72	15	66.67	11	16	11	24.67	---
Goldsborough .....	45.55	55.41	47.71	49.56	15	74	14	69.30	10	25	10	30.10	6.7
Murfreesborough .....	42.94	51.45	45.87	46.75	15	73	15	68.33	10	22	10	28.33	6.1
SOUTH CAROLINA—													
Aiken .....	47.06	58.65	49.13	51.61	7	75	7	70.00	10	29	26	38.00	7.2
All Saints .....	50.16	59.68	53.23	54.36	8	b 74	16	70.33	10	31	25	39.67	6.3
Charleston, [Dawson] .....	54.64	60.77	57.90	57.77	---	71	---	---	---	35	---	---	---
Charleston, [Johnson] .....	54.65	60.77	57.90	57.77	6	71	15	68.00	10	35	25	44.67	---
Columbia .....	47.48	57.71	51.00	52.06	7	d 75	15	68.67	10	29	10	37.00	6.6
St. John's .....	---	---	---	---	---	---	---	---	---	---	---	---	7.2
GEORGIA—													
Savannah .....	53.90	63.00	57.50	58.13	8	75	14	70.00	10	36	25	47.97	6.3
Sparta .....	47.94	58.87	52.68	53.16	7	77	7	68.67	10	30	26	37.67	6.7
Thomson .....	47.84	55.91	58.94	54.23	11	80	14	68.50	23	30	26	35.50	---
Whitemarsh Island .....	53.90	62.03	56.55	57.49	8	74	8	a 68.33	10	e 39	10	47.00	6.7
FLORIDA—													
Alachua County (f) .....	59.12	64.84	62.00	61.99	14	80	---	?	23	43	---	?	75.3
Alligator .....	55.58	69.70	60.00	61.76	13	82	13	73.00	23	38	1	g 51.33	6.4
Atsena .....	61.81	67.29	64.65	64.58	13	a 74	13	70.67	22	49	22	59.00	5.4
Belair .....	54.46	67.03	61.72	61.07	8	82	8	73.33	23	38	23	47.67?	6.2
Jacksonville .....	58.61	67.23	61.65	62.50	14	78	14	73.00	23	40	23	52.67	5.3
Micanopy (f) .....	59.96	71.81	62.21	64.66	11	i 81	---	?	21	40	---	?	6.2
St. Augustine .....	65.42	70.13	64.90	66.82	8	83	15	76.00	22	51	22	53.67	5.6
Salt Ponds .....	73.61	79.32	---	76.47	8	a 84	14	81.00	22	64	22	66.00	3.5
ALABAMA—													
Carlowville .....	43.37	56.48	45.07	48.31	13	j 70	---	?	9	30	9	33.00	6.7
Greene Springs .....	47.67	57.61	49.78	51.69	14	78	14	71.33	10	24	9	33.33	6.9
Greensborough .....	48.46	58.95	57.54	54.98	14	78	---	?	10	26	9	34.83	6.9
Montgomery .....	49.03	61.55	52.81	54.46	7	73	11	63.00	10	30	9	42.00	6.6
Selma .....	49.40	59.20	54.22	54.27	6	78	6	70.67	10	30	9	38.00	8.1
MISSISSIPPI—													
Columbus .....	45.69	55.72	48.58	50.00	4	74	4	68.17	10	25	9	32.17	7.0
Natchez .....	50.26	61.00	55.16	55.47	14	78	4	72.20	10	26	11	36.67	7.3
Paulding .....	50.58	61.38	55.10	55.69	14	80	14	73.33	10	28	9	36.17	6.9
LOUISIANA—													
New Orleans (l) .....	60.90	64.20	65.32	63.47	7	80	5	k 77.00	10	44	10	48.33	---
TEXAS—													
Austin, [Palm] .....	46.90	57.39	49.39	51.23	12	a 72	13	65.67	8	25	3	26.33	7.0
Austin, [Van Nostrand] .....	45.63	57.78	50.42	51.28	12	m 71	13	65.33	9	22	8	30.25	7.2
Goliad .....	52.58	61.81	56.35	56.91	12	n 75	13	70.33	9	31	8	36.33	7.6
Larissa .....	45.12	52.79	50.07	49.33	13	72	13	69.00	8	22	8	28.33	6.9

a Same temperature on the 14th.  
b Same temperature on the 15th.  
c Same temperature on the 16th.  
d Same temperature on the 8th.  
e Same temperature on the 23d.  
f Incomplete.  
g Same temperature on the 22d.

A Same temperature on the 14th, 15th, and 16th.  
i Same temperature on the 7th and 14th.  
j Same temperature on the 14th and 17th.  
k Same temperature on the 7th.  
l Observations taken at 9 a. m., noon, and 3 p. m.  
m Same temperature on the 18th.  
n Same temperature on the 13th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—Continued.	°	°	°	°		°		°		°			
New Braunfels.....	45.65	58.94	49.85	51.48	2	77	13	63.50	9	24	3	29.83	0.9
Union Hill.....	46.16	57.55	49.39	51.03	13	75	12	67.00	9	22	8	27.33	6.1
Washington.....	48.67	59.30	51.29	53.09	13	77	13	74.67	8	25	3	29.00	7.7
TENNESSEE—													
Glenwood.....	40.74	49.86	43.62	44.74	14	70	14	62.80	9	17	9	22.93	7.0
Memphis.....	43.13	51.61	47.45	47.40	4	69	13	65.00	9	22	9	28.33	6.0
KENTUCKY—													
Bardstown.....	38.55	46.01	41.14	41.90	30	62	4	59.20	9	10	9	17.00	6.1
Danville.....	42.30	51.71	44.35	49.45	14	68	14	61.33	9	16	9	23.33	6.1
Louisville (a).....	39.03	47.22	41.61	42.62	30	62	14	57.00	9	15	9	22.00	6.1
Paris.....	37.97	44.86	39.94	40.92	5	61	14	55.67	9	b 17	9	19.67	6.6
Springdale (c).....	36.56	46.56	42.74	41.95	30	61	13	d56.33	9	9	9	19.50	6.3
OHIO—													
Avon.....	36.77	38.42	35.94	37.04	5	60	5	53.00	9	13	9	15.53	7.4
Bellefontaine.....	32.48	39.13	33.32	34.98	4	55	14	50.00	9	2	9	9.00	7.2
Bowling Green.....	33.91	40.50	34.30	36.24	13	59	30	47.33	9	11	8	16.20	7.3
Cincinnati, [Harper].....	40.35	51.80	43.10	45.08	18	69	4	e57.33	9	17	9	29.00	6.3
Cleveland.....	33.10	38.55	33.48	35.04	5	58	14	50.33	9	13	9	14.67	8.2
Cleveland, (near).....				41.00									
Collingwood.....	32.48	38.93	32.51	34.64	13	58	13	48.00	9	12	9	13.00	---
Edinburg.....	33.71	39.35	35.35	36.14	5	57	4	52.00	9	12	9	18.33	7.2
Hillsborough.....	35.80	41.90	38.11	38.27	5	62	4	54.50	9	9.5	9	15.50	6.7
Hiram.....	32.32	37.32	33.22	34.29	14	53	14	50.33	9	12	9	14.00	8.2
Hudson (f).....	33.45	38.49	35.19	35.71	5	59	14	51.13	10	11	■	16.20	7.5
Jackson, Monroe county.....	34.61	43.52	38.23	38.79	14	57	—	?	10	12	---	?	7.2
Jefferson.....	25.81	30.06	25.68	27.48	3	g38	3	e36.00	30	14	30	16.00	6.7
Lancaster.....	35.04	42.51	37.35	38.30	14	57	4	53.73	9	7	9	14.07	6.5
Madison, [Atkins].....	34.20	38.80	34.18	35.73	5	57	13	49.33	25	10	25	25.00	8.2
Madison, [King].....	32.90	38.03	33.52	34.82	5	h56	6	50.67	26	12	10	18.00	8.1
Montville.....	33.32	36.72	33.77	34.60	4	54	14	50.50	■	8	9	12.80	7.5
New Lisbon.....	35.81	47.00	38.87	40.56	5	65	14	59.67	10	5	■	19.33	6.0
Northwood.....													6.3
Ripley (i).....	37.30	46.73	40.06	41.36	5	62	4	56.00	9	13	9	18.67	7.6
Savannah.....	34.03	40.32	34.42	36.26	5	63	13	55.33	9	8	9	13.33	7.8
Urbana.....	34.68	41.87	34.90	37.15	5	j57	13	53.67	9	■	9	13.33	7.3
Welchfield.....	31.61	38.03	32.29	33.98	5	58	14	50.67	9	11	9	13.00	7.5
Westerville.....	36.06	41.93	37.90	38.63	5	62	4	53.67	9	10	9	15.00	7.0
Windham.....	32.16	39.80	33.74	35.23	5	59	5	52.00	9	10	9	13.33	---
MICHIGAN—													
Battle Creek.....	28.87	36.40	30.55	31.94	13	49	13	45.33	9	9	8	k15.00	7.6
Cooper.....	32.20	35.20	30.58	32.66	13	l44	19	39.33	8	8	8	11.33	5.8
Detroit.....	31.74	36.03	30.80	32.86	7	51	5	m40.67	9	10	9	17.67	7.0
Grand Rapids, [Streng].....	28.06	34.00	29.22	30.43	13	47	13	40.67	8	8	8	10.00	8.3
Lansing (n).....	27.92	33.25	30.08	30.42	13	49	13	43.33	9	9	8	14.00	4.8
Marquette.....	21.09	26.69	21.56	23.13	13	l38	26	34.53	8	— 8	8	— 3.13	7.5
Monroe.....													8.0
New Buffalo (o).....	28.84	36.45	29.04	31.44	11	55	—	?	9	10	---	?	8.2
Ottawa Point (p).....	26.29	32.22	29.81	28.76	13	45	13	41.75	9	6	9	10.75	8.0
Port Huron.....	30.03	35.86	30.43	32.11	13	55	13	47.00	9	6	9	11.33	7.6
Thunder Bay Island (q).....	26.79	28.92	27.69	27.69	13	43	13	40.50	8	7	8	10.25	8.5
INDIANA—													
Cannelton.....	39.31	46.00	41.06	42.12	14	60	13	57.33	8	19	8	21.20	5.9
Logansport.....	32.58	39.52	33.39	35.16	14	55	14	49.00	8	10 k	8	13.37	6.6
Madison.....	37.00	42.42	38.61	39.34	5	58	4	h54.67	10	13	9	19.33	6.5

a Observations taken at 7 a. m., 3 p. m., and 9 p. m.

b Same temperature on the 10th.

c Observations taken at 6 a. m., 2 p. m., and 5 p. m.

d Same temperature on the 30th.

e Same temperature on the 5th.

f Observations at 7 a. m. wanting for the last four days of the month.

g Same temperature on the 4th and 5th.

h Same temperature on the 14th.

i Incomplete.

j Same temperature on the 15th.

k Same temperature on the 9th.

l Same temperature on the 19th.

m Same temperature on the 13th.

n Observations taken at 7 a. m., 2 p. m., and 8 p. m.

o Observations taken at 7 a. m., 1 p. m., and 9 p. m.

p Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 26.71.

q Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 27.35.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
INDIANA—Continued.	°	°	°	°		°		°		°			
New Harmony.....	36.90	45.35	40.35	40.87	13	60	13	58.00	9	14	8	19.00	6.1
Richmond, [Moore].....	35.84	42.00	37.40	38.41	14	60	14	57.33	9	9	8	16.90	6.8
ILLINOIS—													
Athens.....	28.58	39.64	32.53	33.58	12	53	12	49.00	8	3	8	8.67	5.4
Augusta.....	26.03	34.77	30.80	30.53	29	52	29	48.67	8	1	8	8.67	5.3
Aurora.....	24.09	31.74	26.74	27.52	30	48	29	40.67	8	— 7	8	— 0.67	6.3
Batavia, [Capon].....	23.16	30.49	25.70	26.42	30	48	30	39.33	9	— 10	8	— 8.00	6.9
Batavia, [Mead].....	21.26	29.90	23.13	24.76	30	45	29	36.00	9	— 16	8	— 3.67	6.9
Brighton.....	26.61	47.50	36.71	36.94	25	61	3	49.67	8	10 b	8	15.33	4.7
Carthage (c).....	24.65	34.90	30.90	30.15	14	82 ?	29	48.00	9	— 3	9	5.00	---
Edgington.....	23.87	32.97	28.67	28.50	29	49	29	44.33	8	— 5	8	7.00	6.5
Elgin.....	22.58	29.58	24.45	25.54	30	44	26	36.00	9	— 16	8	— 3.67	7.0
Jacksonville (d).....	29.90	40.35	35.71	35.32	2	58	2	50.11	8	4	8	11.11	---
Manchester (c).....	28.10	39.26	31.00	32.79	12	54	12	49.00	8	3	8	10.00	5.6
Marengo.....	23.61	31.50	25.61	26.91	30	46	12	38.00	9	— 16	9	— 2.00	6.3
Ottawa.....	25.54	31.40	26.70	27.88	30	53	29	41.67	8	— 3	8	2.67	6.0
Pekin.....	24.71	34.16	29.25	29.37	30	51	29	45.00	8	— 4	8	4.67	5.8
Peoria.....	28.80	36.30	32.07	32.39	12	51	29	47.83	8	1.5	8	9.80	5.7
Riley.....	21.84	28.93	23.06	24.61	27	47	27	38.00	10	— 16	10	— 2.67	5.7
Sandwich.....	23.25	33.51	27.35	28.04	30	46	29	39.33	9	— 15	8	0.00	5.2
South Pass.....	35.54	48.38	40.45	41.46	13	63	13	60.33	8	10 b	8	17.33	6.3
Upper Alton.....	31.22	41.90	34.93	36.02	12	58	12	52.33	8	10 b	8	13.33	4.6
Waynesville.....	26.12	34.87	33.52	31.50	12	48	29	45.00	8	9	8	7.00	5.9
West Salem.....	34.52	45.36	38.36	39.41	13	a 62	13	57.67	9	10	8	15.33	6.0
West Urbana.....	30.29	37.90	34.52	34.47	13	56	15	49.33	8	6	8	10.33	6.4
Wheaton.....	23.29	30.85	25.48	26.54	30	46	30	38.60	9	— 8	8	— 1.50	7.0
Winnebago.....	20.29	27.74	22.67	23.57	30	40	29	35.60	9	— 17	9	— 6.16	6.6
MISSOURI—													
St. Louis.....	34.00	42.71	38.11	38.27	12	56	12	51.00	8	12	8	17.00	---
WISCONSIN—													
Appleton.....	18.87	26.05	22.68	22.53	12	40	30	36.00	9	— 18	8	— 9.00	7.1
Bay City.....	10.87	19.77	13.32	14.65	26	36	26	31.33	9	— 24	8	— 13.33	6.7
Bayfield.....	14.84	19.29	16.29	16.81	26	36	28	32.00	8	— 11 b	8	— 8.00	7.6
Beloit.....	22.03	31.41	23.64	25.69	30	43	29	37.67	9	— 15	9	— 0.67	5.6
Janesville.....	23.45	30.26	25.39	26.37	20	43	29	38.33	9	— 10	8	— 2.67	7.5
Kenosha.....	27.69	32.79	29.86	30.11	19	a 42	30	39.17	9	— 6	8	0.67	5.9
Madison.....	20.00	25.26	20.42	21.89	12	40	12	35.67	8	— 11	8	— 5.00	6.4
Manitowoc.....	24.19	32.39	28.94	28.51	19	44	28	40.67	9	— 11	8	— 3.00	7.3
Milwaukee, [Pomeroy].....	26.29	32.16	28.03	28.83	12	f 43	12	39.67	9	— 6	8	1.00	7.7
Milwaukee, [Winkler].....	25.18	31.06	27.35	27.86	19	g 42	12	38.67	10	— 10	8	— 2.33	6.0
Platteville.....	18.29	28.26	21.32	22.62	28	42	28	37.33	9	— 18	8	— 8.67	6.3
Warsaw.....	9.29	26.90	22.00	19.40	26	44	26	37.00	9	— 38	8	— 8.00	3.3
Waukesha.....	23.35	31.16	26.61	27.04	19	40	29	36.67	9	— 10	8	— 2.67	4.7
IOWA—													
Bellevue.....	17.84	27.97	21.00	22.27	12	42	29	37.67	9	— 18	8	— 5.00	6.6
Border Plains.....	16.00	29.29	17.94	21.08	26	47	28	41.33	9	— 22	9	— 5.33	5.7
Dubuque.....	18.97	27.45	23.68	23.37	12	43	29	37.33	9	— 11	8	— 3.67	5.8
Fairfield.....	20.94	32.29	25.81	26.35	22	49	29	43.33	8	— 8	8	4.00	5.8
Fort Madison (i).....	24.79	32.06	28.32	28.39	29	51	29	44.00	8	— 9	8	4.67	5.1
Iowa City.....	20.06	28.13	22.93	23.71	26	45	29	41.00	9	— 11	8	0.67	5.9
Muscatine.....	19.52	30.27	24.68	24.82	29	48	29	43.33	8	— 15	8	2.33	3.7
Pleasant Plain.....	19.06	33.74	23.90	25.57	29	56	29	44.67	8	— 14	8	0.67	4.8
Rossville.....	15.66	23.35	18.20	19.07	28	37	28	35.33	8	— 17	8	— 12.50	5.9
MINNESOTA—													
Beaver Bay.....	14.31	19.67	15.61	16.53	26	j 34	28	33.33	8	— 17	8	— 10.33	6.6
Burlington.....	12.29	21.55	13.81	19.88	20	j 39	28	34.67	9	— 24	8	— 15.00	6.7
Forest City.....	7.39	19.16	9.61	12.05	28	37	28	33.67	9	— 35	8	— 19.33	1.7

a Same temperature on the 30th.

b Same temperature on the 9th.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m.

d Observations taken at sunrise, 1 p. m., and sunset.

e Same temperature on the 28th.

f Same temperature on the 26th.

g Same temperature on the 12th.

h Same temperature on the 29th.

i Observations taken at 6 a. m., noon, and 7 p. m.

j Same temperature on the 28th and 30th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MINNESOTA—Continued.	°	°	°	°		°		°		°			
Hazlewood .....	11.42	19.66	13.15	14.74	25	a 38	28	36.00	8	—16	8	—9.00	4.5
Lapham (b) .....	7.61		14.00	10.80	18	a 34	28	33.00	8	—36	8	—22.00	---
Princeton .....	9.60	21.13	11.73	14.15	20	35	28	34.67	8	—30	8	—18.00	5.0
NEBRASKA—													
Bellevue .....	21.13	32.43	23.48	25.68	26	50	28	43.67	8	—11	7	—1.00	3.4
Brownville .....	19.00	33.35	21.65	24.67	28	50	28	45.67	8	—20	8	—10.33	4.1
Elkham .....	14.45	28.78	19.52	20.92	26	49	28	43.00	8	—22	7	—6.67	4.8
Gilbert's Trading Post (c) ..	4.85	16.11	6.74	9.23	27	31	27	22.33	7	—24	2	—14.67	5.2
Omaha .....													3.5
KANSAS—													
Burlingame .....	26.52	37.74	29.29	31.18	26	a 53	28	49.00	8	—4	7	8.00	4.0
Lawrence .....	26.42	39.10	30.42	31.98	28	54	28	56.33	8	—3	7	8.00	4.8
Leavenworth C'y, [Berthoud]													4.2
Leavenworth City, [McCarty]	24.87	35.65	28.55	29.69	18	a 50	28	48.33	8	—7	8	5.00	5.1
Manhattan .....	20.58	36.23	23.35	26.72	28	56	28	48.00	8	—16	8	1.67	5.2
OREGON—													
Portland .....	38.61	44.35	41.56	41.51	17	57	16	49.67	9	22	9	27.00	---
MEXICO—													
Cordova (d) .....	64.87	69.37	65.71	66.96	30	78.08			22	61.16			---
Minatitlan (e) .....	69.23	76.23		72.73	5	84	5	78.00	30	60	10	67.00	---
Mirador (f) .....	60.03	70.63	62.76	64.47				73.09				56.71	---
Vera Cruz (g) .....	73.87		71.88	72.77									---
CALIFORNIA—													
Marysville .....	41.06	49.25	45.25	45.19	1	54	26	50.00	7	29	7	38.00	6.1
Sacramento .....	40.97	48.10	44.35	44.47	1	i 52	31	49.00	8	29	7	36.00	6.1
San Francisco .....	44.45	50.06	46.45	46.99	25	59	27	51.67	7	j 36	7	40.67	5.1
WEST INDIES—													
Centre Signal Station, Ber (k)				62.84	9	l 70			27	51			---
Nassau, Bahamas (m) .....				78.25			7	j 81.00					---
Turk's Island, Bahamas (n) ..	75.45	78.23	76.61	76.76	1	83	1	81.33	27	a 70	27	a 71.33	---
CENTRAL AMERICA—													
Guatemala (o) .....	55.40	70.88	59.90	63.61	?	76.5			?	48.7			---
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (p)	74.10	84.30	79.40	79.27	12	q 87	1	r 80.67	26	i 72	9	76.33	5.9
Chanarcillo, Chili (s) .....	63.91	72.00	57.94	65.83									---
EASTERN CONTINENT—													
Jerusalem, Palestine .....	51.29	58.89	52.87	54.35	2	t 71	2	65.83	21	40	24	44.17	2.6

a Same temperature on the 28th.

b Observations taken at sunrise and sunset.

c Observations omitted from the 8th to the 16th.

d Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.  
Mean at 12 m., 67.57; at 6 p. m., 67.26

e Observations taken at 7 a. m. and 3 p. m.

f Observations taken at 7 a. m., 2 p. m., and 8 p. m.

g Observations taken at 7 a. m. to 9 a. m., and at 10 p. m. to 12 p. m.

h Same temperature on the 31st.

i Same temperature on the 27th and 31st.

j Same temperature on the 8th.

k Observations taken at noon.

l Same temperature on the 15th and 17th.

m Mean obtained from daily maximum and minimum.

n Observations taken at 6 a. m., noon, and 6 p. m.

o Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m.  
Mean at 9 a. m., 62.60; mean at noon, 69.26

p Observations taken at 6 a. m., 2 p. m., and 6 p. m.

q Same temperature on the 22d.

r Same temperature on the 3d and 12th.

s Observations taken at 9 a. m., noon, 3 p. m., 6 p. m., and 9 p. m.

Mean at noon, 68.18; mean at 6 p. m., 67.14.

t Same temperature on the 10th.

## No. 26.—PSYCHROMETER, JANUARY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.078	.092	.090	26	.254	23	.000	67	65	71	0	26	23
St. Martin .....	.068	.109	.079	26	.262	23	.013	79	76	79	57	56	57
St. Martin .....	.060	.101	.078	26	.252	23	.015	78	77	83	62	53	51
Toronto (a) .....	.138	.141	.129	25	.272	31	.043	83	71	79	68	47	57
Windsor .....	.114	.133	.124	12	.348	23	.030	85	82	83	69	44	56
Wolfville .....	.113	.120	.124	12	.371	22	.027	84	74	84	61	40	53
MAINE—													
Portland .....	.113	.123	.120	26	.266	22	.038	85	68	77	64	37	46
NEW HAMPSHIRE—													
Francestown, [Bixby] .....	.102	.111	.111	26	.262	22	.022	76	60	73	57	27	51
VERMONT—													
Burlington .....	.105	.117	.123	26	.297	22	.030	86	76	86	55	39	37
St. Johnsbury .....	.080	.102	.097	4	.278	22	.017	82	68	82	54	29	57
MASSACHUSETTS—													
Amherst .....	.125	.152	.148	11	.349	8	b.044	86	74	84	57	45	50
Bridge-water (a) .....	.151	.167	.174	11	.439	8	c.056	89	70	85	56	32	44
Cambridge .....								80	74	78	62	59	57
Lawrence .....	.106	.124	.130	11	.418	23	.015	68	58	70	24	23	33
Nantucket .....	.164	.163	.171	16	.355	8	.046	75	61	73	51	35	49
New Bedford .....	.157	.170	.166	11	.395	22	.043	86	69	81	53	30	48
Newburyport .....	.188?	.190?	.222?	?	?	?	?	80?	70?	89?	?	?	?
Westfield .....	.111	.126	.148	21	.316	11	d.036	73	59	84	46	31	67
Worcester .....	.124	.150	.128	11	e.388	15	.000	74	63	70	40	29	0
RHODE ISLAND—													
Providence (f) .....													
CONNECTICUT—													
Pomfret .....	.134	.158	.154	11	g.388	22	.048	84	73	85	56	47	58
Wallingford .....	.129	.152	.145	11	.389	22	.038	84	62	79	62	27	45
NEW YORK—													
Buffalo (a) .....	.147	.163	.148	11	.283	8	.065	88	66	73	49	42	51
Clinton .....	.100	.142	.109	25	.321	11	.025	67	62	66	40	36	33
Fort Edward .....	.097	.124	.113	26	.247	8	.027	84	77	83	37	38	44
New York city .....	.139	.166	.164	11	.420	22	.017	62	56	64	21	28	15
Ovid .....	.107	.131	.117	11	.308	23	.040	64	63	65	32	37	28
Pompey .....	.031	.029	.029	11	.054	4	.000	83	71	76	55	0	12
NEW JERSEY—													
Bloomfield .....	.151	.170	.189	9	.459	23	.057	72	57	81	40	35	41
PENNSYLVANIA—													
Chromedale .....	.163	.174	.176	11	.476	8	.087	82	61	80	57	38	35
Easton .....	.142	.161	.158	11	.442	22	.037	79	67	77	44	42	36
Harrisburg, [Hickok] .....	.145	.168	.145	26	.426	7	.063	74	61	66	42	29	39
Lewisburg .....	.140	.149	.148	26	.373	8	.056	81	61	78	53	36	43
Murrysville .....	.148	.164	.151	25	.340	8	.022	80	62	75	27	32	40
Norristown .....	.154	.183	.173	11	.410	23	.066	78	63	73	46	38	49
Philadelphia .....	.167	.187	.182	11	.505	8	.077	75	60	69	45	27	46
Somerset .....	.147	.202	.169	25	.442	8	.065	90	81	88	75	60	68
Westtown .....	.169	.197	.190	11	.504	8	.059	85	69	83	64	35	37
DELAWARE—													
Newark .....	.178	.211	.186	11	.518	7	.087	83	62	75	56	43	41
MARYLAND—													
Annapolis .....	.179	.207	.213	11	.459	11	.088	83	68	77	70	45	54
Baltimore .....	.161	.174	.170	11	.418	7	.064	74	57	65	47	27	33
Chestertown .....	.171	.183	.186	11	.423	19	.058	78	61	73	39	21	41
Frederick .....	.167	.195	.189	26	.396	8	.094	78	66	80	59	42	61
DISTRICT OF COLUMBIA—													
Washington .....	.179	.189	.186	11	.449	11	.070	78	60	74	50	28	56

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Same amount on the 22d.

c Same amount on the 9th.

d Same amount on the 31st.

e Same amount on the 26th.

f Mean relative humidity, 62.5. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

g Same amount on the 16th.



## No. 26.—PSYCHROMETER, JANUARY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
VIRGINIA—													
Montross .....	.128	.212	.158	11	.529	31	.003	53	63	57	8	31	2
Rose Hill .....	.203	.226	.236	11	.566	30	.088	70	63	71	48	32	43
Salem .....	.211	.235	.237	26	.446	8	a. 139	78	71	78	69	56	48
NORTH CAROLINA—													
Murfreesborough .....	.296	.371	.328	11	.648	30	.167	96	87	93	88	72	89
SOUTH CAROLINA—													
All Saints .....	.314	.373	.353	11	.662	2	.162	91	75	92	61	48	79
Charleston, [Dawson] (b) .....													
GEORGIA—													
Athens .....	.214	.280	.259	25	.495	17	.128	92	69	82	69	34	53
Hillsborough .....	.254	.259	.262	11	.530	20	.012	85	60	74	55	3	31
Savannah .....	.330	.368	.356	14	.673	28	.125	88	66	80	53	33	27
FLORIDA—													
Jacksonville .....	.418	.514	.434	14	.749	17	.208	92	80	89	84	59	70
Warrington .....	.427	.764	.408	11	1.092	21	.273	94	94	93	85	70	85
ALABAMA—													
Auburn .....	.234	.254	.253	13	.563	19	.083	70	52	64	34	19	37
Carlowville .....	.308	.445	.344	14	.733	14	.123	81	80	80	37	32	40
Greene Springs .....	.283	.324	.311	25	.612	29	.139	86	67	83	56	32	52
Greensborough .....	.271	.284	.298	15	.570	28	.124	89	58	84	63	28	35
MISSISSIPPI—													
Columbus .....	.254	.284	.292	25	.525	28	.129	86	64	83	49	27	38
TEXAS—													
Austin, [Van Nostrand] .....	.277	.318	.287	24	.632	18	.047	83	60	70	64	38	12
Goliad .....	.358	.385	.391	14	.745	15	.156	86	73	81	54	34	27
Larissa (c) .....	.289	.349	.308	10	.596	29	.177	81	63	78	47	35	52
TENNESSEE—													
Glenwood .....	.197	.216	.219	25	.452	7	.093	80	57	76	49	27	51
Memphis .....	.225	.224	.238	24	.376	30	.003	81	55	73	47	1	36
KENTUCKY—													
Bardstown .....	.193	.225	.204	15	.413	3	.079	87	65	79	62	28	32
Springdale (c) .....	.183	.214	.220	25	.413	3	.101	86	69	78	70	47	57
OHIO—													
Cincinnati, [Harper] .....	.196	.237	.197	25	.410	7	.100	80	71	73	69	41	56
Cincinnati, [Hurt] .....	.189	.227	.196	25	.452	3	.071	78	67	74	46	43	50
Medina .....	.170	.194	.176	24	.485	8	.078	84	80	84	45	41	42
Northwood .....	.185	.207	.187	25	.363	31	.117	85	79	85	60	44	43
Perrysburg (c) .....	.173	.179	.171	11	.383	7	.100	80	65	78	58	39	52
Savannah .....	.150	.163	.160	25	.403	4	.038	82	67	93	62	14	54
Westerville .....	.156	.174	.165	25	.365	20	.070	77	62	75	60	20	45
MICHIGAN—													
Marquette .....	.105	.130	.103	25	.270	20	.012	81	76	76	46	44	6
INDIANA—													
Madison .....	.212	.225	.223	25	.423	8	.136	88	77	87	63	57	63
New Harmony .....	.197	.210	.208	25	.420	3	.106	87	66	82	61	36	58
Richmond .....	.152	.161	.167	25	.370	4	.062	73	60	69	35	26	31
ILLINOIS—													
Augusta .....	.147	.207	.175	25	.449	30	.050	83	74	82	43	32	48
Manchester (c) .....	.177	.249	.205	22	.410	7	.082	100	85	100	91	57	100
Peoria .....	.152	.158	.159	24	.361	7	.061	86	58	76	59	22	48
Wheaton .....	.141	.154	.151	25	.341	2	.068	87	63	82	69	34	53
MISSOURI—													
St. Louis .....	.172	.183	.175	24	.334	3	.090	81	53	71	53	26	36
WISCONSIN—													
Appleton .....	.124	.170	.133	25	.309	7	.012	76	79	74	32	57	20
Madison, [Sterling] .....	.130	.152	.140	25	.335	31	.007	84	74	79	26	25	4
Waukesha .....	.129	.139	.146	25	.298	30	.012	81	62	81	14	17	7
IOWA—													
Fairfield .....	.119	.155	.122	4	.334	7	.033	71	54	61	50	21	22

a Same amount on the 17th.

b Mean force of vapor, .352; obtained approximately from the mean dew point.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

## No. 26.—PSYCHROMETER, JANUARY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
Iowa—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Muscatine .....	.372	.437	.429	6	.668	9	.269	70	66	63	53	51	49
Sioux City .....	.110	.158	.130	24	.329	7	.025	80	75	82	55	31	61
MINNESOTA—													
Wabashaw .....	.119	.350	.239	24	.870	7	.000	56	69	67	11	29	41
KANSAS—													
Leavenworth City, [McCarty]	.163	.210	.184	24	.418	7	.082	88	72	87	58	34	53
CALIFORNIA—													
Sacramento .....	.218	.253	.243	21	.348	7	.131	83	72	81	59	25	58
San Francisco .....	.261	.279	.284	4	.363	7	.126	85	69	85	44	34	58
MEXICO—													
Mirador (b) .....	.313	.311	.350	7	.555	7	.199	60	46	64	37	27	36
Vera Cruz (b) .....	.654		.676					82		82			
WEST INDIES—													
St. George's, Bermuda (c) ..													
CENTRAL AMERICA—													
Guatemala (d) .....	.391	.362	.400					97.6	47.6	83.4			
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (b)	.769	.800	.794	11	.877	23	.693	88	69	81	85	61	74

<sup>a</sup> Same amount on the 28th.

<sup>b</sup> For changes in hours of observation, &c., see table of the thermometer for this month.

<sup>c</sup> Observations taken at 9.30 a. m. and 3.30 p. m. Mean force of vapor, .492. Mean relative humidity, 82.

<sup>d</sup> Observations taken at 6 and 9 a. m., 12 m., and at 3 and 9 p. m. Mean force of vapor at 9 a. m., .374, at 12 m., .322. Mean relative humidity at 9 a. m., 65.9, and at 12 m., 43.9.



## No. 27.—PSYCHROMETER, FEBRUARY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.047	.070	.060	28	.196	12	.002	62	65	64	9	34	29
St. Martin .....	.035	.077	.058	27	.192	12	<i>a.</i> .002	63	74	75	18	60	46
St. Martin .....	.040	.074	.055	27	.189	13	.000	71	72	77	0	53	58
Toronto ( <i>b</i> ) .....	.074	.086	.081	2	.180	5	.020	80	71	81	43	52	67
Windsor .....	.090	.095	.079	10	.192	13	.017	79	75	81	39	58	54
Wolfville .....	.074	.090	.087	28	.215	11	.031	87	74	75	74	58	66
MAINE—													
Portland .....	.072	.087	.089	28	.215	13	.032	82	63	77	56	44	48
NEW HAMPSHIRE—													
Francestown, [Bixby] .....	.068	.066	.077	28	.182	15	.020	74	47	73	47	20	43
VERMONT—													
Burlington .....	.067	.083	.079	28	.175	8	<i>c.</i> .024	91	79	87	49	43	47
St. Johnsbury .....	.051	.079	.062	28	.348	11	.006	75	64	79	20	35	31
MASSACHUSETTS—													
Amherst .....	.086	.106	.095	28	.250	24	.034	89	69	82	58	50	53
Bridgewater ( <i>b</i> ) .....	.114	.152	.130	2	.315	24	.037	97	94	96	77	38	55
Cambridge .....								76	69	73	67	61	64
Lawrence .....	.071	.083	.081	28	.243	19	.006	61	49	63	12	15	29
Nantucket .....	.101	.097	.116	2	.275	12	.019	60	42	69	24	14	29
New Bedford .....	.101	.111	.110	2	.275	11	.025	79	62	79	59	32	43
Newburyport .....	.119	.134	.148	10	.454	24	.003	88	64	79	33	1	36
Westfield .....	.074	.091	.097	28	.217	19	.024	71	58	78	46	35	55
Worcester ( <i>b</i> ) .....	.086	.090	.074	10	.248	15	<i>d.</i> .000	77	63	55	27	0	0
RHODE ISLAND—													
Providence ( <i>e</i> & <i>b</i> ) .....													
CONNECTICUT—													
Pomfret .....	.192	.112	.102	28	.251	18	.043	91	73	84	53	48	64
Wallingford .....	.089	.100	.098	28	.225	11	.039	85	60	77	57	37	54
NEW YORK—													
Buffalo ( <i>b</i> ) .....	.089	.101	.095	2	.183	11	.038	77	71	76	56	59	40
Clinton .....	.060	.083	.068	2	<i>f.</i> .178	13	.008	61	57	61	23	39	37
Fort Edward .....	.064	.106	.089	2	.212	12	.020	88	80	87	46	29	41
New York city .....	.096	.120	.109	28	.205	19	.023	66	62	66	29	32	26
Ovid .....	.072	.085	.079	30	.194	21	.024	65	62	64	40	37	44
Pompey .....	.025	.024	.025	27	.057	28	.000	83	74	83	0	32	46
NEW JERSEY—													
Bloomfield .....	.088	.101	.107	2	.236	24	.027	71	55	77	49	19	48
PENNSYLVANIA—													
Chromedale .....	.241	.289	.266	2	.239	24	.034	82	63	75	52	36	42
Easton .....	.080	.089	.096	2	.185	11	.022	71	54	73	50	25	38
Harrisburg, [Hickok] .....	.088	.108	.099	28	.211	27	.009	71	61	66	9	24	31
Lewisburg .....	.207	.255	.245	28	.473	24	.085	81	57	72	55	41	48
Murrysville .....	.094	.095	.101	28	.289	22	.022	74	53	75	21	13	34
Norristown .....	.085	.099	.097	9	.300	25	.024	78	52	70	46	20	31
Philadelphia .....	.101	.111	.118	2	.246	18	.040	70	53	67	52	26	51
Somerset .....	.100	.138	.113	28	.260	11	.028	90	83	91	68	56	57
Westtown .....	.090	.134	.121	2	.258	11	.025	77	74	82	37	45	46
DELAWARE—													
Newark .....	.116	.158	.131	28	.295	24	.046	89	74	83	56	29	46
MARYLAND—													
Annapolis .....	.120	.138	.146	1	<i>g.</i> .251	17	.055	83	64	75	51	36	57
Baltimore .....	.101	.109	.111	2	.228	17	.005	69	52	61	37	20	5
Chestertown .....	.099	.119		1	.246	11	.000	67	60		36	31	
Frederick .....	.099	.123	.118	9	.281	25	.000	73	62	74	53	0	52
DISTRICT OF COLUMBIA—													
Washington .....	.108	.122	.125	1	.257	11	.028	74	57	68	31	24	40

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

*a* Same amount on the 13th.*b* For changes in hours of observation, &c., see table of the thermometer for this month.*c* Same amount on the 12th.*d* Same amount on the 23d, 23d, and 26th.*e* Mean relative humidity, 57.*f* Same amount on the 29th.*g* Same amount on the 26th.

## No. 27.—PSYCHROMETER, FEBRUARY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches.</i>						
VIRGINIA—													
Montross .....	.104	.133	.104	1	.262	23	.000	64	56	52	18	2	11
Rose Hill .....	.127	.136	.159	28	.268	18	.022	67	56	65	18	26	49
Salem .....	.177	.200	.215	28	.349	11	.088	78	74	79	68	62	71
NORTH CAROLINA—													
Murfreesborough .....	.201	.259	.237	9	.423	23	.141	95	86	91	85	68	67
SOUTH CAROLINA—													
All Saints .....	.235	.287	.266	1	.523	11	.116	91	76	87	53	39	65
Charleston, [Dawson] (b) .....													
GEORGIA—													
Hillsborough .....	.204	.194	.187	28	.403	11	.088	83	53	65	63	21	35
Savannah .....	.253	.269	.285	1	.488	11	.156	87	59	76	61	33	47
FLORIDA—													
Jacksonville .....	.354	.458	.389	9	.631	6	.208	86	74	88	75	59	76
ALABAMA—													
Carlowlville .....	.214	.241	.240	22	.648	10	.096	78	62	73	43	29	37
Greene Springs .....	.187	.251	.215	28	.583	27	.082	77	60	75	47	37	46
Greensborough .....	.206	.214	.220	12	.428	25	.090	87	53	78	61	20	45
MISSISSIPPI—													
Columbus .....	.190	.213	.215	27	.466	11	.077	86	57	77	66	29	42
TEXAS—													
Austin, [Van Nostrand] .....	.244	.262	.246	27	.550	22	.058	85	48	67	56	15	32
Goliad .....	.280	.328	.320	9	.613	22	.025	79	56	72	34	9	27
Larissa .....	.219	.278	.238	9	.564	23	.077	79	58	75	56	23	48
TENNESSEE—													
Glenwood .....	.135	.151	.144	9	.348	10	.042	82	58	72	58	31	43
Memphis .....	.164	.171	.176	18	.390	23	.013	79	59	70	15	18	40
KENTUCKY—													
Bardstown .....	.132	.150	.145	13	.236	12	.050	91	72	87	53	43	66
Springdale .....	.111	.139	.142	27	.315	11	.000	80	68	83	11	23	62
OHIO—													
Cincinnati, [Harper] .....	.111	.160	.124	27	.270	22	.033	80	75	70	57	43	38
Hillsborough .....	.092	.110	.106	28	.229	10	.031	75	66	72	53	37	51
Medina .....	.090	.116	.096	2	.196	4	.000	87	79	80	53	0	11
Northwood .....	.114	.140	.110	22	.321	23	.029	90	75	94	73	54	70
Perrysburg (d) .....	.092	.122	.104	27	.229	22	.022	87	71	79	63	38	57
Savannah .....	.078	.112	.090	9	.212	22	.021	82	77	76	51	47	45
Westerville .....	.090	.125	.112	9	.225	23	.028	84	75	83	61	47	58
MICHIGAN—													
Marquette .....	.062	.077	.059	26	.155	20	.000	82	70	75	47	33	00
INDIANA—													
Madison (e) .....	.178	.179	.174	—	?	—	?	88	76	74	?	?	?
New Harmony .....	.125	.153	.138	9	.286	23	.048	89	75	87	66	46	56
Richmond .....	.088	.112	.102	9	.233	11	.022	76	63	73	52	36	43
ILLINOIS—													
Augusta .....	.086	.128	.101	26	.235	23	.003?	93	90	90	14	53	68
Manchester (d) .....	.104	.175	.113	14	.285	9	.027	100	99	100	100	64	100
Peoria .....	.083	.091	.092	26	.257	12	.023	90	58	80	40	35	29
Wheaton .....	.071	.092	.085	27	.178	11	.017	91	76	86	59	40	51
MISSOURI—													
St. Louis .....	.124	.135	.134	27	.243	23	.045	97	81	91	73	36	59
WISCONSIN—													
Appleton .....	.054	.108	.076	27	.270	10	.000	58	72	65	11	34	5
Madison, [Sterling] .....	.059	.081	.071	26	.196	22	.008	75	69	71	20	23	16
IOWA—													
Fairfield .....	.063	.078	.077	26	.196	10	.000	70	53	58	23	0	11
Muscataine .....	.300	.392	.368	28	.559	11	.077	61	65	65	31	49	49
Sioux City .....	.061	.081	.066	26	.296	22	.002	67	66	73	6	39	42

a Same amount on the 10th.

b Mean force of vapor, .265, obtained approximately from the mean dew point.

c Same amount on the 5th.

d For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e Incomplete.

f Same amount on the 24th.

g Same amount on the 26th.



## No. 27.—PSYCHROMETER, FEBRUARY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
MINNESOTA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Wabashaw .....	.087	.331	.176	26	.655	3	.000	46	68	58	0	12	12
KANSAS—													
Leavenworth City, [McCarty] .....	.106	.139	.114	26	.359	22	.040	94	77	88	63	43	69
MEXICO—													
Mirador (a) .....	.274	.227	.321	10	.431	20	b.000	55	35	61	5	5	29
Vera Cruz (a) .....	.666	-----	.626	-----	-----	-----	-----	84	-----	79	-----	-----	-----
CALIFORNIA—													
Sacramento .....	.263	.324	.322	22	.456	10	.142	79	72	79	60	46	63
San Francisco .....	.317	.358	.335	20	.522	2	.191	86	67	83	41	42	56
WEST INDIES—													
St. George's, Bermuda (c) ..	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CENTRAL AMERICA—													
Guatemala (d) .....	.362	.352	.383	-----	-----	-----	-----	90.3	40.7	75.0	-----	-----	-----
SOUTH AMERICA—													
Catharina Sophia, Surinam (a) ..	.666	.766	.757	20	e.850	27	.608	87	63	76	77	52	70

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 21st and 22d.

c Observations taken at 3¼ a. m., 9¼ a. m., 3¼ p. m., and 9¼ p. m. Mean force of vapor, .457. Mean relative humidity, 76.

d Observations taken at 6 a. m., 9 a. m., 12 m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .345, at 12 m., .340. Mean relative humidity at 9 a. m., 54.1, and at 12 m., 40.1.

e Same amount on the 18th and 2.st.

## No. 28.—PSYCHROMETER, MARCH, 1858.

NAME OF STATION.	FORCE OF VAPOR.						RELATIVE HUMIDITY.						
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a.m.	2 p.m.	9 p.m.	Date.	Amt.	Date.	Amt.	7 a.m.	2 p.m.	9 p.m.	7 a.m.	2 p.m.	9 p.m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
BRITISH AMERICA—													
Montreal .....	.097	.147	.115	17	.390	4	.009	70	76	73	19	48	18
St. Martin .....	.085	.173	.111	31	.383	4	.011	75	78	78	60	67	52
St. Martin .....	.083	.169	.110	31	.390	4	.011	77	75	78	53	49	64
Toronto (a) .....	.117	.117	.123	16	.310	5	.024	79	55	75	51	29	38
Windsor .....	.129	.141	.138	■	.341	14	.036	83	68	80	56	41	47
MAINE—													
Portland .....	.112	.134	.129	17	.286	4	.039	77	62	76	39	29	40
NEW HAMPSHIRE—													
Francestown [Bixby] .....	.099	.103	.102	17	.309	3	.032	68	49	67	21	22	29
VERMONT—													
Burlington .....	.112	.122	.129	18	.334	4	.025	86	65	82	59	39	50
St. Johnsbury .....	.088	.130	.104	31	.334	25	.004	72	64	79	■	29	47
MASSACHUSETTS—													
Amherst .....	.130	.153	.137	16	.313	4	.031	85	63	76	52	35	49
Bridgewater (a) .....	.148	.175	.165	17	.419	5	.055	91	75	83	55	32	25
Cambridge .....								78	69	74	62	57	60
Lawrence .....	.114	.134	.159	8	.680	5	.019	73	52	74	33	23	35
Nantucket .....	.135	.143	.153	19	.270	■	.012	68	55	75	45	10	43
New Bedford .....	.139	.139	.148	21	.305	5	.029	78	55	79	46	22	42
Westfield .....	.114	.135	.164	17	.304	5	.028	67	56	79	36	20	46
Worcester .....	.104	.136	.112	18	.295	■	.000	65	49	61	■	0	13
RHODE ISLAND—													
Providence (b) .....													
CONNECTICUT—													
Pomfret .....	.138	.156	.145	17	.487	■	.048	80	63	78	47	30	56
Wallingford .....	.121	.134	.133	18	.323	3	.042	80	50	74	47	17	43
NEW YORK—													
Buffalo (a) .....	.144	.145	.135	16	.363	5	.045	77	67	73	44	31	40
Clinton .....	.108	.139	.110	17	.464	5	.020	64	54	59	27	27	21
Fort Edward .....	.115	.153	.135	17	.321	7	.019	78	68	79	24	31	46
New York City .....	.135	.161	.138	17	.370	5	.016	64	52	56	41	19	24
Ovid .....	.115	.138	.119	15	.420	5	.017	61	56	59	32	19	26
Pompey .....	.030	.031	.030	16	.066	5	.010	79	71	75	42	32	29
Waterford (c) .....	.162	.289	.182	17	.446	13	.071	79	63	78	51	39	59
NEW JERSEY—													
Bloomfield .....	.134	.167	.126	20	.380	3	.028	66	54	71	43	25	31
PENNSYLVANIA—													
Chromedale .....								71					
Easton .....	.118	.120	.123	16	.376	5	d. 028	69	41	60	46	15	35
Harrisburg, [Hickok] .....	.131	.149	.143	16	.430	5	.032	67	44	56	33	19	21
Lewisburg .....	.120	.133	.131	16	.428	5	.022	70	40	58	41	14	28
Murrysville .....	.130	.149	.151	22	.433	6	.004	74	39	70	48	4	13
Norristown .....	.135	.170	.133	18	.433	6	.036	72	51	58	42	20	30
Philadelphia .....	.138	.162	.156	16	.448	5	.023	64	44	58	40	18	28
Somerset .....	.152	.207	.179	16	.489	5	e. 040	92	71	86	62	41	57
Westtown .....	.138	.187	.164	16	.500	5	.027	73	60	74	46	26	37
MARYLAND—													
Annapolis .....	.159	.188	.200	21	.427	5	.048	74	52	66	50	29	34
Baltimore .....	.143	.152	.158	22	.425	5	.031	65	41	52	33	21	31
Chestertown .....	.151	.183	.182	25	.442	6	.028	64	43	56	39	18	22
Frederick .....	.158	.181	.185	17	.390	6	.042	73	54	70	52	36	47
Oakland .....	.128	.145	.123	15	.396	26	.000	80	56	71	40	0	15
DISTRICT OF COLUMBIA—													
Washington .....	.148	.154	.168	17	.396	5	e. 025	63	40	56	31	14	27
VIRGINIA—													
Montross .....	.165	.237	.176	16	.680	11	.000	66	56	55	16	7	0
Rose Hill (a) .....	.181	.200	.208	22	.633	6	.061	63	47	56	39	23	32

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Mean relative humidity for the month, 53.7. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Observations interrupted from the 2d to the 10th of the month.

d Same amount on the 4th.

e Same amount on the 6th.



## No. 28.—PSYCHROMETER, MARCH, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
VIRGINIA—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Salem .....	.257	.272	.276	21	.556	9	.076	71	62	65	43	34	32
NORTH CAROLINA—													
Marfreesborough .....	.290	.374	.338	16	.604	5	.103	91	80	89	68	65	75
SOUTH CAROLINA—													
All Saints .....	.302	.315	.320	18	.586	4	.090	52	60	82	56	36	57
Charleston, [Dawson] (a) .....													
GEORGIA—													
Athens .....	.267	.285	.267	18	.596	3	.062	82	52	65	43	20	31
Hillsborough (b) .....	.290	.272	.309	18	.546	2	.056	74	41	59	30	7	23
Savannah .....	.335	.325	.344	23	.569	3	.064	79	52	72	47	25	48
FLORIDA—													
Jacksonville .....	.433	.510	.435	23	.859	3	.155	85	67	85	62	54	67
ALABAMA—													
Greene Springs .....	.328	.409	.375	18	.704	1	.052	79	58	76	29	27	57
Greensborough .....	.324	.349	.334	18	.706	1	.058	84	52	67	47	17	33
MISSISSIPPI—													
Columbus .....	.310	.346	.338	17	.672	1	.083	84	56	74	56	27	37
Paulding .....	.398	.443	.441	22	.694	1	.069	77	60	66	39	13	17
TEXAS—													
Austin [Van Nostrand] .....	.385	.423	.400	21	.731	1	.059	83	58	71	53	18	28
Goliad .....	.453	.480	.491	15	.814	1	.068	85	64	78	61	17	46
Larissa .....	.385	.424	.416	18	.718	1	.108	88	61	80	63	29	49
TENNESSEE—													
Glenwood Cottage .....	.213	.219	.233	20	.566	2	.053	71	47	63	33	16	20
Memphis .....	.259	.260	.275	19	.591	1	.076	71	50	63	26	23	29
KENTUCKY—													
Bardstown .....	.188	.217	.209	19	.482	2	.059	78	53	67	51	15	27
Springdale .....	.173	.264	.248	21	.635	7	.020	79	63	70	43	38	22
OHIO—													
Cincinnati [Harper] .....	.188	.261	.211	14	.516	5	.024	73	59	64	51	33	20
Hillsborough .....	.140	.159	.144	20	.440	6	.042	65	49	53	44	23	29
Medina .....	.152	.158	.159	20	.426	5	.028	80	56	74	49	25	35
Northwood .....	.164	.181	.213	15	.405	6	.024	78	58	83	40	15	54
Perrysburg (b) .....	.169	.196	.172	16	.517	6	.003	74	53	70	9	2	39
Savannah .....	.132	.171	.160	15	c. 396	5	.018	72	55	75	50	28	56
Westerville .....	.152	.195	.179	20	.452	7	.032	80	59	73	31	26	40
MICHIGAN—													
Marquette .....	.128	.134	.132	15	.315	13	d. 000	34	69	79	44	0	37
INDIANA—													
Madison (e) .....	.266	.330	.339	16	.556	23	.049	78	67	81	20	58	61
New Harmony .....	.218	.238	.244	20	.556	2	.078	83	57	73	54	32	37
ILLINOIS—													
Augusta .....	.187	.242	.222	16	.480	1	.032	81	62	76	54	29	49
Manchester (b) .....	.222	.325	.270	15	.708	1	.055	96	74	95	76	34	61
Peoria .....	.185	.199	.213	16	.500	25	.000	80	47	72	49	21	11
Wheaton .....	.160	.182	.177	15	.449	3	.036	83	59	81	60	26	58
MISSOURI—													
St. Louis .....	.209	.216	.229	21	.514	1	.071	76	51	67	44	14	39
WISCONSIN—													
Appleton .....	.157	.242	.180	16	.543	5	.031	81	75	76	52	32	37
Madison [Sterling] .....	.154	.173	.161	15	.604	3	.033	76	56	66	51	20	35
Waukesha .....	.139	.116	.153	15	.390	9	f. 000	66	36	65	32	0	2
IOWA—													
Dubuque .....	.150	.169	.173	15	.478	11	.038	72	49	69	44	14	39
Fairfield .....	.155	.141	.167	15	.442	2	.025	59	42	56	33	14	29
Muscatine .....	.439	.529	.517	15	.787	1	.256	71	73	74	37	56	49
Sioux City .....	.166	.206	.198	14	.446	1	.029	76	55	76	36	23	43

a Mean force of vapor .325; obtained approximately from the mean dew point.

b For changes in hours of observation, &c., see table of the thermometer for this month.

c Same amount on the 20th.

d Same amount on the 15th.

e For the last 28 days of the month.

f Same amount on the 21st, 24th, and 29th.

## No. 28.—PSYCHROMETER, MARCH, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
MINNESOTA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Wabashaw .....	.124	.298	.166	31	.570	1	.010	59	65	60	29	24	25
KANSAS—													
Leavenworth City [McCarty] .....	.217	.270	.237	17	.559	1	.045	77	57	76	47	33	43
MEXICO—													
Mirador (a) .....	.289	.206	.351	1	.563	4	.000	55	26	61	26	0	15
Vera Cruz (a) .....	.702		.748					81		82			
CALIFORNIA—													
Sacramento .....	.268	.317	.313	31	.442	17	.152	75	67	76	51	50	47
San Francisco .....	.279	.320	.302	15	.452	17	.134	75	64	79	49	24	50
WEST INDIES—													
St. George's, Bermuda (e) .....													
CENTRAL AMERICA—													
Guatemala (f) .....	.387	.337	.399					91.6	39.7	78.7			
SOUTH AMERICA—													
Catharina Sophia, Surinam (a) .....	.767	.793	.792	8	.854	23	.644	88	67	77	81	59	74

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 10th and 11th.

c Same amount on the 24th.

d Same amount on the 18th.

e Observations taken at 3.30 a. m., 3.30 p. m., and 9.30 p. m. Mean force of vapor, .415. Mean relative humidity, 76.

f Observations taken at 6 a. m., 9 a. m., 12 m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .338, at 12 m., .351. Mean relative humidity at 9 a. m., 52.6, and at 12 m., 41.1.



## No. 29.—PSYCHROMETER, APRIL, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date	Amt.	Date	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Montreal .....	.168	.181	.180	23	.335	7	.065	72	59	71	43	20	37
St Martin (a) .....	.153	.208	.187	4	.344	7	.059	80	65	80	59	24	53
Toronto (a) .....	.166	.175	.184	30	.326	19	.065	73	54	73	24	19	51
Windsor .....	.171	.173	.171	24	.311	8	.058	79	60	79	22	27	33
<b>MAINE—</b>													
Gardiner .....	.192	.204	.198	23	.323	3	.013	87	65	85	58	2	46
Perry .....	.164	.193	.191	16	.322	19	.045	78	72	88	40	16	40
Portland .....	.161	.203	.187	17	.466	11	.068	73	63	77	31	17	43
<b>NEW HAMPSHIRE—</b>													
Francestown, [Bixby] .....	.194	.164	.159	23	.423	5	.041	61	46	61	26	19	25
<b>VERMONT—</b>													
Burlington .....	.166	.166	.184	30	.407	17	.055	72	52	69	43	14	25
St. Johnsbury .....	.143	.164	.169	23	.362	2	b.000	71	52	79	0	0	40
<b>MASSACHUSETTS—</b>													
Amherst .....	.209	.223	.218	30	.534	7	.072	81	51	71	53	20	25
Bridgewater (a) .....	.212	.215	.224	30	.490	8	.072	84	54	70	50	16	31
Cambridge .....								81	68	74	63	51	54
Lawrence .....	.181	.208	.211	23	.460	7	.052	81	53	78	49	17	29
Nantucket .....	.203	.215	.221	6	.433	3	.052	68	55	76	43	28	15
New Bedford .....	.207	.218	.231	23	.441	7	.042	77	55	80	31	14	39
Newburyport (a) .....	.197	.229	.230	23	.411	29	.075	80	68	88	19	21	60
Westfield .....	.176	.186	.207	30	.520	28	.052	65	45	63	28	13	39
Worcester .....	.170	.214	.170	9	.449	17	.000	65	54	57	0	0	15
<b>RHODE ISLAND—</b>													
Providence (c) .....													
<b>CONNECTICUT—</b>													
Pomfret .....	.194	.238	.220	30	.543	7	.077	79	63	77	52	31	43
Wallingford .....	.197	.220	.211	18	.530	7	.058	78	52	73	45	19	34
<b>NEW YORK—</b>													
Bellport .....	.206	.255	.245	30	.464	7	.094	67	67	83	41	32	61
Buffalo (a) .....	.187	.200	.204	4	.516	7	.076	67	63	73	36	24	45
Clinton .....	.166	.208	.167	30	.478	7	.056	58	48	57	27	20	37
Fordham .....	.188	.208	.212	23	.443	18	.023	61	48	64	31	10	4
Fort Edward .....	.192	.226	.219	30	.546	7	d.061	77	56	75	47	13	43
New York city .....	.204	.222	.231	23	.474	7	.075	64	48	66	30	18	25
Oswego .....	.237	.257	.211	30	.556	25	.113	84	71	79	51	39	63
Ovid .....	.168	.180	.166	30	.460	18	.032	62	51	58	32	14	11
Waterford .....	.206	.230	.214	30	.473	27	.085	74	54	70	49	27	39
<b>NEW JERSEY—</b>													
Bloomfield .....	.225	.230	.232	30	.509	9	.000	75	52	73	39	17	0
<b>PENNSYLVANIA—</b>													
Byberry (e) .....	.234	.265	.253	30	.499	27	.112	77	56	75	54	29	48
Easton .....	.194	.199	.203	30	.470	28	.055	71	47	64	45	14	28
Harrisburg, [Hickok] .....	.210	.223	.222	9	f.457	27	.057	71	50	61	42	16	19
Lewisburg .....	.196	.200	.203	30	.457	7	.049	72	46	60	46	14	18
Murrysville .....	.213	.228	.248	30	.505	24	.038	70	48	74	21	9	51
Norristown .....	.225	.237	.224	23	f.443	7	b.061	74	53	64	45	13	33
Philadelphia .....	.238	.248	.256	23	.505	7	.089	71	49	66	45	23	36
Somerset .....	.250	.281	.275	9	.497	7	.100	88	67	84	55	45	60
Westtown .....	.231	.256	.249	23	.594	7	.078	79	59	77	42	23	36
<b>MARYLAND—</b>													
Annapolis .....	.286	.291	.317	30	.524	27	.101	83	57	75	53	28	40
Baltimore .....	.252	.258	.269	30	.466	7	.073	73	53	66	45	20	40
Chestertown .....	.255	.261	.244	22	.635	27	.086	74	56	65	37	25	32
Frederick .....	.243	.283	.274	10	.527	27	.103	76	60	74	47	36	53
Oakland (a) .....	.187	.176	.183	29	.410	7	.047	71	46	64	30	12	19

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Same amount on the 28th.

c Mean relative humidity, 53.4. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 18th.

e For the last 15 days of the month.

f Same amount on the 30th.

## No. 29.—PSYCHROMETER, APRIL, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
DISTRICT OF COLUMBIA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Washington .....	.274	.247	.282	30	.482	27	.064	78	51	67	43	18	34
VIRGINIA—													
Kanawha .....	.320	.401	.375	30	.745	16	.025?	85	66	86	67	9?	68
Montross .....	.274	.379	.284	10	.816	9	.096	75	71	71	45	39	31
Rose Hill .....	.302	.283	.335	30	.512	27	.094	74	57	70	51	28	55
NORTH CAROLINA—													
Murfreesborough .....	.420	.511	.457	10	.762	27	.216	70	78	91	81	62	67
SOUTH CAROLINA—													
All Saints .....	.467	.461	.486	20	.706	27	.208	85	61	83	54	37	63
Charleston, [Dawson] (b) .....													
Columbia .....	.345	.462	.438	10	.746	4	.157	75	59	74	34	29	46
GEORGIA—													
Athens .....	.359	.383	.389	12	.753	30	.000	81	57	72	39	0	32
Hillsborough .....	.375	.356	.356	11	.677	5	.106	78	49	63	40	11	20
Savannah .....	.450	.432	.457	21	.715	24	.159	80	51	74	40	24	55
FLORIDA—													
Jacksonville .....	.572	.651	.572	20	1.189	27	.283	85	69	85	67	51	75
ALABAMA—													
Greene Springs .....	.450	.496	.449	9	d. 900	28	.175	82	60	78	55	33	51
Greensborough .....	.396	.399	.402	11	.706	27	.158	81	50	70	55	26	48
Selma .....	.382	.510	.456	10	.800	15	.175	79	62	82	60	20	50
MISSISSIPPI—													
Columbus .....	.402	.413	.433	5	1.691	23	.196	82	52	79	58	27	49
Paulding .....	.472	.477	.487	19	.772	24	.251	79	55	65	56	38	47
TEXAS—													
Austin, [Van Nostrand] .....	.421	.434	.431	17	.677	12	.114	74	44	64	38	17	21
Goliad .....	.490	.518	.535	30	.868	12	.070	79	56	77	43	8	33
Larissa .....	.419	.505	.463	30	.744	12	.221	83	56	75	66	38	58
TENNESSEE—													
Glenwood .....	.305	.300	.319	11	.626	25	.104	73	48	59	40	16	33
Memphis .....	.384	.379	.397	10	.745	5	.138	78	54	72	42	17	39
KENTUCKY—													
Bardstown .....	.325	.316	.321	10	.657	27	.123	79	51	72	49	24	34
Louisville .....		.299		10	.586	5	.098		53			15	
Springdale .....	.271	.324	.294	10	.604	26	.114	81	54	65	51	19	27
OHIO—													
Cincinnati, [Harper] .....	.293	.368	.306	10	.668	6	.136	76	57	65	56	29	49
Hillsborough .....	.241	.264	.243	19	.682	26	.068	70	53	59	43	15	32
Medina .....	.221	.237	.241	30	.543	6	.084	73	56	74	47	21	37
Northwood .....	.264	.276	.266	30	.639	6	.104	86	64	88	54	22	60
Perrysburg (e) .....	.217	.256	.236	30	.798	28	.087	70	55	71	48	30	53
Savannah .....	.221	.260	.226	30	.516	16	.073	73	60	71	41	17	39
Westerville .....	.262	.309	.294	30	.631	26	.108	80	61	77	45	25	32
MICHIGAN—													
Detroit .....	.181	.245	.158	22	.827	4	.071	61	59	59	15	28	22
Marquette .....	.165	.182	.162	29	.350	7	.000	79	72	79	45	0	45
INDIANA—													
Madison .....	.348	.412	.366	20	.683	24	.179	83	72	80	66	43	59
New Harmony .....	.314	.325	.325	11	.595	6	.082	77	51	73	26	28	43
Richmond, [Moore] .....	.230	.246	.236	30	.482	26	.076	68	51	60	44	24	24
ILLINOIS—													
Augusta .....	.250	.267	.279	30	.574	5	.111	79	57	75	50	27	43
Manchester (e) .....	.296	.383	.323	29	.772	6	.130	85	69	90	56	43	64
Peoria .....	.267	.269	.281	30	.647	23	.074	79	51	76	49	16	47
Wheaton .....	.218	.224	.213	29	.559	23	.097	78	57	72	53	25	41
MISSOURI—													
St. Louis .....	.281	.304	.291	30	.623	27	.095	69	47	55	40	21	37

a Same amount on the 21st and 23d.

b Mean force of vapor, .474; obtained approximately from the mean dew point.

c Same amount on the 11th.

d Same amount on the 10th.

e For changes in hours of observation, &amp;c., see table of the thermometer for this month.



## No. 29.—PSYCHROMETER, APRIL, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
WISCONSIN—													
Appleton .....	.186	.249	.219	29	.705	19	.048	75	67	75	38	34	15
Madison, [Sterling] .....	.175	.203	.194	29	.492	25	.044	71	58	65	29	25	16
Waukesha .....	.149	.209	.179	29	.479	3	<i>a.</i> 000	59	50	62	0	0	0
IOWA—													
Dubuque .....	.209	.213	.204	29	.977	23	.077	68	52	66	36	22	32
Fairfield .....	.206	.211	.207	30	.460	5	.058	65	45	63	30	17	31
Muscatine .....	.289	.316	.320	30	.685	5	<i>b.</i> 182	86	82	81	73	67	67
Sioux City .....	.198	.210	.218	28	.483	14	.077	78	64	74	53	23	45
KANSAS—													
Leavenworth City, [McCarty] .....	.283	.312	.274	30	.563	22	.134	79	61	73	45	23	49
MEXICO—													
Vera Cruz ( <i>c</i> ) .....	.712	-----	.774	-----	-----	-----	-----	77	-----	79	-----	-----	-----
CALIFORNIA—													
Sacramento .....	.310	.367	.366	24	.581	3	.165	71	63	71	49	40	53
San Francisco .....	.283	.304	.304	12	.452	0	.156	70	52	76	48	33	56
WEST INDIES—													
St. George's, Bermuda ( <i>d</i> ) ..	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CENTRAL AMERICA—													
Guatemala ( <i>e</i> ) .....	.383	.363	.387	-----	-----	-----	-----	87.1	38.2	66.8	-----	-----	-----
SOUTH AMERICA—													
Catharina Sophia, Surinam ( <i>c</i> ) ..	.786	.814	.803	25	<i>b.</i> 928	7	.529	89	67	79	86	56	74

*a* Same amount on the 4th, 17th, and 23d.*b* Same amount on the 26th.*c* For changes in hours of observation, &c., see table of the thermometer for this month.*d* Observations taken at 3½ a. m., 9½ a. m., 3¼ p. m., and 9½ p. m. Mean force of vapor, .523. Mean relative humidity, 85.*e* Observations taken at 6 a. m., 9 a. m., 12 m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .407; at 12 m., .330. Mean relative humidity at 9 a. m., 56.1; and at 12 m., 32.8.

## No. 30.—PSYCHROMETER, MAY, 1858.

NAME OF STATION.	FORCE OF VAPOR.								RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.			MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	
	Inches.	Inches	Inches.		Inches		Inches							
BRITISH AMERICA—														
Montreal .....	.262	.285	.253	31	.527	2	.113	71	57	65	36	30	35	
St. Martin .....	.261	.375	.306	31	.772	16	.140	84	66	82	59	39	53	
St. Martin .....	.264	.378	.313	31	.759	3	.132	84	66	81	58	38	52	
Toronto (a) .....	.234	.243	.242	31	.491	3	.058	74	59	74	41	17	44	
Windsor .....	.216	.255	.225	6	.433	3	.117	79	61	75	47	30	47	
MAINE—														
Gardiner .....	.270	.314	.283	26	.451	27	.138	80	63	85	37	35	46	
Perry .....	.220	.219	.206	7	.395	3	.018	76	50	71	37	5	40	
Portland .....	.247	.244	.256	7	.556	2	.075	73	56	77	43	18	45	
NEW HAMPSHIRE—														
Francestown, [Bixby] .....	.231	.254	.236	15	.452	2	.083	66	53	67	37	19	34	
VERMONT—														
Burlington .....	.268	.283	.279	31	.449	3	.082	76	58	77	29	26	43	
St. Johnsbury .....	.214	.223	.244	5	.491	5	.007	66	47	75	2	6	36	
MASSACHUSETTS—														
Amherst .....	.291	.300	.298	6	.546	2	.138	80	55	76	45	32	45	
Bridgewater (a) .....	.296	.276	.312	24	.559	3	.139	82	57	81	49	21	33	
Lawrence .....	.271	.306	.269	12	.583	16	.112	81	60	76	40	27	34	
Nantucket .....	.263	.238	.269	12	.391	17	.034	72	57	80	42	31	65	
New Bedford .....	.282	.294	.288	15	.451	15	.150	79	62	82	43	26	47	
Westfield .....	.264	.277	.294	6	.500	2	.122	75	51	75	48	23	36	
Worcester .....	.263	.264	.277	15	.708	2	.048	76	55	72	14	19	15	
RHODE ISLAND—														
Providence (a & b) .....														
CONNECTICUT—														
Pomfret .....	.331	.362	.314	15	.522	13	.164	87	70	86	57	30	60	
Wallingford .....	.281	.313	.290	2	.476	3	.147	80	59	79	48	35	45	
NEW YORK—														
Bellport .....	.288	.319	.295	24	.673	17	.117	74	71	81	54	31	45	
Buffalo (a) .....	.250	.299	.287	31	.505	16	.117	72	68	72	38	30	46	
Clinton .....	.246	.270	.249	31	.465	3	.102	65	50	64	32	20	41	
Fordham .....	.248	.271	.272	6	.451	24	.004	65	54	68	28	0	26	
Fort Edward .....	.286	.299	.324	31	.516	3	.096	77	60	82	45	30	51	
New York city .....	.292	.328	.308	15	.522	3	.120	70	62	71	36	29	23	
Waterford .....	.298	.328	.314	9	.537	2	.144	77	60	75	34	33	49	
NEW JERSEY—														
Bloomfield .....	.319	.356	.316	14	.588	2	.074	81	67	79	51	32	25	
PENNSYLVANIA—														
Easton .....	.276	.322	.320	15	.536	16	.137	76	62	75	43	28	48	
Harrisburg, [Hickok] .....	.315	.349	.345	8	.586	21	.135	75	62	74	45	24	21	
Lewisburg .....	.296	.318	.313	15	.553	16	.083	74	58	72	29	24	38	
Mount Joy .....	.393	.492	.461	1	.725	23	.270	81	77	81	72	63	69	
Murrysville .....	.320	.357	.354	30	.617	11	.129	68	57	80	35	27	62	
Norristown .....	.311	.338	.331	16	.537	3	.146	79	65	76	47	33	56	
Philadelphia .....	.330	.366	.352	24	.691	3	.186	75	59	72	49	26	50	
Somerset .....	.335	.388	.361	31	.662	29	.195	86	72	86	64	48	65	
Westtown .....	.346	.391	.358	25	.583	3	.150	84	70	84	45	37	49	
MARYLAND—														
Annapolis .....	.408	.424	.431	17	.628	22	.209	76	70	82	63	32	58	
Baltimore .....	.364	.383	.391	24	.628	22	.189	77	64	77	43	29	45	
Chestertown .....	.363	.367	.352	15	.574	28	.135	75	61	73	47	28	28	
Frederick .....	.382	.426	.401	24	.667	21	.140	81	71	84	35	26	28	
Oakland .....	.300	.339	.252	17	.543	2	.087	73	64	63	43	17	12	
DISTRICT OF COLUMBIA—														
Washington .....	.384	.379	.393	15	.612	21	.152	78	61	75	52	25	40	
VIRGINIA—														
Kanawha .....	.433	.544	.475	31	.832	12	.296	83	75	88	77	55	73	
Montross .....	.384	.480	.403	1	.942	23	.181	76	65	77	43	35	49	
Rose Hill (a) .....	.413	.443	.454	18	.677	3	.215	82	67	77	52	35	59	

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 24th.

b Mean relative humidity for the month, 61.

d Same amount on the 25th.



## No. 30.—PSYCHROMETER, MAY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 a. m.	7 a. m.	2 p. m.	9 p. m.
NORTH CAROLINA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches</i>						
Murfreesborough.....	.528	.636	.575	14	.895	4	.375	88	79	88	80	66	77
SOUTH CAROLINA—													
All Saints.....	.550	.583	.593	26	.863	22	.299	81	62	80	52	39	47
Charleston, [Dawson] (a).....													
Columbia.....	.477	.660	.594	16	1.174	13	.255	76	61	74	42	36	56
St. John's.....	.544	.606	.570	18	.772	21	.270	78	60	84	47	43	66
GEORGIA—													
Athens.....	.453	.437	.448	30	.687	13	.026	72	47	67	33	3	21
Hillsborough.....	.486	.457	.466	31	.806	22	.204	76	44	63	53	22	34
Savannah.....	.591	.574	.603	26	.848	21	.313	87	53	77	46	31	46
FLORIDA—													
Jacksonville.....	.710	.740	.703	25	.950	7	.502	86	66	87	73	53	75
ALABAMA—													
Carlowville.....	.399	.868	.439	26	1.366	22	b.176	70	75	68	43	61	27
Greene Springs.....	.548	.629	.551	31	.891	12	.3.2	85	59	79	71	35	47
Greensborough.....	.535	.485	.551	29	.849	12	.258	85	49	79	61	26	52
Selma.....	.482	.483	.528	30	.641	22	.312	73	45	74	56	28	52
MISSISSIPPI—													
Columbus.....	.552	.570	.580	29	.885	21	.321	83	57	84	62	32	56
Paulding.....	.621	.615	.629	28	.903	11	.362	84	60	70	53	38	45
TEXAS—													
Austin, [Van Nostrand] ---	.592	.583	.602	29	.918	10	.275	83	56	75	65	24	62
Goliad.....	.684	.699	.731	25	.942	4	.226	88	64	89	76	40	79
Larissa.....	.588	.676	.634	28	.908	11	.361	88	66	85	64	49	59
TENNESSEE—													
Glenwood.....	.465	.469	.489	31	.820	12	.225	84	58	82	66	32	56
Memphis.....	.548	.514	.554	29	.873	20	.293	86	64	81	63	36	52
KENTUCKY—													
Bardstown.....	.465	.471	.458	30	.802	22	.136	82	57	80	64	19	57
Louisville (c).....		.487		17	.870	12	.316		67			41	
Springdale.....	.367	.532	.478	22	1.151	11	.157	84	66	80	53	40	64
OHIO—													
Cincinnati, [Harper].....	.414	.495	.439	23	.792	11	.241	79	64	78	62	41	57
Cincinnati, [Hurt].....	.359	.470	.384	30	.800	2	.118	73	63	75	48	32	34
Hillsborough.....	.355	.374	.361	31	.656	21	.157	78	61	73	50	33	38
Medina.....	.332	.355	.329	31	.686	14	.177	78	65	80	51	32	52
Northwood.....	.330	.371	.365	23	.685	10	.110	88	64	93	65	14	46
Savannah.....	.326	.368	.336	30	.772	16	.126	79	61	81	49	28	50
Westerville.....	.344	.389	.374	31	.695	12	.196	80	61	78	64	35	57
MICHIGAN—													
Detroit.....	.276	.382	.273	30	.823	16	.113	65	66	66	29	38	32
Marquette.....	.223	.260	.216	31	.485	21	.096	79	71	80	36	31	56
INDIANA—													
Madison.....	.466	.517	.469	31	.790	18	.269	83	73	83	67	56	64
New Harmony.....	.457	.515	.484	17	.936	11	.265	84	67	84	68	46	63
Richmond, [Moore].....	.352	.344	.335	31	.663	21	.139	79	56	71	62	26	39
ILLINOIS—													
Augusta.....	.379	.428	.389	30	.799	15	.157	87	73	83	50	44	56
Manchester (c).....	.434	.530	.431	30	1.023	1	d.241	94	84	92	67	61	78
Peoria.....	.386	.412	.425	27	.686	15	.162	82	63	87	45	35	64
Wheaton.....	.307	.335	.312	30	.571	16	.117	78	65	78	39	26	55
MISSOURI—													
St. Louis.....	.414	.442	.422	30	.847	11	.190	76	59	75	44	36	50
WISCONSIN—													
Appleton.....	.272	.324	.295	28	.732	16	.025	75	59	76	9	27	36
Madison, [Sterling].....	.276	.293	.279	28	.549	17	.090	70	59	72	28	21	31
Waukesha.....	.220	.253	.249	24	.577	29	.000	61	47	66	0	0	34
IOWA—													
Dubuque.....	.307	.308	.297	23	.592	4	.073	71	56	68	21	20	22
Fairfield.....	.319	.313	.314	27	.617	2	.113	73	57	71	54	27	53

a Mean force of vapor, .626; obtained approximately from the mean dew point.

b Same amount on the 23d.

c For changes in hours of observation, &c., see table of the thermometer for this month.

d Same amount on the 2d.

## No. 30.—PSYCHROMETER, MAY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
Iowa—Continued.	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Muscatine.....	.423	.452	.471	27	.772	2	.260	89	88	89	81	80	75
Sioux City.....	.291	.324	.307	27	.577	15	.124	77	55	80	43	27	57
MINNESOTA—													
Wabashaw.....	.275	.418	.308	28	.717	2	.113	62	65	67	42	32	37
KANSAS—													
Leavenworth City, [McCarty]	.406	.457	.409	29	.735	11	.225	83	65	81	56	44	49
MEXICO—													
Vera Cruz (a).....	.838		.853					78	80				
CALIFORNIA—													
Sacramento.....	.341	.385	.382	2	.489	5	.263	66	54	56	43	30	36
San Francisco.....	.307	.326	.321	19	.449	5	.163	71	52	78	23	33	33
CENTRAL AMERICA—													
Guatemala (b).....	.477	.442	.511					94.3	51.0	85.5			
SOUTH AMERICA—													
Catharina Sophia, Surinam (a)	.789	.894	.849	15	1.083	7	c. 693	90	75	82	82	62	57

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Observations taken at 6 a. m., 9 a. m., 12 m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .420, at 12 m., .470. Mean relative humidity at 9 a. m., 56.8, and at 12 m., 51.2.

c Same amount on the 4th.



## No. 31.—PSYCHROMETER, JUNE, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
BRITISH AMERICA—													
Montreal .....	.453	.511	.461	25	.997	12	.242	72	61	71	49	31	48
St. Martin .....	.434	.613	.507	26	1.256	12	.210	90	62	84	58	44	62
St. Martin .....	.433	.607	.514	26	1.253	12	.216	78	64	82	46	35	60
Toronto (a) .....	.437	.507	.444	27	.858	12	.220	75	60	73	54	34	53
Windsor .....	.400	.467	.402	7	.691	1	.241	84	67	82	69	42	68
MAINE—													
Gardiner .....	.474	.571	.476	27	.923	3	.262	87	73	89	62	43	66
Perry .....	.370	.387	.340	18	.691	1	.140	82	59	77	42	25	34
Portland .....	.425	.439	.405	28	.789	12	.236	78	61	76	51	31	34
VERMONT—													
Burlington .....	.474	.479	.480	27	.870	12	.232	73	58	74	53	30	45
St. Johnsbury .....	.408	.466	.443	30	.955	12	.202	79	55	82	54	24	46
MASSACHUSETTS—													
Amherst .....	.522	.571	.527	26	1.127	3	.251	81	63	76	58	26	46
Bridgewater (a) .....	.493	.559	.513	28	.874	4	.130	88	64	80	43	33	34
Lawrence .....	.469	.557	.479	27	1.038	1	.269	86	60	79	68	34	57
Nantucket .....	.428	.414	.431	30	.697	1	.198	78	61	81	43	39	61
New Bedford .....	.477	.523	.491	25	.916	1	.224	85	64	87	56	26	50
Newburyport .....	.463	.490	.450	28	.857	3	.277	82	62	84	58	33	48
Westfield .....	.480	.494	.532	25	.849	23	.219	83	56	81	36	28	52
Worcester .....	.491	.527	.494	26	.875	2	.205	79	57	76	50	36	33
RHODE ISLAND—													
Providence (b) .....													
CONNECTICUT—													
Pomfret .....	.541	.619	.545	26	.936	12	.300	89	74	89	67	45	64
Wallingford .....	.519	.545	.499	25	.814	2	.292	86	57	81	65	30	50
NEW YORK—													
Bellport .....	.490	.560	.520	26	c. 882	19	.237	79	74	85	30	47	61
Buffalo (a) .....	.504	.518	.516	25	.812	15	.218	78	70	77	57	33	57
Clinton .....	.494	.523	.492	27	.782	8	.221	72	53	73	44	28	48
Fordham .....	.590	.587	.550	20	.928	2	.183	75	55	80	51	20	50
Fort Edward .....	.515	.630	.548	25	1.189	3	.299	80	68	79	59	39	46
New York city .....	.541	.570	.559	25	c. 841	2	.169	67	55	70	36	36	48
Waterford .....	.557	.620	.600	26	1.108	12	.328	82	64	78	64	38	61
NEW JERSEY—													
Bloomfield .....	.613	.682	.592	26	.940	16	.282	82	64	86	56	34	58
PENNSYLVANIA—													
Easton .....	.534	.523	.551	28	.768	3	.246	78	54	78	56	26	53
Harrisburg, [Hickok] .....	.568	.586	.628	21	.800	2	.270	80	55	78	56	32	66
Lewisburg .....	.557	.583	.570	6	.942	2	.195	77	57	80	51	22	62
Mount Joy .....	.637	.770	.742	26	1.003	2	.382	83	71	83	74	44	75
Murrysville .....	.550	.570	.573	28	.976	13	.216	77	55	87	51	31	73
Norristown .....	.570	.618	.594	26	.874	3	.305	83	63	81	49	34	60
Philadelphia .....	.606	.627	.641	28	.934	3	.361	72	55	72	49	31	57
Somerset .....	.543	.629	.546	25	.850	15	.322	90	63	88	75	44	76
Westtown .....	.637	.695	.646	25	.990	12	.382	85	68	86	61	46	58
MARYLAND—													
Annapolis .....	.667	.677	.736	29	.976	14	.456	86	63	80	76	40	70
Baltimore .....	.580	.618	.650	28	.819	14	.350	76	59	76	60	33	57
Chestertown .....	.632	.623	.634	22	1.138	2	.354	78	59	76	55	28	48
Frederick .....	.625	.680	.652	8	1.051	2	.396	78	66	82	50	48	56
Oakland .....	.423	.497	.382	18	.886	2	.165	69	55	72	36	22	26
DISTRICT OF COLUMBIA—													
Washington .....	.628	.633	.623	29	.923	14	.367	79	57	72	64	41	48
VIRGINIA—													
Kanawha .....	.658	.804	.712	29	1.076	15	.354	93	78	93	82	65	82
Montross .....	.626	.741	.668	29	1.459	14	.352	78	69	83	57	47	73
Rose Hill (a) .....	.651	.639	.707	30	.879	14	.399	82	63	76	67	46	64

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Mean relative humidity, 65.6. For changes in hours of observation, &c., see table of the thermometer for this month.

c Same amount on the 28th.

## No. 31.—PSYCHROMETER, JUNE, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
NORTH CAROLINA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Murfreesborough.....	.777	.878	.801	11	1.165	13	.543	89	79	89	81	61	78
SOUTH CAROLINA—													
All Saints.....	.761	.806	.777	29	.983	16	.577	87	77	72	73	64	70
Charleston, [Dawson] (a).....													
Columbia.....	.742	.862	.771	1	1.372	14	.510	88	70	85	75	41	62
St. John's.....	.687	.675	.690	30	.841	16	.501	86	63	85	76	46	65
GEORGIA—													
Athens.....	.629	.629	.645	27	.813	13	.171	84	58	80	74	20	60
Hillsborough.....	.649	.621	.640	28	.848	14	.369	83	52	74	72	30	58
Savannah.....	.764	.748	.763	7	.868	14	.462	85	62	82	71	39	75
FLORIDA—													
Jacksonville.....	.831	.881	.841	30	1.024	19	.556	89	75	89	66	40	78
Micanopy.....	.869	1.012	.906	26	1.215	15	.708	98	76	95	82	56	84
ALABAMA—													
Greene Springs.....	.742	.804	.717	3	1.228	16	.421	85	65	84	71	39	67
Greensborough.....	.681	.654	.695	8	.869	15	.360	86	62	85	75	41	73
Selma.....	.640	.583	.660	30	.758	19	.416	77	49	79	62	29	53
MISSISSIPPI—													
Columbus.....	.718	.764	.763	27	.974	13	.431	88	61	88	80	43	75
Paulding.....	.676	.675	.690	7	.916	14	.483	84	71	85	67	47	55
TEXAS—													
Austin, [Van Nostrand].....	.692	.624	.665	23	.827	13	.423	80	51	73	54	37	57
Goliad.....	.735	.762	.782	1	.870	23	.373	86	57	83	71	50	72
Larissa.....	.719	.779	.746	30	.951	13	.438	79	55	85	56	39	75
TENNESSEE—													
Glenwood.....	.619	.652	.665	29	.892	13	.335	89	63	89	71	48	73
Memphis.....	.718	.676	.746	27	.950	13	.390	83	59	84	67	39	57
KENTUCKY—													
Bardstown.....	.635	.678	.666	23	.956	14	.316	80	60	84	57	45	71
Louisville (b).....		.634		24	.882	13	.346		60			45	
Springdale.....	.505	.780	.702	30	1.200	16	.139	91	69	87	39	46	56
OHIO—													
Bowling Green.....	.624	.681	.622	27	.915	18	.284	75	54	81	59	40	62
Cincinnati, [Harper].....	.631	.707	.687	30	1.003	13	.350	82	63	78	54	46	62
Cincinnati, [Hurt].....	.577	.630	.615	19	1.033	14	.299	75	58	76	42	35	56
Hillsborough.....	.567	.553	.580	28	.827	1	.318	81	57	74	60	40	48
Medina.....	.579	.570	.556	21	.927	2	.232	79	61	86	65	34	71
Northwood.....	.561	.608	.550	18	1.201	13	.283	81	56	93	59	38	62
Savannah.....	.583	.537	.571	26	.841	1	.237	82	53	89	67	30	73
Westerville.....	.609	.662	.640	24	1.296	13	.334	83	62	85	46	44	72
MICHIGAN—													
Detroit.....	.456	.568	.472	30	.875	12	.176	60	47	56	28	22	37
Marquette.....	.365	.425	.347	26	.846	11	.142	75	62	76	40	19	51
INDIANA—													
Madison.....	.683	.757	.749	27	1.311	13	.394	85	72	84	57	57	52
Michigan City.....	.532	.518	.525	27	.854	13	.216	77	56	80	48	28	75
New Harmony.....	.696	.730	.702	27	.969	12	.362	83	69	88	70	55	83
Richmond.....	.552	.544	.562	27	.772	1	.238	77	54	79	51	29	43
ILLINOIS—													
Augusta.....	.616	.649	.615	17	.915	12	.302	89	68	83	77	46	60
Manchester (b).....	.654	.805	.634	25	1.087	12	.335	91	77	93	77	48	79
Peoria.....	.632	.637	.658	26	1.073	13	.246	79	53	80	61	26	58
Upper Alton.....	.684	.845	.663	28	1.060	12	.283	87	85	88	75	60	69
Wheaton.....	.552	.562	.534	28	.882	11	.216	77	57	79	42	36	61
MISSOURI—													
St. Louis.....	.641	.673	.651	27	.886	12	.315	75	63	77	58	43	60
WISCONSIN—													
Appleton.....	.574	.659	.582	23	1.352	12	.247	83	64	82	61	34	54
Madison.....	.525	.522	.555	29	.850	1	.152	67	58	78	29	26	48
Waukesha.....	.455	.400	.467	27	.800	6	1.000	65	37	69	32	0	26

a Mean force of vapor, .823; obtained approximately from the mean dew point

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 25 h.

d Same amount on the 14th.



## No. 31.—PSYCHROMETER, JUNE, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
IOWA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Dubuque .....	.538	.513	.558	28	.856	12	.190	72	50	72	43	28	54
Fairfield .....	.537	.533	.530	30	.802	11	.259	67	55	73	51	33	48
Muscatine .....	.702	.777	.758	27	1.074 <sup>a</sup>	14	.404	89	88	90	80	72	79
Sioux City .....	.522	.573	.526	25	.908	5	.000	78	59	74	39	0	37
MINNESOTA—													
Wabashaw .....	.491	.627	.492	29	1.368	11	.117	73	60	92	53	26	32
KANSAS—													
Lawrence .....	.615	.660	.713	30	.955	15	.190	75	68	80	29	54	66
Leavenworth City, [McCarty] .....	.621	.702	.635	24	.969	4	.308	78	63	84	59	46	67
MEXICO—													
Vera Cruz (b) .....	.882		.921					82		84			
CALIFORNIA—													
Sacramento .....	.380	.439	.423	7	.577	30	.230	63	53	63	38	22	38
San Francisco .....	.334	.345	.347	15	.433	25	.181	73	55	80	53	22	58
CENTRAL AMERICA—													
Guatemala (c) .....	.485	.482	.527					96.5	62.6	93.4			
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (b) .....	.794	.887	.868	1	.950	18	.719	91	78	86	86	68	79

<sup>a</sup> Same amount on the 30th.<sup>b</sup> For changes in hours of observation, &c., see table of the thermometer for this month.<sup>c</sup> Observations taken at 6 and 9 a. m., 12 m., 3 and 9 p. m. Mean force of vapor at 9 a. m., .466; at 12 m., .513. Mean relative humidity at 9 a. m., 63.5, and at 12 m., 58.6.

## No. 32.—PSYCHROMETER, JULY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal	.473	.506	.467	3	.802	24	.242	77	63	76	46	37	48
St. Martin	.481	.630	.528	7	1.304	26	.269	88	73	89	71	47	67
St. Martin	.483	.644	.533	3	.952	1	.263	88	71	90	70	36	64
Toronto (a)	.456	.514	.470	10	.814	27	.231	77	62	74	49	20	45
Windsor	.457	.538	.464	14	.923	1	.295	87	72	86	68	48	62
MAINE—													
Gardiner	.525	.568	.532	7	1.101	26	.234	89	73	90	49	31	50
Perry	.390	.424	.402	14	.744	1	.143	81	65	83	26	22	25
Portland	.494	.526	.506	11	.836	1	.165	79	67	84	41	22	47
Steuben	.431	.455	.403	17	.706	1	.097	79	70	83	35	13	29
VERMONT—													
Burlington	.493	.525	.494	3	.800	1	.176	80	67	78	54	27	57
St. Johnsbury	.403	.464		10	.733	1	.181	82	56		43	15	
MASSACHUSETTS—													
Amherst	.526	.532	.537	10	.849	1	.223	82	56	76	47	33	38
Bridgewater (a)	.582	.614	.609	11	1.002	1	.211	88	68	86	48	28	43
Lawrence	.506	.553	.549	10	.843	1	.219	86	62	82	54	23	44
Nantucket	.504	.531	.532	14	.758	1	.182	72	63	86	32	33	65
New Bedford	.554	.592	.587	11	.883	1	.183	86	69	91	48	27	62
Newburyport (a)	.519	.500	.510	10	.743	28	.145	84	63	85	53	24	53
Westfield	.500	.504	.566	17	.823	1	.183	85	53	83	53	27	63
Worcester	.524	.565	.542	10	.821	1	.178	81	62	81	37	37	43
RHODE ISLAND—													
Providence (b)													
CONNECTICUT—													
Pomfret	.559	.622	.585	12	.856	1	.327	92	78	91	65	57	73
Wallingford	.539	.577	.559	11	.887	1	.163	88	60	83	58	23	62
NEW YORK—													
Bellport	.568	.632	.592	17	.950	25	.136	77	74	84	56	54	36
Buffalo (a)	.521	.529	.570	2	.799	19	.291	73	60	74	52	31	52
Clinton	.527	.495	.510	9	.832	1	.247	72	47	75	56	26	52
Fordham	.550	.589	.586	10	1.046	23	.280	72	58	78	49	29	51
Fort Edward	.570	.651	.610	3	1.044	23	.423	85	72	86	69	52	64
New York city	.566	.556	.573	3	.870	1	.277	66	53	64	40	33	46
Spencertown	.493	.605	.475	3	.900	24	.282	77	71	80	53	48	60
Waterford	.547	.579	.576	11	.870	18	.350	79	53	79	59	41	54
NEW JERSEY—													
Bloomfield	.648	.712	.641	29	1.111	20	.425	90	63	86	80	46	62
PENNSYLVANIA—													
Berwick	.631	.686	.667	31	.891	24	.449	84	63	85	52	45	68
Chambersburg	.688	.704	.752	3	.976	8	.476	82	69	76	65	49	46
Easton	.567	.542	.572	13	.884	24	.234	81	52	76	44	27	48
Harrisburg, [Hickok]	.567	.527	.645	3	.850	24	.271	76	47	72	57	28	45
Lewisburg	.561	.554	.567	3	.912	24	.250	74	52	74	55	26	45
Mount Joy	.657	.742	.748	11	1.033	24	.382	80	65	79	40	43	59
Murrysville	.554	.573	.553	1	.969 <sup>d</sup>	24	.264	72	51	73	41	27	56
Norristown	.571	.611	.604	29	1.019	24	.296	78	59	77	53	27	49
Philadelphia	.632	.615	.657	3	.975	19	.368	72	50	69	45	32	52
Pottsville	.624	.699	.601	11	.914	24	.413	70	61	79	41	41	69
Somerset	.586	.634	.580	3	.887	24	.399	87	61	84	72	42	70
Westtown	.650	.665	.652	10	1.148	24	.383	86	59	82	57	37	55
MARYLAND—													
Annapolis	.694	.647	.719	11	.955	24	.382	82	59	70	54	37	56
Baltimore (e)	.599	.608	.643	12	.920	25	.336	71	52	67	49	35	45
Chestertown	.624	.549	.625	3	.970 <sup>f</sup>	24	.309	68	50	69	46	30	47
Frederick	.633	.663	.662	5	.931	7	.390	75	60	75	60	36	57
DISTRICT OF COLUMBIA—													
Washington	.672	.636	.673	3	.891	6	.358	78	57	71	66	33	46

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation &amp;c., see table of the thermometer for this month.

b Mean relative humidity, 70.5. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 24th.

d Same amount on the 3d.

e Observations interrupted from the 19th to the 24th, inclusive.

f Same amount on the 4th.



## No. 32.—PSYCHROMETER, JULY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
VIRGINIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Kanawha .....	.739	.916	.777	28	1.097	8	.549	93	78	94	88	68	86
Montross .....	.662	.749	.679	29	1.029	7	.417	78	61	78	62	41	62
Rose Hill (a) .....	.708	.667	.685	2	.897	7	.439	85	64	74	74	47	64
NORTH CAROLINA—													
Murfreesborough .....	.818	.962	.871	22	1.255	7	.635	89	78	88	81	74	57
SOUTH CAROLINA—													
All Saints .....	.807	.855	.839	21	1.074	26	.595	85	75	82	67	59	68
Columbia .....	.734	.731	.765	1	.909	26	.410	86	59	76	77	36	57
Charleston, [Dawson] (b) .....													
St. John's .....	.753	.726	.772	30	.873	26	.460	88	64	89	74	42	75
GEORGIA—													
Athens .....	.701	.709	.724	11	.874	7	.511	86	64	85	68	44	61
Savannah .....	.815	.821	.832	5	1.001	2	.648	87	65	85	65	41	58
FLORIDA—													
Jacksonville .....	.873	.985	.897	1	1.282	15	.799	87	78	86	74	56	73
Micanopy .....	.946	1.073	.969	21	1.228c	14	.839	99	82	96	95	48	88
ALABAMA—													
Carlowville .....	.681	.986	.732	23	1.548d	16	.409	76	70	77	49	38	43
Greene Springs .....	.805	.899	.797	21	1.255	14	.623	86	70	85	74	43	61
Greensborough .....	.747	.688	.750	5	.900e	14	.433	84	55	80	67	31	60
Selma .....	.670	.566	.657	6	.758	27	.451	71	44	70	38	30	40
MISSISSIPPI—													
Columbus .....	.786	.812	.822	23	.964	14	.572	88	61	88	77	41	75
Paulding .....	.812	.846	.874	6	.983	8	.638	86	66	78	70	46	59
TEXAS—													
Austin, [Van Nostrand] .....	.772	.631	.704	5	.853	27	.407	74	43	64	54	25	47
Goliad .....	.845	.757	.831	30	.990	24	.556	87	51	82	55	34	74
Larissa .....	.833	.899	.839	8	1.042	26	.745f	85	61	81	65	46	65
TENNESSEE—													
Glenwood .....	.720	.745	.755	22	.886	13	.494	91	66	90	84	46	82
Memphis .....	.828	.800	.844	5	1.010	15	.582	82	62	85	69	41	66
KENTUCKY—													
Bardstown .....	.712	.705	.710	3	.929	23	.338	80	59	78	61	31	25
Louisville (a) .....		.689		2	.948	13	.438		57			41	
Springdale (a) .....	.591	.776	.728	2	1.058	14	.378	94	60	81	81	41	34
OHIO—													
Bowling Green .....	.592	.656	.608	2	.864	24	.345	76	60	82	67	39	66
Cincinnati, [Harper] .....	.707	.766	.760	3	1.138	24	.345	74	63	70	42	49	54
Hillsborough .....	.606	.593	.599	3	.827	8	.363	82	56	69	56	31	45
Medina .....	.611	.618	.607	3	.827	24	.363	79	60	85	44	43	68
Northwood (a) .....	.726	.858	.800	16	1.023	24	.529	87	71	93	75	57	66
Savannah .....	.628	.637	.633	17	.854	25	.425	79	59	89	62	39	73
Westerville .....	.681	.740	.673	3	1.396	24	.429	83	60	80	64	38	51
MICHIGAN—													
Detroit .....	.460	.328	.497	6	.929	24	.217	57	50	62	37	32	41
Forestville (g) .....	.447	.524	.490										
Marquette .....	.398	.460	.391	7	.799	13	.211	76	61	82	53	24	46
INDIANA—													
Madison .....	.781	.845	.839	22	1.187	14	.599	83	66	83	73	49	69
Michigan City .....	.589	.582	.573	1	.836	24	.382	82	61	79	63	39	59
New Harmony .....	.788	.842	.827	3	1.097	24	.501	82	68	89	51	48	83
Richmond, [Moore] .....	.583	.557	.592	3	.814	24	.346	76	51	77	58	34	57
ILLINOIS—													
Augusta .....	.681	.750	.706	27	.983	12	.414	90	66	87	77	36	71
Manchester (a) .....	.721	.876	.775	1	1.114	24	.438	91	78	95	62	63	79
Peoria .....	.681	.738	.710	2	1.075	23	.261	82	59	83	61	37	38
Upper Alton .....	.746	.890	.755	31	1.111	24	.456	89	77	87	72	45	73
Wheaton .....	.568	.573	.559	1	.884	23	.246	80	56	80	44	30	67

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Mean force of vapor .887; obtained approximately from the mean dew point.

c Same amount on the 22d and 23d.

d Same amount on the 31st.

e Same amount on the 21st.

f Same amount on the 29th.

g Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .516. Mean relative humidity at 9 a. m., .67.

## No. 32.—PSYCHROMETER, JULY, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
MISSOURI—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
St. Louis.....	.723	.765	.748	■	.917	12	.436	74	57	74	58	41	64
WISCONSIN—													
Appleton.....	.566	.768	.580	6	1.310	7	.264	82	71	83	55	35	63
Maitson (a).....	.354	.544	.532	16	.816	12	.301	66	57	69	46	39	49
Waukesha.....	.493	.580	.488	■	.829 <sup>b</sup>	13	.264	68	54	■	42	27	39
IOWA—													
Dubuque.....	.556	.587	.608	6	1.037	3	.366	75	59	79	50	35	■
Fairfield.....	.599	.622	.610	31	.904	12	.349	72	58	75	51	42	59
Muscatine.....	.718	.810	.786	7	1.051	13	.510	87	85	87	76	65	77
Sioux City.....	.601	.703	.618	18	.983	11	.304	84	70	85	55	43	75
MINNESOTA—													
Wabashaw.....	.541	.760	.567	7	1.135	12	.336	78	73	80	53	59	■
KANSAS—													
Lawrence.....	.746	.805	.800	■	1.111	7	.504	78	70	76	70	39	57
Leavenworth City, [McCarty]	.729	.825	.740	15	1.023	3	.523 <sup>c</sup>	78	64	84	58	48	■
MEXICO—													
Vera Cruz (a).....	.852	.....	.890	.....	.....	.....	.....	82	.....	83	.....	.....	.....
CALIFORNIA—													
Sacramento.....	.409	.458	.440	■	.689	17	.325	65	52	63	■	21	46
San Francisco.....	.670	.671	.697	12	.423	5	.295	76	54	84	60	29	70
CENTRAL AMERICA—													
Guatemala (d).....	.466	.441	.502	.....	.....	.....	.....	97.6	56.8	91.2	.....	.....	.....
SOUTH AMERICA—													
Caracas, Venezuela.....	.588	.537	.620	23	.699	5	.396	81	54	80	75	38	76
Catharina Sophia, Surinam (a)	.783	.933	.916	21	1.010	2	.680 <sup>e</sup>	88	76	90	81	60	87

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 9th.

c Same amount on the 12th.

d Observations taken at 6 a. m., 9 a. m., 12 m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .459; at 12 m., .441. Mean relative humidity at 9 a. m., 66.5, and at 12 m., 55.7.

e Same amount on the 7th.



## No. 33.—PSYCHROMETER, AUGUST, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.442	.481	.486	18	.977	23	.255	78	62	77	51	32	56
St. Martin (a) .....	.440	.646	.529	14	.992	23	.240	88	69	90	68	57	68
Toronto (a) .....	.446	.505	.478	9	.702	23	.176	79	59	75	67	28	50
Windsor .....	.478	.537	.502	10	.853	24	.278	93	74	92	81	54	81
<b>MAINE—</b>													
Perry .....	.435	.493	.431	11	.725	24	.257	92	76	91	66	48	71
Portland .....	.480	.496	.488	18	.731	23	.143	82	67	86	21.5	36	53
Steuben .....	.459	.475	.426	8	.883	24	.131	90	75	89	71	38	29
<b>VERMONT—</b>													
Burlington .....	.468	.492	.495	9	.711	23	.204	81	63	82	62	41	57
<b>MASSACHUSETTS—</b>													
Amherst (a) .....	.454	.498	.492	—	?	—	?	85	58	80	—	—	—
Cambridge .....								86	75	79	77	63	65
Lawrence .....	.472	.545	.502	17	.787	23	.234	90	67	85	69	39	61
Nantucket .....	.515	.513	.508	29	.695	21	.293	81	66	83	57	35	52
New Bedford .....	.544	.562	.539	16	.751	23	.263	91	73	91	69	47	64
Newburyport (a) .....	.465	.550	.476	—	?	—	?	85	73	89	?	?	?
Westfield .....	.472	.498	.518	30	.740	23	.194	87	61	87	62	34	59
Worcester .....	.499	.515	.514	18	.733	23	.240	86	64	86	56	40	63
<b>CONNECTICUT—</b>													
Pomfret .....	.521	.586	.534	17	.839	23	.242	94	79	92	73	45	71
Wallingford .....	.505	.538	.527	18	.816	23	.223	92	62	85	75	30	61
<b>RHODE ISLAND—</b>													
Providence (c) .....													
<b>NEW YORK—</b>													
Bellport .....	.541	.587	.547	18	.799	24	.269	82	73	85	62	50	35
Buffalo (a) .....	.510	.546	.546	10	.841	19	.282	75	65	74	51	41	56
Clinton .....	.469	.437	.460	28	.666	23	.189	71	47	74	59	30	57
Fordham .....	.562	.503	.535	5	.891	23	.216	78	55	77	52	26	43
Fort Edward .....	.492	.557	.543	11	.832	20	d. 309	85	64	84	73	38	69
New York city .....	.531	.524	.552	17	.782	23	.240	71	56	68	48	33	44
Waterford .....	.507	.541	.535	11	.745	20	d. 282	82	61	80	67	46	55
<b>NEW JERSEY—</b>													
Bloomfield .....	.554	.653	.592	18	.904	24	.304	88	67	90	66	38	57
<b>PENNSYLVANIA—</b>													
Berwick .....	.557	.658	.599	11	.970	19	e. 362	90	71	88	73	55	66
Chambersburg .....	.663	.647	.690	5	f. 891	24	.337	80	71	77	57	51	45
Easton .....	.520	.479	.504	28	.826	24	.206	84	54	79	73	28	37
Harrisburg, [Hickok] .....	.520	.507	.559	11	.816	23	.190	80	53	74	56	27	37
Lewisburg .....	.513	.511	.522	4	.755	23	.252	82	55	77	53	26	46
Mount Joy .....	.603	.722	.694	11	.942	24	.350	84	73	82	72	54	72
Murrysville .....	.455	.472	.481	5	.868	23	.183	70	47	73	47	23	43
Norristown .....	.545	.559	.562	4	.758	23	.282	84	60	78	68	41	58
Philadelphia .....	.589	.583	.605	18	.864	23	.319	78	55	71	63	37	45
Somerset .....	.516	.576	.541	5	.877	29	.245	88	58	84	75	37	68
Westtown .....	.599	.625	.606	5	.936	23	.321	88	64	89	71	48	75
<b>MARYLAND—</b>													
Annapolis .....	.634	.629	.676	4	.989	23	.327	85	59	75	70	39	54
Frederick .....	.599	.667	.643	17	.974	24	.321	85	66	84	61	48	63
<b>DISTRICT OF COLUMBIA—</b>													
Washington .....	.632	.601	.626	4	b. 882	23	.234	80	57	73	59	32	56
<b>VIRGINIA—</b>													
Kanawha .....	.680	.859	.704	6	1.111	24	.452	92	79	95	87	68	87
Montross .....	.484	.651	.536	5	1.160	23	.124	62	57	66	31	16	44
Rose Hill (a) .....	.624	.652	.620	2	.846	8	.190	77	59	66	53	41	21
<b>NORTH CAROLINA—</b>													
Murfreesborough .....	.743	.929	.792	2	1.400	24	.436	88	78	81	77	62	72

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Same amount on the 18th.

c Mean relative humidity, 72.2. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 24th.

e Same amount on the 24th and 25th.

f Same amount on the 11th.

## No. 33.—PSYCHROMETER, AUGUST, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>SOUTH CAROLINA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
All Saints .....	.815	.856	.822	22	1.111	9	.523	86	74	81	68	50	51
Charleston, [Dawson] (a) .....													
Columbia .....	.695	.744	.751	7	1.296	31	.429	82	58	77	50	33	55
St. John's .....	.753	.719	.757	19	.969	23	.524	89	63	87	61	36	66
<b>GEORGIA—</b>													
Athens .....	.635	.622	.663	6	1.181	30	.381	81	53	78	55	33	57
Savannah .....	.814	.794	.814	4	.978	30	.465	89	67	85	75	41	70
<b>FLORIDA—</b>													
Jacksonville .....	.895	.993	.912	24	1.124	26	.745	90	79	89	79	62	79
Micanopy .....	.936	1.206	.990	3	1.386	17	b. 812	100	81	99	95	78	91
<b>ALABAMA—</b>													
Carlowville .....	.710	1.030	.764	10	1.410	30	c. 394	80	76	86	65	60	73
Selma .....	.621	.471	.624	25	.706	31	.180	71	36	70	55	16	39
<b>MISSISSIPPI—</b>													
Columbus .....	.711	.725	.745	2	.944	30	.433	88	54	84	75	42	65
Paulding .....	.774	.811	.800	22	.992	29	.516	87	67	78	67	54	62
<b>TENNESSEE—</b>													
Austin, [Van Nostrand] .....	.704	.526	.610	12	.805	28	.234	71	33	57	42	21	23
Goliad .....	.823	.680	.786	25	.955	29	.367	84	47	75	67	27	66
Larissa .....	.768	.804	.766	14	.915	29	.446	85	52	75	77	37	50
<b>TENNESSEE—</b>													
Glenwood .....	.644	.654	.674	5	.899	30	.365	88	59	87	62	36	68
Memphis .....	.739	.721	.749	7	d. 969	28	.416	85	60	84	74	44	60
<b>KENTUCKY—</b>													
Bardstown .....	.656	.668	.665	6	.963	23	.342	84	58	84	65	40	59
Louisville (e) .....		.625		6	.836	23	.331		56			39	
Springdale (e) .....	.543	.723	.669	■	1.427	30	.310	91	61	79	69	40	60
<b>OHIO—</b>													
Bowling Green .....	.549	.633	.559	8	.935	25	.228	80	61	82	60	40	70
Cincinnati, [Harper] .....	.710	.796	.729	7	1.092	30	.416	74	71	69	64	42	59
Hillsborough .....	.559	.572	.555	11	.823	23	.259	84	57	74	64	38	52
Medina .....	.570	.567	.549	2	.914	26	.138	80	61	85	29	17	75
Savannah .....	.565	.705	.608	9	1.038	24	.222	88	75	95	72	57	69
Westerville .....	.600	.710	.616	10	1.396	23	.308	87	71	86	66	48	74
<b>MICHIGAN—</b>													
Detroit .....	.476	.539	.463	1	.863	29	.223	64	53	65	39	25	22
Marquette .....	.442	.501	.442	7	.999	30	.192	79	64	82	65	37	37
Thunder Bay Island (f) .....	.459	.525	.507	■	.799	23	.229	77	71	73	48	43	51
<b>INDIANA—</b>													
Madison .....	.694	.779	.715	5	1.074	31	.281	79	68	78	59	42	66
Michigan City .....	.568	.585	.556	5	.902	22	.229	83	68	82	61	38	41
New Harmony .....	.687	.748	.719	5	1.056	30	.396	83	64	85	74	48	69
<b>ILLINOIS—</b>													
Augusta .....	.610	.688	.655	4	.997	28	.335	91	66	85	81	49	73
Manchester (e) .....	.671	.846	.733	8	1.128	27	.361	95	78	96	79	63	83
Peoria .....	.633	.635	.666	8	1.000	23	.303	83	52	79	64	36	67
Upper Alton .....	.682	.893	.696	10	1.162	30	.309	91	85	89	77	65	59
Wheaton .....	.538	.572	.551	9	.891	29	.224	84	59	80	66	32	64
<b>MISSOURI—</b>													
St. Louis .....	.621	.646	.662	4	.936	28	.316	71	50	71	56	33	44
<b>WISCONSIN—</b>													
Appleton .....	.527	.682	.555	10	1.269	29	.146	80	66	85	47	33	62
Waukesha .....	.464	.432	.476	8	.785	27	.111	70	42	73	29	18	44
<b>IOWA—</b>													
Des Moines .....	.544	.498	.558	6	.950	31	.057	76	48	75	51	6	63
Fairfield .....	.515	.612	.525	4	.841	29	.204	65	55	69	53	30	47
Muscatine .....	.649	.713	.725	6	1.060g	29	.493	84	78	85	67	65	77

a Mean force of vapor, .820; obtained approximately from the mean dew point.

b Same amount on the 29th.

c Same amount on the 31st.

d Same amount on the 8th.

e For changes in hours of observation, &c., see table of the thermometer for this month.

f Observations taken at 6 and 9 a. m., and 3 and 9 p. m. Mean force of vapor at 9 a. m., .522. Mean relative humidity at 9 a. m., 73.

g Same amount on the 9th.



## No. 33.—PSYCHROMETER, AUGUST, 1858.

NAME OF STATION.	FORCE OF VAPOR.								RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.			MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.		7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
IOWA—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>							
Pleasant Plain.....	.658	.791	.671	2	1.165	28	.282	87	71	95	65	40	79	
Sioux City.....	.488	.617	.566	12	.954	28	.271	80	62	83	49	44	63	
MINNESOTA—														
Wabashaw.....	.542	.719	.570	5	a. 956	28	.234	77	72	77	64	59	65	
KANSAS—														
Lawrence.....	.660	.686	.733	9	1.160	29	.362	75	65	77	61	49	63	
Leavenworth City, [McCarty]	.667	.736	.670	4	1.005	28	.335	84	65	86	66	52	66	
MEXICO—														
Vera Cruz (b).....	.854		.925					86		87				
CALIFORNIA—														
Sacramento.....	.430	.489	.454	16	.626	17	.313	69	56	64	60	33	39	
San Francisco.....	.379	.385	.384	26	.509	25	.336	82	61	85	70	51	75	
WEST INDIES—														
St. George's, Bermuda (c) ..														
CENTRAL AMERICA—														
Guatemala (d).....	.455	.430	.485					96.4	54.1	87.0				
SOUTH AMERICA—														
Caracas, Venezuela.....	.571	.555	.600	21	.678	20	.425	82	58	79	75	39	62	
Catharina Sophia, Surinam (b)	.780	.935	.916	25	1.010e	19	f. 718	89	72	88	81	63	79	

a Same amount on the 6th and 9th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Observations taken at 9.30 a. m. and 3.30 p. m. Mean force of vapor, .828. Mean relative humidity, 77.

d Observations taken at 6 and 9 a. m., 12 m., and 3 and 9 p. m. Mean force of vapor at 9 a. m., .459; at 12 m., .415. Mean relative humidity at 9 a. m., 67.9, and at 12 m., 50.1.

e Same amount on the 29th.

f Same amount on the 25th.

## No. 34.—PSYCHROMETER, SEPTEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.						RELATIVE HUMIDITY.						
	MEAN.			MAXIMUM.		MINIMUM.	MEAN.			MINIMA.*			
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.382	.407	.388	10	.772	25	.147	83	64	79	57	39	53
St. Martin (a) .....	.354	.503	.409	10	.731	22	.160	89	67	85	75	49	72
Toronto (a) .....	.350	.401	.384	9	.664	?	?	84	60	79	69	31	55
Windsor .....	.389	.490	.412	9	.780	23	.182	87	73	91	83	56	77
Wolfville .....	.411	.465	.391	12	.718	23	.143	89	67	84	48	43	36
MAINE—													
Gardiner .....	.413	.508	.446	9	.789	23	.177	93	74	93	66	47	61
Perry .....	.377	.456	.382	4	.673	23	.178	93	76	92	61	44	78
Portland .....	.405	.436	.429	9	.741	28	.096	85	60	83	67	13½	62
Steuben .....	.367	.409	.364	9	.663	23	.152	87	71	87	68	42	63
VERMONT—													
Burlington .....	.349	.419	.406	9	.731	23	.170	81	62	81	67	44	55
MASSACHUSETTS—													
Amherst .....	.415	.416	.412	9	.745	25	.144	88	58	77	65	30	54
Bridgewater (a) .....	.470	.500	.488	9	.862	23	.153	85	68	85	61	26	50
Cambridge .....								87	73	83	80	62	73
Lawrence .....	.372	.445	.435	11	.792	23	.145	87	57	84	67	34	36
Nantucket .....	.448	.432	.473	11	.717	25	.148	76	58	83	48	32	58
New Bedford .....	.452	.474	.461	4	.771	23	.168	88	65	88	66	34	64
Newburyport .....	.425	.451	.443	11	.685	23	.209	86	63	87	67	44	63
Westfield .....	.371	.420	.430	16	.706	23	.144	87	56	86	59	32	65
Worcester .....	.421	.406	.431	16	.726	28	.141	87	56	86	66	30	56
RHODE ISLAND—													
Providence (b) .....													
CONNECTICUT—													
Middletown .....	.436	.447	.470	4	.781	23	.159	96	54	94	47	30	75
Pomfret .....	.445	.516	.444	9	.785	22	.199	88	78	92	83	60	74
Wallingford .....	.411	.434	.458	4	.758	23	.178	91	57	87	73	37	62
NEW YORK—													
Bellport .....	.453	.494	.456	4	.758	23	.162	79	71	83	44	44	29
Buffalo (a) .....	.398	.425	.430	10	.664	22	.181	71	63	72	43	43	49
Clinton .....	.357	.369	.364	21	.599	23	.131	71	44	70	55	29	54
Fordham .....	.405	.425	.430	4	.718	23	.130	73	55	72	45	29	47
Fort Edward .....	.408	.525	.460	10	.841	27	.178	88	72	87	57	52	75
New York city .....	.416	.426	.438	3	.738	22	.163	69	53	63	49	34	31
Saratoga .....	.419	.492	.500	6	.846	27	.142	89	74	81	53	30	42
Waterford .....	.399	.432	.424	10	.692	22	.186	85	56	79	49	41	52
NEW JERSEY—													
Bloomfield .....	.485	.579	.460	3	.854	23	.149	87	66	82	56	49	64
PENNSYLVANIA—													
Berwick .....	.399	.481	.462	9	.823	23	.186	84	60	81	68	44	62
Carlisle .....	.405	.495	.450	3	.772	13	.190	84	64	78	38	41	46
Chambersburg .....	.475	.526	.559	9	.843	23	.257	81	69	78	57	56	56
Chromedale .....	.435	.476	.453	11	.727	22	.234	82	58	81	70	32	62
Easton .....	.391	.354	.408	10	.732	23	.125	81	41	78	40	27	49
Harrisburg, [Hickok] .....	.396	.409	.444	3	.700	22	.149	83	50	74	52	24	40
Lewisburg .....	.392	.420	.423	3	.707	22	.191	89	54	81	62	34	61
Mount Joy .....	.455	.625	.580	10	.914	28	.163	82	74	84	52	26	77
Murrysville .....	.281	.370	.347	7	.677	22	.053	62	45	63	39	15	18
Norristown .....	.423	.459	.449	3	.909	22	.143	87	57	76	59	37	43
Philadelphia .....	.451	.465	.483	3	.792	23	.166	79	50	72	56	34	43
Somerset .....	.366	.446	.407	20	.677	23	.212	85	57	80	61	39	67
Westtown .....	.450	.493	.467	20	.799	23	.186	91	60	87	71	43	62
MARYLAND—													
Annapolis .....	.479	.495	.546	3	.866	23	.225	85	58	76	70	39	47
Baltimore .....	.402	.419	.465	3	.785	23	.160	74	50	72	53	35	53
Chestertown .....	.484	.500	.499	3	.942	27	.111	77	54	78	52	18	47

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Mean relative humidity, 67.4. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 10th.

d Same amount on the 27th.



## No. 34.—PSYCHROMETER, SEPTEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.						RELATIVE HUMIDITY.						
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
MARYLAND—Continued.	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches.</i>						
Frederick .....	.438	.540	.506	8	.800	23	.249	87	69	87	71	53	65
DISTRICT OF COLUMBIA—													
Washington .....	.453	.453	.511	3	.827	23	.190	83	53	77	62	36	57
VIRGINIA—													
Montross .....	.300	.493	.372	2	.877	22	.099	55	57	60	25	39	29
NORTH CAROLINA—													
Murfreesborough .....	.576	.704	.672	6	1.016	23	.335	89	77	88	46	65	65
SOUTH CAROLINA—													
All Saints .....	.613	.668	.637	4	.955	17	.323	84	71	77	61	49	59
Charleston, [Dawson] (a) .....													
Columbia .....	.548	.656	.592	8	1.138	28	.308	82	61	76	66	40	59
St. John's .....	.562	.573	.587	11	.843	16	.333	89	64	87	66	38	50
GEORGIA—													
Athens .....	.496	.483	.537	11	.854	16	.181	83	55	81	57	18	54
Augusta .....	.583	.635	.654	11	.863	20	.319	75	61	73	61	47	65
Savannah .....	.629	.637	.658	12	.888	18	.321	89	69	84	71	41	52
FLORIDA—													
Jacksonville .....	.756	.830	.776	4	1.038	17	.496	91	83	91	79	64	63
Micanopy .....	.816	1.014	.858	3	1.311	17	.536	99	86	96	84	74	38
ALABAMA—													
Carlowville .....	.500	.960	.549	6	1.455	17	.167	70	72	71	24	43	26
Greene Springs .....	.584	.744	.637	10	1.228	29	.302	83	63	88	56	28	67
Selma .....	.555	.442	.558	2	.706	18	.220	84	38	80	62	21	52
MISSISSIPPI—													
Columbus .....	.527	.535	.561	10	.850	17	.294	83	46	74	59	28	56
Paulding .....	.613	.667	.652	7	.931	18	.359	81	60	70	58	37	50
TEXAS—													
Austin, [Van Nostrand] .....	.634	.505	.550	9	.886	24	.216	82	42	64	61	19	33
Goliad .....	.645	.589	.679	9	.931	20	.315	82	47	75	46	26	60
Larissa .....	.619	.723	.656	8	.902	20	.460	86	60	73	77	40	60
TENNESSEE—													
Glenwood .....	.478	.491	.535	2	.792	16	.220	87	51	85	56	29	56
Memphis .....	.572	.564	.645	9	.955	12	.310	88	52	86	75	32	66
KENTUCKY—													
Bardstown .....	.469	.558	.545	9	.802	11	.296	88	61	84	30	41	58
Louisville (c) .....		.489		9	.677	16	.261		50			35	
Springdale (c) .....	.386	.571	.561	9	.853	23	.208	94	62	79	82	39	56
OHIO—													
Bowling Green .....	.360	.452	.403	9	.725	23	.144	75	51	76	61	36	63
Cincinnati, [Harper] .....	.466	.627	.520	8	.895	23	.282	76	61	67	66	49	56
Hillsborough .....	.404	.388	.402	10	.655	23	.170	81	47	68	58	29	51
Medina .....	.384	.435	.368	20	.704	22	.191	78	55	69	38	37	54
Savannah .....	.382	.568	.447	9	.846	26	.162	87	70	92	73	52	74
Westerville .....	.423	.485	.467	8	.812	23	.241	89	54	84	70	36	63
MICHIGAN—													
Detroit .....	.381	.462	.359	11	.679	2	.150	69	54	65	44	31	23
Marquette .....	.334	.326	.322	6	.582	29	.000	82	62	82	43	6	0
Ottawa Point (e) .....	.385	.479	.474	19	.612	12	.269	90	85	87	69	50	59
Thunder Bay Island (f) .....	.338	.393	.389	29	.618	22	.182	81	71	77	61	42	54
INDIANA—													
Madison .....	.473	.575	.491	3	.785	16	.293	85	64	80	66	40	67
Michigan City .....	.401	.454	.412	9	.752	25	.231	80	58	75	66	39	53
New Harmony .....	.506	.587	.560	8	.827	16	.321	88	63	86	77	44	68
Notre Dame .....	.430	.436	.468	8	.745	22	.216	78	59	76	45	40	47
ILLINOIS—													
Augusta .....	.436	.528	.477	9	.829	26	.259	88	61	84	67	39	68
Manchester (c) .....	.493	.652	.561	7	1.187	13	.310	92	70	94	75	46	79

a Mean force of vapor, .654; obtained approximately from the mean dew point.

b Same amount on the 2<sup>d</sup> st.

c For changes in hours of observation, &c., see table of the thermometer for this month.

d Same amount on the 12<sup>th</sup>.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .405. Mean relative humidity at 9 a. m., 87.

f Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .390. Mean relative humidity at 9 a. m., 75.

## No. 34.—PSYCHROMETER, SEPTEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
ILLINOIS—Continued.	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Peoria.....	.470	.503	.500	7	.941	23	.283	84	54	80	54	32	59
Upper Alton.....	.461	.736	.512	28	.983	27	.215	87	81	84	69	39	70
Wheaton.....	.409	.397	.408	9	.735	3	.136	84	52	77	66	36	64
MISSOURI—													
St. Louis.....	.454	.522	.500	8	.816	17	.275	72	48	71	57	31	55
WISCONSIN—													
Appleton.....	.381	.503	.392	6	.904	11	.189	82	66	79	62	33	52
Waukesha.....	.306	.351	.321	7	.935	6	.000	64	46	61	22	■	15
IOWA—													
Dubuque.....	.379	.360	.403	7	.733	23	.149	76	44	70	28	18	37
Fairfield.....	.388	.407	.364	6	.664	4	.216	68	49	69	57	22	56
Muscatine.....	.549	.573	.584	6	.864	15	.389	85	82	83	75	63	63
Pleasant Plain.....	.457	.602	.508	7	1.296	25	.262	87	83	96	73	54	83
Sioux City.....	.365	.371	.401	5	.627	15	.131	76	52	78	54	18	56
KANSAS—													
Lawrence.....	.526	.542	.564	7	.785	11	.191	72	61	70	27	46	29
Leavenworth City, [McCarty]	.520	.588	.521	5	.789	10	.303	83	62	82	64	40	63
MEXICO—													
Vera Cruz (a).....	.871	.....	.903	.....	.....	.....	.....	85	.....	84	.....	.....	.....
CALIFORNIA—													
Sacramento.....	.368	.408	.432	2	.554	19	.255	67	46	64	53	22	50
San Francisco.....	.389	.386	.398	23	.509	26	.223	79	56	82	70	26	66
CENTRAL AMERICA—													
Guatemala (b).....	.477	.516	.514	.....	.....	.....	.....	94.3	67.4	88.2	.....	.....	.....
SOUTH AMERICA—													
Cantharina Sophia, Surinam (a)	.785	.894	.916	8	1.033	28	.693	90	70	89	81	57	83
EASTERN CONTINENT—													
Jerusalem, Palestine.....	.482	.492	.522	12	.692	21	.120	65	55	65	20	12	13

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., 53.1; at 12 m., 54.7. Mean relative humidity at 9 a. m., 77.5, and at noon, 64.8.



## No. 35.—PSYCHROMETER, OCTOBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.227	.252	.230	19	.543	26	.097	76	63	66	44	37	39
St. Martin (a) .....	.218	.276	.266	18	.482	26	.111	90	63	88	73	40	72
Toronto (a) .....	.252	.262	.252	3	.530	25	.108	80	62	75	55	28	53
Windsor .....	.248	.315	.258	14	.559	29	.123	89	76	86	60	61	71
Wolfville .....	.242	.289	.255	20	.612	5	.115	82	70	83	23	49	51
<b>MAINE—</b>													
Gardiner .....	.247	.302	.282	19	.464	26	.090	87	69	85	58	28	49
Perry .....	.243	.250	.241	14	.452	28	.093	88	70	82	53	31	54
Portland .....	.261	.263	.271	1	.502	26	.100	80	59	76	52	29	41
Steuben .....	.237	.279	.295	18	.489	17	.059	81	72	80	28	31	29
<b>VERMONT—</b>													
Burlington .....	.247	.278	.274	3	.478	26	.121	81	63	78	56	37	49
<b>MASSACHUSETTS—</b>													
Amherst .....	.295	.311	.292	4	.591	26	.099	87	61	74	53	29	35
Bridgewater (u) .....	.307	.370	.328	4	.813	26	.037	90	69	83	65	22	8
Cambridge .....								86	75	80	67	58	65
Lawrence .....	.262	.323	.297	1	.617	25	.033	81	61	78	51	34	39
Nantucket .....	.336	.324	.349	1	.516	11	b. 165	78	63	80	48	35	54
New Bedford .....	.318	.316	.328	4	.577	27	.090	83	58	81	38	17	43
Westfield .....	.262	.301	.284	1	.568	28	.113	85	60	80	65	25	48
Worcester .....	.294	.313	.297	1	.573	26	.022	82	52	78	12	22	32
<b>RHODE ISLAND—</b>													
Providence (c) .....													
<b>CONNECTICUT—</b>													
Middletown .....	.300	.306	.327	1	.564	25	.113	94	52	88	75	18	60
Pomfret .....	.303	.388	.321	1	.648	26	.130	92	78	88	70	56	65
Wallingford .....	.276	.297	.298	1	.586	27	.108	83	53	79	62	27	51
<b>NEW YORK—</b>													
Bellport .....	.331	.374	.338	1	.576	28	.098	84	71	84	60	47	45
Buffalo (a) .....	.301	.311	.290	3	.543	8	.134	73	66	72	50	39	48
Clinton .....	.240	.274	.264	3	.581	25	.093	72	50	74	55	26	58
Fordham .....	.288	.310	.337	4	.628	25	.091	74	56	74	49	23	43
Fort Edward .....	.267	.335	.305	3	.529	16	.142	87	71	86	69	44	67
New York city .....	.316	.342	.332	4	.593	25	.123	75	58	68	41	26	49
Schenectady .....	.259	.306	.281	4	.499	27	.137	82	63	78	45	41	65
Watertown .....	.277	.327	.303	19	.524	26	.142	88	62	82	60	40	66
<b>PENNSYLVANIA—</b>													
Berwick .....	.298	.367	.326	4	.624	27	.130	82	60	75	59	36	48
Carlisle .....	.297	.345	.317	3	.581	27	.117	83	61	76	62	32	49
Chambersburg .....	.439	.485	.509	4	.708	25	.231	74	69	73	36	55	52
Chromedale .....	.323	.357	.359	4	.582	2?	.004?	81	59	78	? 0.5	17	55
Easton .....	.284	.279	.285	30	.549	25	.045	81	47	73	51	10	53
Harrisburg, [Hickok] .....	.304	.325	.301	3	.561	26	.117	76	49	70	37	25	28
Lewisburg .....	.279	.314	.295	7	.537	10	.091	87	54	76	36	28	30
Mount Joy .....	.363	.536	.464	4	.809	26	d. 199	79	73	80	53	59	31
Murrysville .....	.205	.241	.222	7	.563	19	.021	55	42	59	04	15	28
Norristown .....	.304	.303	.318	13	.529	8	.047	84	53	71	52	25	33
Philadelphia .....	.334	.351	.373	4	e. 591	27	.145	79	53	73	55	24	56
Somerset .....	.279	.356	.305	3	e. 537	8	.106	84	62	79	50	42	56
Westtown .....	.348	.377	.364	3	.603	27	.061	89	62	87	44	13	55
<b>MARYLAND—</b>													
Annapolis .....	.358	.390	.411	7	.655	27	.150	79	63	77	51	34	43
Baltimore .....	.307	.327	.324	3	.572	27	.084	74	52	68	37	19	34
Chestertown .....	.326	.349	.332	7	.595	25	.071	73	52	66	30	15	24
Frederick .....	.339	.400	.377	4	.690	27	.110	90	68	85	74	27	58
<b>DISTRICT OF COLUMBIA—</b>													
Washington .....	.344	.351	.343	7	.608	5	.073	87	55	69	44	26	17

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Same amount on the 26th.

c Mean relative humidity, 63. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 27th and 28th.

e Same amount on the 7th.

## No. 35.—PSYCHROMETER, OCTOBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Am't.	Date.	Am't.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>VIRGINIA—</b>	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
Kanawha .....	.384	.516	.434	3	.846	9	.214	94	79	91	80	60	78
Montross .....	.207	.353	.235	2	.589	27	.047	47	54	47	24	36	19
<b>NORTH CAROLINA—</b>													
Goldsborough .....	.400	.412	.448	22	.679	9	.101	83	50	78	48	16	38
Murfreesborough (b) .....	.416	.538	.475	8	.731	16	.244	93	76	88	62	51	69
<b>SOUTH CAROLINA—</b>													
All Saints .....	.506	.599	.572	3	.873	15	.206	82	73	80	49	42	58
Charleston, [Dawson] (c) .....													
Columbia .....	.431	.526	.491	3	.764	17	.149	80	58	73	41	39	23
St. John's .....	.452	.514	.494	7	.745	15	.208	83	63	82	52	37	47
<b>GEORGIA—</b>													
Athens .....	.389	.378	.387	7	.630	9	.114	79	43	67	52	15	39
Augusta .....	.489	.544	.568	3	.817	10	.295	73	59	70	62	33	56
Savannah .....	.541	.561	.578	6	.776	15	.262	87	64	78	54	31	60
<b>FLORIDA—</b>													
Jacksonville .....	.672	.717	.723	7	.977	9	.429	91	81	91	77	63	64
Micanopy .....	.723	.919	.809	13	1.079	10	.529	97	88	95	86	72	86
<b>ALABAMA—</b>													
Greensborough (b) .....	.442	.448	.452	25	.639	15	.237	89	56	81	62	33	56
Selma .....	.464	.462	.503	5	.680	15	.226	88	51	82	63	26	50
<b>MISSISSIPPI—</b>													
Columbus .....	.449	.471	.465	5	.739	15	.166	87	53	76	58	18	40
Paulding .....	.534	.594	.571	4	.832	15	.216	82	65	70	46	46	49
<b>TEXAS—</b>													
Austin, [Van Nostrand] .....	.554	.493	.533	9	.785	20	.177	90	46	72	35	22	34
Goliad .....	.599	.587	.633	26	.870	27	.322	82	52	77	55	31	39
Larissa .....	.520	.610	.571	16	.800	8	.321	88	75	82	72	36	49
<b>TENNESSEE—</b>													
Glenwood .....	.380	.401	.398	5	.644	7	.158	86	54	79	62	25	47
Memphis .....	.457	.478	.493	2	.785	7	.208	91	63	84	63	33	53
<b>KENTUCKY—</b>													
Bardstown .....	.367	.431	.391	4	.877	7	.115	89	61	79	58	23	49
Louisville (b) .....		.406		11	.691	8	.150		58			27	
Springdale (b) .....	.331	.429	.417	3	.802	9	.153	92	66	77	70	39	43
<b>OHIO—</b>													
Avon (b) .....	.278	.327	.317	18	.437	21	.190	77	61	77	61	47	57
Bowling Green .....	.254	.282	.264	3	.551	7	.087	70	49	66	42	23	30
Cincinnati, [Harper] .....	.350	.472	.399	2	.878	9	.169	80	64	74	58	46	51
Hillsborough .....	.315	.314	.313	4	.596	9	.106	84	58	72	49	24	39
Hudson .....	.288	.308	.289	7	.502	7	.108	81	61	76	60	36	37
Montville .....	.286	.309	.303	4	.509	8	.116	77	61	78	40	37	32
Savannah .....	.305	.438	.337	19	.680	7	.117	85	73	86	62	32	73
Westerville .....	.314	.375	.337	3	.936	8	.100	82	60	78	65	25	58
<b>MICHIGAN—</b>													
Detroit .....	.249	.342	.252	3	.955	15	.113	62	54	63	25	18	29
Fort Gratiot (d) .....	.229	.250	.264										
Marquette .....	.236	.278	.255	17	.771	20	.093	84	73	82	54	23	36
Thunder Bay Island (e) .....	.265	.275	.264	3	.476	7	.170	81	75	77	68	59	33
<b>INDIANA—</b>													
Madison .....	.364	.457	.400	4	1.117	9	.157	86	72	87	64	47	61
Michigan City (b) .....	.260	.297	.301	2	.595	7	.100	74	56	73	45	33	36
New Harmony .....	.365	.448	.415	6	.977	9	.170	87	70	86	64	40	48
Notre Dame .....	.296	.312	.316	3	.514	8	.142	73	64	75	36	38	54
Richmond, [Moore] .....	.268	.277	.230	19	.432	15	.105	82	55	70	60	17	42
<b>ILLINOIS—</b>													
Augusta .....	.297	.344	.321	6	.900	8	.120	85	64	80	59	30	45
Manchester (b) .....	.342	.481	.358	1	1.051	9	.167	96	80	94	75	50	72

a Same amount on the 28th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Mean force of vapor, .558; obtained approximately from the mean dew point.

d Observations taken at 6 and 9 a. m., and 3 and 9 p. m. Mean force of vapor at 9 a. m., .237. Mean relative humidity at 9 a. m., 65.

e Observations taken at 6 and 9 a. m., and 3 and 9 p. m. Mean force of vapor at 9 a. m., .268. Mean relative humidity at 9 a. m., 76.



## No. 35.—PSYCHROMETER, OCTOBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
ILLINOIS—Continued.	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches.</i>						
Peoria .....	.308	.333	.329	2	.624	8	.123	86	65	83	48	30	49
Upper Alton .....	.331	.520	.374	6	.931	20	a. 155	87	83	85	60	67	66
Wheaton .....	.266	.290	.284	2	.595	7	.069	80	60	76	37	27	41
MISSOURI—													
St. Louis .....	.333	.381	.350	11	.697	7	.131	79	59	73	51	29	41
WISCONSIN—													
Appleton .....	.257	.298	.285	16	.617	8	.118	82	69	81	61	33	57
Madison .....	.257	.242	.298	1	.503	15	.047	75	62	76	51	12	53
Waukesha .....	.229	.278	.237	16	.554	22	.048	70	57	66	43	24	15
IOWA—													
Dubuque .....	.268	.243	.252	2	.497	8	.000	83	52	67	44	0	23
Fairfield .....	.243	.273	.251	6	.608	8	.060	73	53	65	42	16	39
Muscataine .....	.361	.369	.376	3	.658	9	.249	84	81	83	71	58	72
KANSAS—													
Lawrence (b) .....	.383	.434	.438	24	.805	17	.242	62	54	58	45	34	42
Leavenworth C'y, [McCarty] (b)	.380	.424	.389	—	?	—	?	84	74	92	?	?	?
CALIFORNIA—													
Sacramento .....	.286	.363	.343	1	.470	18	.151	67	61	70	45	35	46
San Francisco .....	.343	.322	.334	21	.529	16	.144	77	53	72	33	23	32
CENTRAL AMERICA—													
Guatemala (c) .....	.459	.466	.484	—	—	—	—	93.1	59.5	85.1	—	—	—
SOUTH AMERICA—													
Cathar's Sophia, Surinam (b)	.798	.918	.912	22	1.046	17	.706	88	72	90	81	66	87
EASTERN CONTINENT—													
Jerusalem, Palestine .....	.405	.413	.439	1	.631	27	.066	61	49	61	19	30	27

a Same amount on the 21st.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Observations taken at 6 a. m., 9 a. m., noon, 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .462; at noon, .441. Mean relative humidity at 9 a. m., 72.6; and at noon, 59.5.

## No. 36.—PSYCHROMETER, NOVEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.147	.166	.149	20	.378	14	.075	85	79	83	57	53	53
St. Martin (a) .....	.121	.145	.129	1	.282	15	.043	84	77	83	71	50	68
Toronto (a) .....	.165	.163	.162	1	.312	19	.072	86	72	79	66	40	63
Windsor .....	.168	.188	.173	1	.387	15	.084	90	81	87	79	57	72
Wolfville .....	.203	.225	.178	1	.439	15	.061	77	74	74	49	47	40
MAINE—													
Gardiner .....	.147	.170	.159	8	.272	30	.055	94	79	91	62	54	61
Portland .....	.142	.156	.149	1	.296	14	.067	80	65	76	59	40	55
VERMONT—													
Burlington .....	.132	.157	.136	5	.272	30	.051	78	71	76	43	52	52
MASSACHUSETTS—													
Amherst .....	.150	.181	.162	4	.282 <sup>b</sup>	30	.178	88	71	84	61	44	56
Bridgewater (a) .....	.189	.211	.205	1	.533	13	.000	95	80	91	70	0	61
Cambridge .....								87	80	84	75	70	73
Lawrence .....	.146	.156	.157	5	.298	14	.033	79	64	79	57	28	24
Nantucket .....	.187	.194	.200	23	.389	14	.080	70	63	77	41	40	56
New Bedford .....	.181	.179	.186	4	.361	14	.058	87	66	83	72	31	56
Westfield .....	.143	.153	.153	5	.268 <sup>c</sup>	29	.049	79	62	77	36	28	36
Worcester .....	.167	.187	.158	8	.296	17	.047	86	72	81	36	38	41
RHODE ISLAND—													
Providence (d) .....													
CONNECTICUT—													
Middletown .....	.164	.183	.168	4	.307	14	.035	91	69	88	27	26	53
Pomfret .....	.161	.189	.172	1	.365	17	.070	92	79	89	76	45	61
Wallingford .....	.153	.163	.156	5	.295	30	.043	85	64	83	63	33	44
NEW YORK—													
Bellport .....	.191	.206	.193	1	.399	14	.009	80	72	84	45	3	58
Buffalo (a) .....	.185	.183	.188	4	.335	15	.093	81	77	78	64	46	64
Clinton .....	.137	.151	.138	1	.303	29	.063	69	61	70	54	48	42
Fordham .....	.146	.139	.138	1	.277	30	.035	67	51	63	44	21	19
Port Edward .....	.155	.180	.162	1	.308	16	.078	93	79	90	64	37	59
New York city .....	.178	.195	.176	1	.319	30	.066	73	66	68	29	38	38
Schenectady .....	.166	.173	.163	1	.279	29	.076	84	72	83	57	52	44
PENNSYLVANIA—													
Berwick .....	.183	.191	.182	5	.361	17	.087	85	70	79	70	30	60
Carlisle .....	.171	.185	.181	2	.321	20	.085	79	66	77	54	41	46
Chambersburg .....	.382	.421	.455	1	.577	13	.247	72	71	71	35	59	57
Chromedale .....	.209	.217	.210	1	.392	14	.134 <sup>c</sup>	87	71	83	61	45	62
Easton .....	.160	.153	.158	5	.315	27	.053	78	56	72	50	26	42
Harrisburg, [Hickok] .....	.168	.161	.163	5	.297	14	.070	74	55	65	42	34	40
Lewisburg .....	.181	.174	.170	5	.322	19	.058	87	64	75	59	26	52
Linden .....	.160	.171	.174	5	.395	20	.041	86	73	79	69	48	19
Murrysville .....	.129	.128	.135	3	.255	20	.040	63	51	64	36	26	-----
Norristown .....	.172	.179	.176	6	.310	30	.070	78	61	71	50	30	39
Philadelphia .....	.192	.195	.204	6	.361	14	.090	79	61	73	61	33	53
Somerset .....	.168	.193	.176	3	.322	14	.078	93	80	89	78	55	70
Westtown .....	.190	.203	.197	1	.399	16	.099	89	73	84	60	33	69
MARYLAND—													
Annapolis .....	.206	.224	.238	3	.459	14	.100	85	67	80	57	46	57
Baltimore .....	.171	.169	.176	3	.348	30	.034	70	53	63	48	10	45
Chestertown .....	.177	.182	.187	7	.412	16	.026	67	54	66	17	27	36
Frederick .....	.194	.203	.190	4	.413	14	.006	82	68	77	2	38	50
DISTRICT OF COLUMBIA—													
Washington (a) .....	.164	.199	.202	3	.436	16	.084	78	60	73	50	29	43
VIRGINIA—													
Montross .....	.092	.145	.109	3	.403	17	.003	32	42	36	2	10	■

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Same amount on the 5th.

c Same amount on the 7th.

d Mean relative humidity, 60. For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e Same amount on the 19th.



## No. 36.—PSYCHROMETER, NOVEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>NORTH CAROLINA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Goldsborough .....	.254	.245	.216	2	.633	18	.101	84	56	77	54	23	50
Murfreesborough .....	.292	.366	.307	3	.668	17	.160	98	89	95	90	73	85
<b>SOUTH CAROLINA—</b>													
All Saints .....	.285	.321	.316	2	.720	17	.135	91	70	87	81	44	65
Charleston, [Dawson] (a) .....													
Columbia .....	.234	.270	.296	2	.918	10	.108	87	61	84	53	29	64
<b>GEORGIA—</b>													
Savannah .....	.284	.287	.300	2	.654	24	.135	82	57	72	57	34	59
<b>FLORIDA—</b>													
Jacksonville .....	.376	.452	.394	2	.813	27	.165	83	77	81	63	61	66
Micanopy .....	.383		.438	2	1.003	25	.181	100		99	92		94
<b>ALABAMA—</b>													
Greensborough .....	.240	.233	.243	1	.559	30	.134	92	60	83	61	30	50
Selma .....	.234	.259	.270	28	.563	11	.104	86	61	80	45	28	43
<b>MISSISSIPPI—</b>													
Columbus .....	.272	.294	.303	1	.543	19	.165	82	62	66	68	48	52
Paulding .....	.223	.231	.229	1	.571	30	.104	88	60	78	53	26	44
<b>TEXAS—</b>													
Austin, [Van Nostrand] .....	.270	.254	.237	28	.563	9	.125	89	46	65	68	18	30
Goliad (d) .....	.321	.323	.348	14	.608	21	.151	82	54	78	56	31	42
Larissa .....	.247	.312	.277	27	.631	24	.155	83	69	79	74	47	53
<b>TENNESSEE—</b>													
Glenwood .....	.194	.196	.199	1	.469	30	.049	82	63	80	63	16	56
Memphis .....	.237	.238	.235	23	.500	30	.112	95	71	83	79	31	59
<b>KENTUCKY—</b>													
Bardstown .....	.195	.216	.206	27	.449	17	.090	91	76	86	40	41	51
Louisville (d) .....		.204		1	.378	30	.126		70			49	
Springdale (d) .....	.197	.211	.205	2	.410	19	.078	94	78	84	78	49	63
<b>OHIO—</b>													
Avon .....	.169	.172	.169	2	.334	20	.076	77	70	74	56	45	51
Bowling Green .....	.140	.148	.147	2	.321	15	.035	67	55	67	46	17	33
Cincinnati, [Harper] .....	.198	.256	.192	2	.456	17	.094	81	73	73	70	49	54
Hillsborough .....	.181	.177	.172	2	.337	16	.067	91	75	83	68	50	58
Hudson .....	.191	.221	.187	1	.393	18	.091	96	92	89	86	68	62
Montville .....	.176	.180	.180	2	.368	14	.000	87	77	84	72	0	49
Savannah .....	.162	.217	.184	3	.423	20	.040	83	83	88	46	63	65
Westerville .....	.178	.197	.181	2	.426	17	.082	86	77	81	66	48	66
<b>MICHIGAN—</b>													
Detroit .....	.139	.170	.154	2	.354	15	.074	67	62	70	31	38	42
Marquette .....	.136	.156	.130	3	.276	22	.000	82	78	75	65	40	0
Ottawa Point (g) .....	.181	.193	.188	3	.365	39	.101	88	83	84	78	57	69
Thunder Bay Island (h) .....	.153	.163	.159	4	.310	30	.073	79	76	77	64	59	61
<b>INDIANA—</b>													
Madison .....	.226	.223	.219	1	.391	30	.052	88	79	87	73	21	77
New Harmony .....	.205	.219	.222	28	.420	19	.118	90	79	93	72	54	81
Notre Dame .....	.228	.222	.237	2	.363	8	.099	83	70	83	64	29	61
Richmond, [Moore] .....	.175	.171	.181	2	.322	15	.029	81	63	80	59	13	66
<b>ILLINOIS—</b>													
Angusta .....	.174	.196	.182	2	.341	15	.064	95	83	89	83	57	70
Manchester (d) .....	.182	.226	.198	27	.418	19	.063	100	92	100	100	64	100
Peoria .....	.182	.190	.183	2	.361	18	.041	86	75	83	63	48	61
Upper Alton .....	.184	.233	.207	2	.418	16	.059	81	85	87	60	70	71
Wheaton .....	.166	.165	.166	2	.321	30	.075	87	73	88	78	53	75
<b>MISSOURI—</b>													
St. Louis .....	.182	.191	.195	27	.369	19	.078	87	72	85	70	48	47
<b>WISCONSIN—</b>													
Appleton .....	.133	.172	.153	3	.285	19	.030	74	74	78	41	50	58

a Mean force of vapor, .293; obtained approximately from the mean dew point.

b Same amount on the 26th and 27th.

c Same amount on the 25th.

d For changes in hours of observation, &c., see table of the thermometer for this month.

e Same amount on the 19th.

f Same amount on the 16th.

g Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .181. Mean relative humidity at 9 a. m., 86.

h Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .193. Mean relative humidity at 9 a. m., 80.

## No. 36.—PSYCHROMETER, NOVEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
WISCONSIN—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Madison .....	.158	.168	.166	4	.311	15	.039	89	83	86	70	56	38
Waukesha .....	.153	.160	.149	3	.311	16	.030	81	70	74	32	39	22
IOWA—													
Dubuque .....	.153	.155	.156	2	.306	15	.000	83	70	79	0	49	60
Fairfield .....	.146	.154	.138	2	.250	18	.042	80	68	74	50	35	45
Muscatine .....	.297	.351	.343	27	.502	11	.173	75	70	72	49	56	53
Sioux City .....	.115	.143	.118	1	.235	15	.029 <sup>a</sup>	77	77	79	51	57	52
KANSAS—													
Lawrence .....	.215	.305	.297	27	.733	4	.044	54	46	43	17	29	29
Leavenworth City, [McCarty]	.156	.174	.160	27	.391	16	.060	86	75	82	79	54	61
MEXICO—													
Vera Cruz (b) .....	.658	-----	.671	-----	-----	-----	-----	78	-----	78	-----	-----	-----
CALIFORNIA—													
Sacramento .....	.271	.331	.320	23	.423	27	.147	80	64	77	57	29	42
San Francisco .....	.330	.326	.340	22	.452	27	.130	81	62	79	29	26	44
CENTRAL AMERICA—													
Guatemala (c) .....	.415	.419	.429	-----	-----	-----	-----	94.0	56.3	83.6	-----	-----	-----
SOUTH AMERICA—													
Catharina Sophia, Surnam (b)	.804	.930	.921	1	1.033	4	.758 <sup>d</sup>	93	76	90	86	63	87
EASTERN CONTINENT—													
Jerusalem, Palestine .....	.301	.296	.282	1	.577	30	.146	54	39	46	27	17	19

<sup>a</sup> Same amount on the 19th.<sup>b</sup> For changes in hours of observation, &c., see table of the thermometer for this month.<sup>c</sup> Observations taken at 6 a. m., 9 a. m., 12 m., 3 p. m., and 9 p. m. Mean force of vapor at 9 a. m., .442, and at 12 m., .420. Mean relative humidity at 9 a. m., 75.8, and at 12 m., 61.9.<sup>d</sup> Same amount on the 7th.



## No. 37.—PSYCHROMETER, DECEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>BRITISH AMERICA—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.076	.105	.088	14	.267	29	.008	79	83	79	34	51	42
St. Martin's (a) .....	.065	.091	.075	17	.199	30	.014	83	76	82	68	53	69
Toronto (a) .....	.130	.129	.124	14	.266	8	.050	83	75	82	61	39	62
Windsor .....	.101	.121	.109	22	.271	13	.030	86	80	81	69	51	65
Wolfville .....	.100	.123	.111	27	.271	9	b. 034	88	86	85	55	64	43
<b>MAINE—</b>													
Portland .....	.088	.105	.101	15	.238	30	.033	82	69	77	49	47	46
<b>VERMONT—</b>													
Burlington .....	.100	.104	.102	15	.248	18	c. 030	84	72	75	54	39	46
<b>MASSACHUSETTS—</b>													
Amherst .....	.111	.177	.123	15	.283	26	.044	87	78	85	63	56	44
Bridgewater (a) .....	.143	.180	.174	14	.426	25	.030	90	86	93	21	34	52
Cambridge .....								87	82	82	74	64	68
Lawrence .....	.093	.114	.122	15	.275	1	.030	72	63	77	41	39	54
Nantucket .....	.159	.168	.185	15	.390	18	.048	72	65	78	46	31	49
New Bedford .....	.155	.168	.174	15	.418	10	.047	89	74	86	50	27	56
Westfield .....	.103	.117	.126	15	.254	26	.023	79	67	83	53	30	36
Worcester .....	.124	.141	.149	15	.384	18	.042	80	72	82	52	33	41
<b>RHODE ISLAND—</b>													
Providence (d) .....													
<b>CONNECTICUT—</b>													
Middletown .....	.124	.138	.144	15	.378	25	.042	82	67	86	52	31	54
Pomfret .....	.131	.151	.147	15	.388	19	.060	96	85	91	75	63	59
Wallingford .....	.121	.139	.138	15	.368	20	.051	87	69	86	56	36	58
<b>NEW YORK—</b>													
Buffalo (a) .....	.154	.164	.155	14	.348	9	.063	77	76	78	56	53	53
Clinton .....	.097	.115	.107	14	.248	1	.027	67	62	63	34	40	36
Fordham .....	.131	.153	.146	15	.396	9	.026	66	61	68	24	17	29
Fort Edward .....	.104	.121	.114	15	.257	25	.024	62	82	88	69	53	43
New York city .....	.152	.177	.161	15	.389	19	.035	75	74	73	37	40	36
<b>PENNSYLVANIA—</b>													
Berwick .....	.143	.160	.154	15	.390	25	.056	81	72	82	54	38	46
Carlisle .....	.150	.175	.165	15	.335	10	.071	81	75	80	54	37	57
Chambersburg .....	.333	.367	.414	7	.591	25	.095	66	62	65	20	23	54
Chromedale .....	.177	.213	.208	14	.529	10	e. 000	75	79	83	0	36	33
Easton .....	.139	.145	.144	15	.317	9	.051	81	67	78	53	25	37
Harrisburg, [Hickok] .....	.142	.148	.153	15	.363	16	.043	74	64	74	35	14	27
Lewisburg .....	.138	.147	.148	15	.414	9	.054	84	67	81	51	34	55
Linden .....	.151	.163	.161	21	.241	9	.059	89	78	90	55	53	68
Murrysville .....	.146	.168	.155	5	.426	10	.004	67	59	69	9	25	42
Norristown .....	.156	.165	.169	14	.497	9	.054	79	69	79	45	27	51
Philadelphia .....	.169	.172	.188	14	.524	19	.071	80	69	78	51	33	45
Somerset .....	.189	.227	.204	5	.540	8	.044	97	86	91	74	62	36
Westtown .....	.170	.201	.191	14	.544	10	.078	90	83	91	52	49	68
<b>MARYLAND—</b>													
Annapolis .....	.194	.215	.231	5	.459	10	.070	88	76	86	60	42	61
Baltimore .....	.162	.180	.184	14	.489	9	.046	71	64	72	36	24	46
Chestertown .....	.165	.197	.191	14	.489	9	.033	69	62	68	24	22	35
Frederick .....	.169	.192	.186	15	.411	10	.057	82	75	82	54	51	55
<b>DISTRICT OF COLUMBIA—</b>													
Washington .....	.186	.205	.209	14	.465	9	.059	80	70	79	42	32	54
<b>NORTH CAROLINA—</b>													
Goldsbrough .....	.290	.315	.312	14	.625	25	.026	86	66	80	53	8	43
Murfreesborough .....	.314	.380	.339	15	.758	10	.123	98	92	96	84	79	89
<b>SOUTH CAROLINA—</b>													
All Saints .....	.358	.420	.392	14	.718	10	.118	91	78	89	57	34	50
Charleston, [Dawson] (f) .....													

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &c., see table of the thermom-  
eter for this month.

b Same amount on the 10th.

c Same amount on the 25th.

d Mean relative humidity, 59.3. For changes in hours of observation,  
&c., see table of the thermometer for this month.

e Same amount on the 19th.

f Mean force of vapor, .393; obtained approximately from the mean  
dew point.

## No. 37.—PSYCHROMETER, DECEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>SOUTH CAROLINA—Continued.</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Columbia .....	.290	.362	.322	15	.693	□	.061	81	72	81	25	18	45
<b>GEORGIA—</b>													
Savannah .....	.384	.430	.413	14	.710	□	.170	87	72	88	54	37	44
<b>FLORIDA—</b>													
Jacksonville .....	.459	.582	.504	13	.812	23	.203	90	86	90	78	65	64
<b>ALABAMA—</b>													
Greensborough .....	.342	.349	.357	4	.663	□	.104	90	67	86	55	29	47
Selma .....	.333	.369	.351	30	.604	10	.111	87	72	80	67	34	43
<b>MISSISSIPPI—</b>													
Columbus .....	.303	.333	.323	4	.604	9	.086	89	70	87	60	34	47
Paulding .....	.376	.431	.433	14	.752	1	.160	87	75	78	62	42	53
<b>TEXAS—</b>													
Austin, [Vau Nostrand] .....	.301	.311	.303	14	.626	22	.114	91	64	78	54	20	40
Goliad .....	.344	.381	.385	13	.682	23	.000	82	67	81	0	32	51
Larissa .....	.302	.351	.338	13	.668	7	a. 118	93	83	83	77	59	61
<b>TENNESSEE—</b>													
Glenwood .....	.240	.263	.240	4	.566	9	.062	83	67	77	48	25	34
Memphis .....	.276	.295	.304	13	.626	9	.101	93	75	86	57	36	53
<b>KENTUCKY—</b>													
Bardstown .....	.242	.268	.250	4	.511	8	.067	94	76	91	52	39	57
Louisville (b) .....		.244		4	c. 420	23	.126	72				34	
Springdale (b) .....	.224	.253	.217	14	.500	9	.065	94	79	88	68	45	46
<b>OHIO—</b>													
Avon .....	.178	.180	.166	5	.456	19	.049	79	73	74	14	34	34
Bowling Green .....	.134	.149	.136	5	.345	9	d. 000	61	55	63	17	0	21
Cincinnati, [Harper] .....	.230	.312	.223	14	.469	□	.047	80	78	74	50	100	50
Hillsborough .....	.216	.221	.205	5	.556	9	.047	87	75	80	57	40	40
Montville .....	.179	.192	.179	5	.476	8	.049	88	80	83	63	50	58
Savannah .....	.172	.193	.174	5	.456	9	.048	81	78	82	63	54	63
Westerville .....	.215	.224	.213	5	.556	9	.060	90	80	83	70	53	61
<b>MICHIGAN—</b>													
Detroit .....	.127	.144	.125	13	.282	9	.026	71	66	70	38	20	45
Marquette .....	.095	.102	.103	1	.175	31	.002	76	69	78	14	1	23
Ottawa Point (e) .....	.135	.155	.143	13	.251	□	.057	92	85	85	78	71	73
Thunder Bay Island (f) .....	.122	.130	.124	13	.233	24	.051	81	79	79	68	68	67
<b>INDIANA—</b>													
Madison .....	.257	.262	.246	13	.484	24	.076	90	81	87	80	33	62
New Harmony .....	.222	.250	.235	13	.487	9	.082	94	79	89	71	39	42
Richmond, [Moore] .....	.193	.194	.189	14	.407	9	.046	79	67	73	59	22	47
<b>ILLINOIS—</b>													
Augusta .....	.132	.156	.156	29	.347	9	.031	85	74	85	52	39	68
Manchester (b) .....	.165	.226	.186	12	.418	8	.050	100	89	100	100	68	100
Peoria .....	.142	.148	.152	30	.335	7	.023	82	64	77	51	17	33
Upper Alton (g) .....	.194	.247	.259	12	.423	1	.131	80	80	84	69	62	78
Wheaton .....	.126	.133	.138	29	.236	19	.000	90	72	91	71	□	70
<b>MISSOURI—</b>													
St. Louis .....	.182	.192	.195	12	.377	8	.039	87	67	81	51	34	55
<b>WISCONSIN—</b>													
Appleton .....	.094	.125	.110	12	.222	9	.009	71	76	72	33	37	37
Madison .....	.098	.111	.106	30	.238	7	.017	85	78	82	62	27	39
Waukesha .....	.112	.133	.119	2	.188	9	h. 028	82	73	77	25	40	25
<b>IOWA—</b>													
Fairfield .....	.092	.119	.109	29	.285	8	.003	71	59	71	48	14	□
Muscatine .....	.341	.443	.421	21	.706	8	.178	65	61	62	49	42	48
<b>KANSAS—</b>													
Lawrence .....	.178	.236	.238	25	.369	6	.006	42	40	44	2	16	26
Leavenworth City, [McCarty] .....	.130	.160	.140	28	.309	8	.032	87	73	82	46	48	53

a Same amount on the 8th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 14th.

d Same amount on the 16th.

e Observations taken at 6 and 9 a. m. and 3 and 6 p. m. Mean force of vapor at 9 a. m., .139. Mean relative humidity at 9 a. m., 93.

f Observations taken at 6 and 9 a. m. and 3 and 9 p. m. Mean force of vapor at 9 a. m., .124. Mean relative humidity at 9 a. m., 79.

g Incomplete.

h Same amount on the 16th and 17th.



## No. 37.—PSYCHROMETER, DECEMBER, 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>MEXICO—</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches.</i>						
Vera Cruz (a) -----	.666	.695	-----	-----	-----	-----	-----	81	-----	81	-----	-----	-----
<b>CALIFORNIA—</b>													
Sacramento -----	.209	.237	.231	12	.360	7	.051	80	70	78	33	19	38
San Francisco -----	.240	.270	.259	11	.405	2	.066	79	74	81	23	26	28
<b>CENTRAL AMERICA—</b>													
Guatemala (b) -----	.427	.388	.417	-----	-----	-----	-----	95.0	51.4	80.7	-----	-----	-----
<b>SOUTH AMERICA—</b>													
Cathar'a Sophia, Surinam (a)	.790	.899	.881	23	c. 977	26	d. 706	92	77	87	85	65	78
<b>EASTERN CONTINENT—</b>													
Jerusalem, Palestine -----	.271	.292	.275	1	.509	23	.110	72	61	70	48	26	35

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Observations taken at 6 and 9 a. m., 12 m., and 3 and 9 p. m. Mean force of vapor at 9 a. m., .417, at 12 m., .387. Mean relative humidity at 9 a. m., 71.6, and at 12 m., 54.2.

c Same amount on the 22d.

d Same amount on the 27th and 31st.

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	13	27	2	0	5	20	11	12	3	93	4	20	2	0	5	15	8	9	63
Red River Settlement .....	20	2	8	4	31	7	8	4	6	90	7	3	2	11	2	0	1	2	28
Rigolet .....	2	5	2	1	1	1	8	32	10	62	—	—	—	—	—	—	—	—	—
St. John's .....	9	7	1	7	10	18	5	36	0	93	—	—	—	—	—	—	—	—	—
St. Martin .....	2	26	5	16	0	24	6	14	0	93	—	—	—	—	—	—	—	—	—
Stanbridge .....	12	7	5	21	19	4	14	4	7	93	—	—	—	—	—	—	—	—	—
Toronto .....	1	14	3	8	1	23	5	25	13	93	—	—	—	—	—	—	—	—	—
Windsor .....	13	10	2	2	1	15	24	14	12	93	1	1	0	0	0	0	6	8	11
Wolfville .....	1	7	9	8	0	11	19	30	8	93	1	5	4	5	2	10	24	18	70
MAINE—																			
Cornish, [Guptill] .....	5	10	0	0	2	18	18	31	0	93	—	—	—	—	—	—	—	—	—
Cornish, [West] .....	6	13	8	0	9	28	21	8	0	93	0	0	0	0	0	1	4	2	7
East Exeter .....	14	11	0	5	1	19	7	36	0	93	2	7	6	31	5	8	1	1	62
Gardiner .....	0	22	0	0	2	0	3	29	18	92	0	10	0	1	1	8	0	12	32
Monson .....	7	5	2	10	7	7	15	34	6	93	—	—	—	—	—	—	—	—	—
Perry .....	11	16	0	4	4	14	5	37	1	93	7	10	0	0	1	4	9	6	37
Portland .....	19	11	6	1	3	19	22	12	0	93	2	0	1	0	1	8	13	1	26
Steuben .....	0	32	0	0	0	25	4	26	4	93	0	12	0	0	0	22	16	3	53
NEW HAMPSHIRE—																			
Claremont .....	14	11	5	4	7	9	15	28	0	93	1	0	0	1	0	1	14	0	17
Concord .....	1	18	0	2	0	10	4	45	8	88	0	0	0	0	0	1	1	0	2
Francestown [Bixby] .....	2	7	4	5	0	5	36	31	0	90	0	6	4	3	3	4	36	4	60
Shelburne .....	0	0	15	0	0	0	58	0	12	85	0	1	0	0	1	3	27	25	57
West Enfield .....	2	0	1	7	16	17	12	36	2	93	1	0	1	6	10	15	7	19	59
VERMONT—																			
Brandon .....	31	1	2	4	20	12	4	0	0	93	1	0	0	0	0	10	5	20	36
Burlington .....	14	17	0	1	30	13	2	16	0	93	—	—	—	—	—	—	—	—	—
Craftsbury .....	2	11	2	4	27	8	9	28	2	93	2	2	0	0	6	7	18	19	54
Rupert .....	—	—	—	—	—	—	—	—	—	—	2	1	0	1	2	51	4	7	68
St. Johnsbury .....	18	1	1	2	16	1	5	36	13	93	2	0	0	0	2	3	11	3	21
MASSACHUSETTS—																			
Amherst .....	3	6	0	15	5	11	3	43	0	86	0	2	0	1	0	5	4	17	29
Bridgewater .....	11	6	2	7	2	29	20	16	0	93	0	2	0	3	1	12	1	1	20
Cambridge .....	7	3	3	3	3	23	14	28	0	93	—	—	—	—	—	—	—	—	—
Canton .....	16	3	1	8	8	17	10	21	7	91	0	0	1	0	0	3	5	1	10
Florida .....	0	0	4	2	5	12	36	34	0	93	0	0	4	2	4	12	19	29	70
Lawrence .....	0	11	0	0	0	25	5	43	0	93	—	—	—	—	—	—	—	—	—
Mendon .....	3	3	1	0	4	40	4	38	0	93	3	5	1	1	4	37	14	16	81
Nantucket .....	7	14	2	7	8	20	8	27	0	93	—	—	—	—	—	—	—	—	—
New Bedford .....	5	11	1	6	0	30	3	37	0	93	0	0	0	0	0	2	8	0	18
Newburyport .....	18	1	0	1	14	5	12	9	0	60	—	—	—	—	—	—	—	—	—
Richmond .....	0	13	0	10	0	27	0	42	0	92	2	5	0	10	2	17	0	22	62
Westfield .....	6	9	3	11	5	13	12	34	0	93	0	0	0	0	0	0	1	1	2
Williamstown .....	11	0	5	6	11	10	13	20	5	81	0	1	0	0	0	0	0	0	1
Worcester .....	7	14	6	4	4	16	22	15	0	88	—	—	—	—	—	—	—	—	—
RHODE ISLAND—																			
Providence .....	8	8	2	3	4	28	3	37	0	93	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia .....	3	10	0	0	0	25	4	29	22	93	3	8	0	0	0	15	1	17	44
New London .....	7	4	0	4	0	29	1	48	0	93	—	—	—	—	—	—	—	—	—
Norwich .....	0	13	2	11	3	37	1	10	16	93	—	—	—	—	—	—	—	—	—
Pomfret .....	9	8	2	4	7	19	4	34	0	87	3	5	2	3	3	13	5	11	46
Saybrook .....	9	15	2	5	1	17	10	17	11	87	2	3	0	2	1	7	15	7	37
Wallingford .....	31	13	3	5	9	19	1	12	0	93	2	2	1	0	0	7	27	5	44
NEW YORK—																			
Baldwinsville .....	5	5	7	5	3	12	33	19	0	90	2	0	0	0	1	0	43	16	62
Bellport .....	27	13	2	6	8	14	13	10	0	93	—	—	—	—	—	—	—	—	—
Beverly .....	6	9	0	6	11	30	6	17	1	86	4	6	0	4	4	19	4	11	52
Buffalo .....	3	12	4	2	9	31	22	9	0	92	0	0	1	1	4	8	9	0	23
Canton .....	5	7	1	2	0	45	3	27	3	93	0	4	1	3	0	29	3	19	59
Cazenovia .....	3	4	2	5	18	17	8	33	1	92	0	1	1	3	2	8	22	30	67
Clinton .....	10	13	4	1	6	27	10	22	0	93	2	1	0	1	1	8	22	10	45



## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Covert .....	1	1	0	23	5	17	10	30	6	93	0	0	0	1	2	8	15	9	35
Fishkill .....	2	26	3	18	11	15	8	10	0	93	3	3	0	4	3	11	8	11	43
Flatbush .....	6	16	9	3	8	11	18	22	0	93	0	1	7	20	5	0	0	0	33
Fort Edward .....	15	16	2	1	1	23	12	22	0	92	0	6	0	0	1	5	21	3	36
Madrid .....	2	30	0	0	0	2	32	3	19	88	0	0	0	0	0	0	0	0	0
Morrisania .....	9	6	8	7	9	10	26	14	0	89	0	1	12	4	3	9	24	6	59
New York city .....	0	11	2	20	5	15	16	24	0	93	13	0	0	2	8	12	9	17	61
Nichols .....	17	0	3	20	29	3	3	18	0	93	2	8	3	1	8	5	2	1	30
Ogdensburg .....	2	8	3	1	8	5	2	1	0	30	1	0	0	1	9	18	16	21	66
Oswego .....	9	6	5	17	20	11	19	6	0	93	0	0	0	0	1	0	0	0	1
Ovid .....	9	5	0	10	25	10	22	11	1	93	7	4	1	1	3	12	17	19	64
Pompey .....	11	4	1	9	24	9	14	21	0	93	2	0	1	2	1	5	16	3	30
Rochester .....	18	4	6	5	13	12	23	12	0	93	0	24	0	0	0	34	9	26	93
Sag Harbor .....	14	4	7	3	12	17	13	20	3	93	4	0	0	0	7	2	0	8	21
Saratoga .....	0	21	0	1	0	36	10	25	0	93	0	1	10	7	15	4	31	4	72
Spencertown .....	35	3	0	4	25	8	0	11	0	86	0	0	0	0	2	2	4	0	8
Wampsville .....	2	1	11	11	17	15	32	4	0	93	0	0	0	0	2	2	4	0	8
Waterford .....	36	1	0	2	21	5	14	8	5	92	0	0	0	0	2	2	4	0	8
Wellsville .....	0	0	61	0	1	0	27	4	0	93	0	0	0	0	0	2	1	0	3
NEW JERSEY—																			
Bloomfield .....	4	19	0	4	0	19	2	39	0	87	1	7	2	1	2	6	15	10	44
Burlington .....	9	12	14	6	4	13	14	17	2	91	0	0	0	0	0	0	0	0	0
Lambertville .....	2	11	2	6	4	18	3	39	0	85	7	11	9	1	1	2	8	6	45
Newark .....	8	12	0	6	1	14	5	16	0	62	0	0	0	0	0	0	0	0	0
Sergeantsville .....	11	16	12	2	1	17	21	13	0	93	3	19	7	25	0	0	0	5	59
PENNSYLVANIA—																			
Bedford .....	0	2	0	10	1	30	0	29	0	78	0	3	1	2	1	10	17	15	49
Berwick .....	4	3	23	3	3	6	44	7	0	93	2	0	0	2	2	6	11	17	40
Cannonsburg .....	0	1	23	9	0	11	45	4	0	93	1	0	0	0	2	10	13	34	60
Chromedale .....	8	17	3	4	4	7	1	20	29	93	0	0	0	0	0	0	0	0	0
Easton .....	5	10	2	6	2	4	20	21	15	85	0	0	0	2	2	6	11	17	40
Fleming .....	1	1	7	14	1	13	12	42	2	93	1	0	0	0	2	10	13	34	60
Gettysburg .....	11	10	1	0	21	17	6	21	6	93	0	2	0	1	7	14	26	18	68
Harrisburg, [Heisely] .....	10	1	6	21	4	0	10	37	0	89	3	0	0	0	0	0	5	11	25
Harrisburg, [Hickok] .....	16	7	14	6	9	8	24	9	0	93	0	1	0	0	5	2	13	1	22
Lewisburg .....	10	2	3	9	8	17	14	21	9	93	3	0	0	0	5	11	5	14	38
Meadville .....	7	0	1	8	23	14	8	12	15	83	3	1	0	3	1	8	14	18	48
Morrisville .....	8	11	11	5	5	24	12	16	1	93	3	7	3	8	2	13	15	14	65
Mount Joy .....	0	3	0	36	1	1	2	1	49	93	0	0	0	1	1	2	0	4	8
Murrysville .....	3	12	16	4	1	33	10	6	8	91	0	0	0	1	0	17	14	17	49
Norristown .....	1	3	12	8	3	10	38	0	0	81	0	0	5	2	0	6	57	0	70
North Whitehall .....	2	6	5	0	0	3	26	13	38	93	2	1	0	0	0	7	13	7	30
Philadelphia .....	4	15	1	7	2	17	11	36	0	93	0	0	1	1	1	8	5	15	31
Pittsburg, [Martin] .....	1	2	17	2	5	16	25	4	21	93	0	0	0	0	0	14	17	7	38
Pocopson .....	13	5	9	3	4	21	22	11	0	88	2	0	1	0	1	2	14	4	24
Shamokin .....	0	0	6	2	39	19	32	1	0	90	0	1	0	0	0	0	74	1	76
Somerset .....	1	0	2	7	16	9	31	10	12	88	0	0	0	6	2	6	43	9	66
Tarentum .....	7	5	7	8	11	12	1	13	29	93	1	0	0	0	3	17	23	17	66
West Haverford .....	0	8	0	4	4	9	7	27	3	62	0	1	2	2	0	7	13	19	44
Westtown .....	4	11	6	10	8	10	6	35	0	90	5	1	0	2	4	0	11	21	44
DELAWARE—																			
Milford .....	6	11	3	4	5	16	11	16	0	72	8	0	1	1	6	2	31	1	50
Newark .....	7	13	4	4	1	14	4	35	0	82	0	0	0	0	0	1	1	4	6
MARYLAND—																			
Annapolis .....	11	21	6	2	15	14	0	9	15	93	1	0	0	0	1	15	3	0	20
Baltimore .....	11	13	11	7	3	14	11	23	0	93	0	0	0	0	0	0	0	0	0
Bladensburg .....	0	5	6	1	2	8	1	9	0	32	0	0	0	0	0	0	0	0	0
Chestertown .....	11	2	3	1	5	4	13	3	0	42	0	0	0	0	0	0	0	0	0
Frederick .....	10	18	1	3	4	16	14	14	13	93	1	0	0	1	4	0	33	7	46
Leonardtown .....	9	19	6	10	10	15	5	19	0	93	1	3	1	1	1	9	7	30	53
Sykesville .....	11	15	8	13	15	10	11	10	0	93	0	1	5	5	8	11	53	1	84

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
DISTRICT OF COLUMBIA—																			
Washington .....	2	5	4	3	9	4	2	7	9	45	3	1	0	0	0	3	3	3	13
VIRGINIA—																			
Alexandria .....	10	19	5	4	27	4	5	19	0	93									
Ashland .....	3	0	0	5	2	23	0	16	41	90	0	0	0	0	0	5	25	2	32
Crichton's Store .....	27	13	2	0	11	20	6	12	2	93	0	0	0	0	0	0	5	0	5
Lewisburg .....	0	0	0	0	0	0	2	0	0	2	0	0	3	3	1	5	21	1	34
Montross .....	0	7	4	6	8	6	7	12	34	93	3	1	3	1	4	7	12	4	35
Mossy Creek .....	3	9	3	8	9	35	9	17	0	93	1	1	0	0	0	25	0	12	47
Poplar Grove .....	0	1	12	4	0	3	10	13	35	78	0	0	0	0	0	16	28	0	44
Portsmouth .....	5	23	4	6	1	17	8	29	0	93									
Rose Hill .....	2	23	3	8	7	14	7	4	7	75	0	0	0	0	0	0	2	1	3
Rougemont .....	6	0	5	0	5	10	29	3	3	70	0	2	1	0	1	8	15	2	29
Salem .....	3	14	12	2	0	18	24	20	0	93	0	7	26	3	0	5	15	3	59
Smithfield .....	11	22	5	10	10	15	11	9	0	93	2	7	2	3	3	1	21	15	54
Winchester .....	2	0	4	2	5	3	17	2	56	91	0	0	0	0	0	0	4	0	4
Wirt Court-House .....	2	4	0	13	4	20	4	28	18	93	1	0	0	1	4	35	3	35	79
NORTH CAROLINA—																			
Chapel Hill .....	24	21	6	2	3	11	17	9	0	93	5	5	0	0	1	22	4	0	37
Davidson College .....	1	21	0	3	0	15	5	15	30	90	1	3	0	1	1	26	2	4	38
Marlborough .....	15	12	3	0	2	4	5	16	3	60	4	5	3	2	2	3	3	9	31
Murfreesborough .....	1	20	6	2	1	12	22	8	11	83	1	11	4	2	1	7	15	4	45
SOUTH CAROLINA—																			
Aiken .....	1	5	0	0	1	3	1	0	0	11									
All Saints .....	19	22	3	5	11	15	11	7	0	93	1	8	2	1	2	31	16	2	63
Charleston, [Dawson] .....	3	29	1	6	0	13	1	0	0	62									
Charleston, [Johnson] .....	2	7	1	5	2	4	4	11	0	36									
St. John's .....	0	15	1	27	1	17	0	19	0	80	7	3	1	1	2	3	7	19	43
GEORGIA—																			
Athens .....	2	17	12	0	1	1	7	22	19	87	0	1	2	0	0	0	1	0	4
Hillsborough .....	2	28	7	13	1	11	9	22	0	93									
Savannah .....	14	24	8	5	2	17	9	14	0	93	0	0	0	0	1	1	3	0	5
Sparta .....	5	26	10	8	4	11	15	14	0	93	0	4	0	3	2	13	15	2	39
Whitemarsh Island .....	5	21	11	4	3	10	4	11	23	92	1	3	2	1	1	5	11	10	34
Zebulon .....	6	7	29	7	4	6	19	12	0	90	4	0	2	0	3	3	0	7	19
FLORIDA—																			
Alachua County .....	7	24	23	4	4	3	16	6	0	87									
Alligator .....	4	42	3	3	3	8	8	9	13	93	0	5	2	2	4	12	6	5	36
Atsena .....	12	29	10	6	5	9	9	6	7	93	4	23	8	5	5	7	0	4	62
Belair .....	13	25	13	9	0	1	8	8	16	93	2	1	0	8	0	23	24	7	65
Jacksonville .....	1	42	0	4	1	20	2	21	2	93	2	15	1	7	1	29	6	3	64
St. Augustine .....	29	12	9	6	0	11	0	26	0	93	18	11	9	4	0	15	1	25	83
Salt Ponds .....	8	22	13	9	2	0	2	4	2	62									
Warrington .....	2	46	2	19	1	7	0	16	0	93	0	0	0	0	0	0	0	1	1
ALABAMA—																			
Auburn .....	15	3	11	24	13	5	14	8	0	93	2	3	9	16	7	4	14	1	56
Carlowville .....	14	10	2	6	10	0	36	9	0	93	0	0	1	0	2	1	8	1	13
Greene Springs .....	5	3	13	18	2	10	11	3	15	80	0	0	0	5	1	0	4	7	26
Greensborough .....	12	6	4	29	3	3	5	31	0	93	3	0	2	8	2	3	35	4	57
MISSISSIPPI—																			
Columbus .....	13	7	15	21	0	4	17	10	0	93	1	0	0	8	4	0	20	5	44
LOUISIANA—																			
Black River .....	36	5	2	15	22	1	1	11	0	93	1	0	2	2	12	18	19	3	57
New Orleans .....	0	51	0	10	0	6	0	26	0	93									
TEXAS—																			
Austin, [Palm] .....	33	4	4	2	14	13	8	1	93		7	0	2	6	4	6	7	3	35
Austin, [Van Nostrand] .....	33	1	2	3	25	6	18	2	2	92	5	0	1	1	13	13	10	1	44
Goliad County .....	35	17	8	17	5	1	2	8	0	93	4	0	0	4	10	15	11	3	47
Larissa .....	11	9	8	11	4	3	1	1	8	56	1	2	4	2	4	1	16	0	30
Union Hill .....	23	0	6	6	29	4	1	5	19	93	21	0	1	0	35	2	8	2	69
Washington .....	27	0	0	0	30	0	0	0	27	84	0	2	0	0	1	0	0	0	6
TENNESSEE—																			
Glenwood .....	8	13	0	23	11	11	3	9	0	93	0	3	0	3	7	16	32	5	66



## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
KENTUCKY—																				
Lardstown .....	9	15	5	12	10	20	12	10	0	93	3	5	1	2	5	22	17	11	66	
Danville .....	5	5	8	9	3	37	16	10	0	93	0	2	2	2	3	29	18	6	62	
Paris .....	8	4	8	9	8	30	14	11	0	92	0	2	0	2	11	7	29	0	51	
Springdale .....	3	14	9	0	9	18	14	6	20	93										
OHIO—																				
Bellefontaine .....	0	6	7	16	7	20	17	19	0	92	0	3	0	11	0	36	9	14	73	
Bowling Green .....	0	2	1	2	0	4	3	1	0	13										
Cincinnati, [Harper] .....	1	0	3	0	2	40	25	22	0	93										
Cincinnati, [Hurt] .....	1	0	7	15	6	12	27	6	11	85	0	0	8	8	10	8	16	5	55	
Cleveland .....	8	6	3	17	20	10	14	11	0	89	2	0	0	0	0	10	15	7	34	
Edinburg .....	0	39	6	19	0	7	2	8	12	93	0	2	0	2	1	30	19	21	75	
Hillsborough .....	0	12	0	22	0	32	0	25	0	91	0	2	0	0	0	14	0	2	18	
Hiram .....	9	5	3	13	25	21	4	8	1	89	1	0	0	2	5	7	7	10	32	
Jackson, (Jackson Co.) .....	10	6	17	4	7	7	25	5	12	93	2	2	4	5	10	13	34	4	74	
Jackson, (Monroe Co.) .....	16	9	1	5	20	11	0	0	25	77	0	2	0	0	0	0	0	0	2	
Jefferson .....	0	7	1	21	1	45	3	15	0	93	0	4	2	13	1	40	4	14	78	
Madison, [Atkins] .....	8	5	0	5	20	9	17	4	19	87	3	0	0	0	5	2	11	2	23	
Madison, [King] .....	3	5	3	12	12	21	9	12	15	92	1	2	1	1	6	31	19	13	74	
Medina .....	4	3	9	10	17	24	12	8	0	87	11	22	30	8	3	2	5	6	87	
Mount Union .....	1	3	0	9	4	12	8	6	9	52	1	11	3	6	2	0	0	4	27	
New Lisbon .....	1	10	0	15	6	30	0	21	1	93	0	1	0	7	1	29	15	23	76	
Northwood .....	6	1	7	16	7	25	15	14	0	91	1	0	0	0	1	0	0	1	3	
Ripley .....	2	0	0	12	3	3	8	19	19	66	1	0	0	0	0	0	2	11	14	
Savannah .....	0	3	1	27	0	17	10	35	0	93	1	3	1	22	0	13	6	29	75	
Urbana .....	0	1	1	15	8	16	14	13	25	93	0	1	0	0	6	20	27	12	66	
Welchfield .....	2	3	4	24	6	31	14	9	0	93	0	0	0	1	0	3	1	0	5	
Westerville .....	8	5	1	1	18	33	4	23	0	93	2	1	1	0	11	31	10	24	80	
MICHIGAN—																				
Battle Creek .....	5	3	6	13	13	11	21	9	11	93	3	2	2	1	3	13	33	13	70	
Cooper .....	4	1	9	3	3	14	34	2	23	93	1	0	1	2	1	11	10	0	26	
Grand Rapids, [Currier] .....	0	8	11	11	20	26	6	16	10	88	0	0	0	1	1	3	4	2	11	
Grand Rapids, [Streng] .....	0	4	10	25	7	15	19	13	0	93	4	1	5	5	7	14	31	12	79	
Marquette .....	1	10	1	17	6	15	15	28	0	93										
Monroe .....	3	0	3	12	0	47	0	28	0	93	3	0	3	14	0	33	0	30	83	
New Buffalo .....											2	0	1	10	1	21	14	20	69	
Port Huron .....	1	3	1	14	15	24	11	23	1	93	1	0	3	3	2	17	18	14	58	
INDIANA—																				
Evansville .....	6	11	7	12	7	12	20	17	1	93	0	0	2	2	2	35	5	6	52	
Logansport .....	2	3	1	17	3	14	40	13	0	93										
Madison .....	1	11	6	13	3	22	13	24	0	93	0	6	5	11	3	16	13	9	63	
Michigan City .....	15	1	0	12	57	7	7	11	3	93	9	0	0	3	13	6	7	11	49	
New Harmony .....	7	1	8	4	10	16	10	10	0	66	0	0	0	0	3	1	0	0	4	
Richmond, [Moore] .....	2	0	5	6	10	18	18	7	26	92										
ILLINOIS—																				
Athens .....	1	7	1	36	0	27	3	15	0	90	0	0	0	2	0	12	24	8	46	
Augusta .....	0	6	7	17	13	15	20	10	5	93	0	1	1	7	6	3	20	5	43	
Aurora .....	5	3	9	16	10	16	23	11	0	93	1	0	2	8	3	18	26	10	68	
Batavia, [Mead] .....	0	12	0	17	0	39	12	13	0	93	0	9	0	8	0	25	13	17	72	
Brighton .....	3	1	2	15	24	17	15	16	0	93	0	0	0	18	10	15	2	7	52	
Edgington .....	4	7	0	11	21	25	8	17	0	93	0	1	0	0	20	32	5	16	83	
Elgin .....	4	5	3	7	12	10	17	16	19	93	2	1	1	0	0	4	8	5	21	
Fremont Centre .....	0	8	12	5	19	17	16	16	0	93										
Manchester .....	6	5	3	3	24	23	25	4	0	93	2	2	2	2	14	16	20	2	60	
Marengo .....	1	4	0	24	7	38	19	0	0	93										
Ottawa .....	2	3	4	19	4	21	12	14	6	85	0	0	0	1	7	3	5	6	22	
Pekin .....	8	2	5	15	28	8	7	18	2	93	1	2	0	4	3	11	12	7	40	
Peoria .....	6	4	9	6	17	4	42	5	0	93	0	1	0	0	1	0	7	0	9	
Riley .....	3	2	7	10	16	5	28	19	3	93										
South Pass .....	2	3	5	10	20	9	17	8	19	93										
Waynesville .....	2	1	8	4	22	3	19	3	0	62										
West Salem .....	0	12	3	16	18	10	1	16	17	93	0	0	0	0	2	18	26	0	46	
West Urbana .....	2	17	0	14	8	31	4	17	0	93	0	0	0	0	4	1	0	0	5	

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
ILLINOIS—Continued.																				
Wheaton .....	4	5	5	10	13	24	11	17	4	93	2	0	0	0	3	12	9	10	36	
Winnebago .....	0	9	1	26	6	25	3	23	0	93	0	0	0	0	0	9	3	17	29	
MISSOURI—																				
Cape Girardeau .....	13	28	2	14	24	18	5	19	1	124	3	1	3	3	13	30	16	26	94	
St. Joseph .....	0	9	0	34	0	29	0	19	23	111										
St. Louis .....	8	5	7	22	5	16	21	8	0	93										
Springfield .....	3	10	1	12	8	15	4	8	23	84	3	6	1	5	10	9	3	4	41	
WISCONSIN—																				
Appleton .....	6	15	1	3	0	51	3	14	0	93	8	12	1	2	1	31	2	10	67	
Bay City .....	0	20	6	2	3	35	12	15	0	93	1	0	0	0	0	12	6	4	22	
Beloit .....	13	0	1	9	38	11	8	13	0	93	0	0	0	0	0	1	0	0	1	
Janesville .....	3	5	7	13	11	14	19	14	7	93										
Kenosha .....	7	3	1	5	23	25	14	3	0	90										
Lind .....	1	3	5	2	3	3	20	1	4	42	1	1	2	0	0	4	0	8		
Madison, [Sterling] .....	5	3	4	8	15	17	9	13	1	75	0	0	0	1	0	3	1	0	5	
Manitowec .....	9	4	6	10	13	9	22	20	0	93	4	1	0	1	1	4	5	4	20	
Menasha .....	4	4	11	6	4	11	13	10	30	93	3	6	9	4	4	3	10	9	48	
Milwaukee, [Pomeroy] .....	3	6	3	20	2	22	17	20	0	93										
Milwaukee, [Winkler] .....	0	13	3	21	3	11	18	24	0	93										
New London .....	7	3	2	0	11	22	35	13	0	93	9	3	0	0	12	18	3	21	66	
Platteville .....	4	3	4	38	3	11	7	23	0	93	4	4	0	27	1	9	5	14	68	
Racine .....	15	1	1	20	13	7	24	0	6	87	6	0	0	1	0	6	2	0	15	
St. Croix .....	15	8	0	7	14	7	2	0	11	73	2	0	0	3	5	7	1	6	24	
Waukesha .....	14	2	1	1	11	7	27	6	23	92	0	0	0	0	0	1	0	2	3	
IOWA—																				
Bellevue .....	1	1	5	25	3	15	14	28	0	92	0	0	1	7	1	8	4	0	27	
Border Plains .....	5	0	6	19	23	5	3	28	4	93	0	0	0	0	1	5	5	4	15	
Camanche .....	0	2	9	15	8	16	16	0	25	91	18	7	6	0	0	1	1	1	33	
Dubuque .....	21	5	1	14	9	15	3	14	11	93	3	2	0	2	1	11	1	18	38	
Fairfield .....	1	0	0	16	9	16	0	15	33	93	1	2	1	4	0	0	0	1	9	
Fort Madison .....	4	3	1	21	3	30	2	27	2	93	1	1	3	3	1	21	11	11	52	
Franklin .....	2	7	6	18	7	19	9	15	10	93										
Iowa City .....	1	0	6	30	3	8	20	14	11	93	0	0	0	0	0	1	1	3	5	
Muscatine .....	4	0	1	8	14	22	24	20	0	93	0	0	0	0	0	4	0	1	5	
Pleasant Plain .....	0	3	4	17	16	17	14	19	0	90	0	0	0	0	3	5	7	4	19	
Rossville .....	6	4	8	12	8	14	10	16	15	93										
Sioux City .....	4	9	3	36	4	0	6	30	0	92	0	2	0	10	4	0	0	9	25	
MINNESOTA—																				
Burlington .....	6	0	0	0	8	7	7	3	0	31										
Hazlewood .....	4	7	9	4	22	12	10	25	0	93	0	0	11	0	1	0	1	0	15	
Lapham .....	1	1	2	2	7	9	6	1	0	29										
Princeton .....	6	4	16	4	6	6	18	11	22	93	3	2	7	2	4	4	16	5	43	
Wabashaw .....	1	3	1	7	19	13	21	10	18	93	4	3	3	3	0	0	0	1	14	
NEBRASKA—																				
Bellevue .....	22	1	0	6	34	6	8	8	2	93	10	3	5	3	12	7	5	5	50	
Omaha .....	7	2	0	19	12	14	6	17	16	93	3	1	1	10	12	8	0	12	45	
KANSAS—																				
Burlingame .....	3	3	3	24	10	12	8	13	17	93										
Lawrence .....	11	0	20	18	17	7	7	7	0	93	0	0	0	0	1	0	0	0	1	
Leavenworth, [McCarty] .....	8	7	8	17	25	13	4	8	3	93	1	1	1	3	4	16	3	5	34	
Mapleton .....	7	9	17	5	8	15	19	11	2	93	0	2	1	0	0	1	0	0	4	
Topoka .....	0	0	4	3	13	4	7	3	8	42	0	0	3	0	6	3	0	0	12	
DACOTAH—																				
Fort Union .....	2	8	1	0	5	20	30	27	0	93										
OREGON—																				
Fort Thompson .....	3	1	1	8	7	9	0	12	0	41										
MEXICO—																				
Cordova .....	13	13	4	4	5	12	3	6	2	62										
Mirador .....	12	21	18	81	18	30	0	0	0	180										
Vera Cruz .....	13	0	0	0	1	0	0	0	0	14										
CALIFORNIA—																				
Marysville .....	45	0	1	0	46	1	0	0	0	93										



## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
CALIFORNIA—Continued.																				
Sacramento .....	16	11	8	25	8	2	1	22	0	93	0	3	0	7	4	4	10	3	31	
San Francisco .....	20	6	1	1	13	5	1	11	35	93	4	1	3	2	2	12	14	15	60	
WEST INDIES—																				
Centre Signal Station, Ber.	6	4	2	0	2	4	2	4	0	24	—	—	—	—	—	—	—	—	—	
Nassau, Bahamas .....	0	20	8	16	0	0	0	8	0	52	—	—	—	—	—	—	—	—	—	
St. George's, Bermuda...	2	11	1	3	1	8	1	4	0	31	—	—	—	—	—	—	—	—	—	
SOUTH AMERICA—																				
Cathar'a Sophia, Surinam.	1	41	17	12	1	0	0	0	0	72	0	12	36	13	0	0	0	0	61	

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	15	5	0	0	1	22	23	19	0	86	11	6	0	0	0	17	12	11	57
Red River Settlement .....	9	2	4	1	11	7	8	23	18	83	1	2	1	14	3	0	1	1	23
Rigolet .....	3	3	5	1	1	1	29	10	2	56									
St. John's .....	2	7	0	6	0	14	11	44	0	84									
St. Martin .....	0	20	0	8	2	30	12	12	0	84									
Stambridge .....	3	5	5	21	13	3	24	3	7	84									
Toronto .....	4	11	0	4	1	27	4	26	7	84									
Windsor .....	3	0	2	3	2	11	32	15	12	80	0	0	0	0	0	1	1	0	2
Wolfville .....	0	1	3	2	0	5	23	44	8	84	0	0	2	2	0	5	19	20	48
MAINE—																			
Cornish, [Guptill] .....	4	3	1	4	1	4	6	61	0	84	0	0	0	0	0	0	1	5	6
Cornish, [West] .....	2	5	1	2	8	22	19	15	0	84	1	0	0	0	0	0	1	1	3
East Exeter .....	5	4	2	3	0	0	29	49	0	84	4	5	0	1	0	10	12	32	64
Gardiner .....	1	10	0	6	1	11	2	45	8	84	0	0	0	0	2	18	3	8	31
Monson .....	2	5	5	0	8	2	1	59	0	82									
Perry .....	2	2	0	7	0	10	5	57	0	84	1	2	0	3	1	7	5	5	24
Portland .....	4	7	1	0	5	7	28	30	0	82	0	0	0	0	3	5	15	5	28
Steuben .....	2	15	0	2	0	14	7	39	5	84	1	2	0	0	0	19	16	6	44
NEW HAMPSHIRE—																			
Concord .....	2	11	0	2	0	11	2	51	0	79									
Francstown, [Bixby] .....	3	5	5	2	0	8	18	42	0	83	0	4	7	1	0	4	36	10	62
Shelburne .....	0	0	21	0	0	0	51	0	4	76	0	0	2	1	1	1	31	7	43
West Enfield .....	0	1	0	4	15	4	7	50	0	81	0	1	0	4	10	0	5	29	59
VERMONT—																			
Brandon .....	22	0	3	5	15	4	7	25	3	84	0	0	0	0	1	0	4	30	35
Burlington .....	7	9	2	0	2	22	1	39	0	82									
Craitsbury .....	5	5	3	6	18	5	5	33	2	84	3	0	0	0	0	5	12	17	38
Rupert .....											1	0	0	4	0	57	0	0	62
St. Johnsbury .....	10	1	3	1	11	2	8	47	1	84	0	0	0	0	1	5	16	3	25
MASSACHUSETTS—																			
Amherst .....	5	3	0	10	4	7	5	49	0	83	0	0	0	0	0	5	2	17	25
Bridgewater .....	0	7	2	2	1	11	28	24	0	84	1	6	2	4	2	4	0	0	28
Cambridge .....	3	3	2	5	0	31	17	17	8	84									
Florida .....	0	3	0	9	0	10	16	46	0	84	0	3	0	0	0	11	11	35	69
Lawrence .....	1	10	0	4	3	14	5	49	0	84									
Mendon .....	1	6	0	0	0	15	4	58	0	84	1	4	0	0	1	3	5	44	58
Nantucket .....	2	12	1	4	2	11	7	42	3	84									
New Bedford .....	5	8	2	3	1	19	1	44	0	84	1	2	3	3	3	4	8	8	32
Newburyport .....	5	2	3	2	10	1	19	31	6	74	0	0	0	0	0	2	0	0	2
Richmond .....	1	15	0	7	0	13	0	48	0	84	2	7	0	6	3	12	0	17	47
Westfield .....	7	11	1	7	1	12	22	23	0	84	0	1	0	0	0	3	0	0	4
Williamstown .....	5	1	5	10	4	2	16	39	1	81	0	5	1	1	0	0	0	0	7
Worcester .....	1	2	5	5	0	4	28	19	4	68									
RHODE ISLAND—																			
Providence .....	4	9	2	2	0	15	5	47	0	84									
CONNECTICUT—																			
Columbia .....	1	7	0	2	2	8	5	40	19	84	1	4	0	0	0	8	3	28	44
New London .....	8	13	0	2	3	15	2	41	0	84									
Norwich .....	1	13	1	1	1	15	16	15	21	84									
Pomfret .....	1	10	0	5	3	13	1	49	0	83	0	7	0	3	0	11	0	14	44
Saybrook .....	8	13	0	2	2	10	14	23	7	84	0	0	0	0	0	3	18	13	36
Wallingford .....	30	6	1	2	5	9	13	18	0	84	0	0	0	0	0	5	21	6	32
NEW YORK—																			
Baldwinsville .....	2	2	13	3	1	10	33	20	0	84	0	0	0	0	0	0	34	13	47
Beverly .....	10	5	0	5	4	21	3	29	1	78	3	2	0	1	5	13	16	7	48
Cazenovia .....	1	2	1	6	11	6	17	38	2	84	2	0	1	5	4	4	27	25	63
Covert .....	1	0	2	13	4	11	21	28	4	84	0	0	0	0	1	3	14	8	26
Eden .....	3	6	8	4	23	13	13	11	0	81	0	0	0	0	2	9	20	3	34
Nichols .....	7	1	1	29	6	3	13	24	0	84	7	0	1	8	4	8	11	19	58
Ogdensburg .....	1	4	1	2	4	8	4	5	0	32									
Oswego .....	8	3	15	10	11	4	22	7	4	84									
Sag Harbor .....	12	8	3	3	10	7	16	25	0	84	0	0	0	0	1	16	13	7	37



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Saratoga.....	0	14	0	0	0	36	5	29	0	84	0	15	0	0	0	34	8	27	84	
Wampsville.....	1	0	16	0	9	3	48	7	0	84	2	0	17	0	7	3	37	6	72	
NEW JERSEY—																				
Bloomfield.....	0	15	0	0	0	39	2	28	0	84	—	—	—	—	—	—	—	—	—	
Burlington.....	7	9	14	1	1	8	26	12	0	78	1	0	0	0	0	9	11	5	26	
Lambertville.....	2	12	3	4	2	16	6	30	0	75	—	—	—	—	—	—	—	—	—	
Newark.....	2	14	0	2	0	13	5	20	0	56	—	—	—	—	—	—	—	—	—	
Sergeantsville.....	15	11	3	0	0	17	14	21	0	81	9	12	1	0	0	11	8	8	43	
PENNSYLVANIA—																				
Bedford.....	0	0	0	10	0	9	2	51	0	72	0	2	2	31	0	0	0	11	46	
Berwick.....	3	3	15	1	6	2	43	11	0	84	—	—	—	—	—	—	—	—	—	
Cannonsburg.....	0	1	20	0	0	8	47	7	1	84	—	—	—	—	—	—	—	—	—	
Chomedale.....	4	13	3	1	5	4	5	27	22	84	0	2	0	0	1	4	11	12	30	
Easton.....	5	7	4	2	1	4	20	27	10	80	3	1	0	1	0	4	17	9	35	
Fleming.....	3	3	7	9	0	11	16	35	0	84	0	0	1	1	0	3	21	27	53	
Gettysburg.....	12	13	1	0	4	19	9	21	5	84	1	2	1	1	2	7	22	14	50	
Harrisburg, [Heisely].....	5	4	10	12	9	0	5	37	0	82	0	3	1	2	2	0	1	18	27	
Harrisburg, [Hickok].....	4	9	12	1	5	12	28	13	0	84	1	0	0	0	2	5	8	0	16	
Lewisburg.....	9	6	4	3	4	11	20	20	7	84	0	0	0	0	0	3	6	18	27	
Meadville.....	1	0	1	5	13	11	17	11	23	82	0	0	0	2	2	4	19	5	32	
Morrisville.....	1	16	4	1	2	21	11	26	2	84	1	9	2	0	0	15	17	11	55	
Mount Joy.....	0	0	0	35	1	8	3	1	36	84	0	0	0	0	0	0	0	5	5	
Murrysville.....	3	13	12	1	2	27	9	4	9	80	1	0	1	0	2	16	10	6	36	
Norristown.....	2	5	6	5	0	1	42	11	0	72	0	1	8	0	1	2	39	2	53	
North Whitehall.....	3	7	3	1	0	4	19	12	32	81	2	0	4	0	1	5	21	5	38	
Philadelphia.....	2	14	1	5	0	21	11	30	0	84	0	0	0	0	0	3	10	7	20	
Pittsburg, [Martin].....	1	1	15	0	5	15	21	8	12	84	0	0	1	0	0	9	24	1	35	
Pocopson.....	9	12	6	1	2	16	31	6	0	83	0	1	0	0	0	2	20	2	25	
Reading.....	4	7	5	6	2	2	11	18	1	54	3	2	3	2	0	2	18	11	41	
Shamokin.....	1	5	16	7	13	6	36	0	0	84	0	5	48	2	0	0	0	0	55	
Somerset.....	3	1	1	5	6	14	27	8	19	84	0	0	0	3	0	6	35	6	50	
Tarentum.....	5	7	4	2	6	21	2	4	33	84	0	0	0	0	1	13	26	7	47	
West Haverford.....	2	7	1	3	7	7	4	22	3	56	0	1	1	0	0	1	10	12	25	
Westtown.....	5	9	3	10	1	12	2	42	0	84	4	0	0	0	0	1	8	18	31	
DELAWARE—																				
Milford.....	12	12	3	0	4	10	14	26	0	81	17	1	4	0	7	0	29	1	59	
Newark.....	8	15	6	1	0	7	6	32	0	75	0	0	0	0	0	1	0	3	4	
MARYLAND—																				
Annapolis.....	16	16	2	2	12	9	10	11	6	84	0	0	0	0	0	14	13	0	27	
Baltimore.....	12	13	2	7	3	11	12	24	0	84	0	0	0	0	0	0	1	1	2	
Bladensburg.....	0	6	1	0	0	8	1	18	0	34	—	—	—	—	—	—	—	—	—	
Chestertown.....	15	12	5	4	11	4	18	6	0	75	—	—	—	—	—	—	—	—	—	
Frederick.....	3	18	0	0	2	8	14	15	24	84	0	0	0	0	0	0	27	4	31	
Sykesville.....	4	19	6	15	8	10	14	8	0	84	0	0	12	1	2	8	37	1	61	
DISTRICT OF COLUMBIA—																				
Washington.....	6	10	5	3	11	7	9	22	11	84	1	1	0	0	0	6	13	4	25	
VIRGINIA—																				
Alexandria.....	15	17	4	7	11	8	4	18	0	84	—	—	—	—	—	—	—	—	—	
Crichton's Store.....	23	2	8	0	13	25	10	2	1	84	0	0	0	0	0	3	2	0	5	
Montross.....	3	3	6	2	5	9	15	13	28	84	0	0	0	1	1	8	10	2	22	
Mosby Creek.....	0	16	0	6	7	40	4	11	0	84	0	3	0	0	0	20	1	7	31	
Poplar Grove.....	1	4	11	1	0	7	12	23	25	84	2	4	0	0	1	9	26	7	49	
Portsmouth.....	11	16	5	7	5	12	11	17	0	84	—	—	—	—	—	—	—	—	—	
Rose Hill.....	5	32	2	3	2	14	4	2	8	72	0	0	0	0	0	0	5	3	8	
Rougemont.....	9	21	3	3	10	12	23	3	0	84	0	7	0	0	3	1	21	0	32	
Salem.....	2	9	2	21	0	13	16	21	0	84	0	4	32	4	0	1	6	0	47	
Smithfield.....	12	16	3	4	4	15	6	10	0	70	1	2	0	1	1	1	10	16	32	
Winchester.....	2	3	0	0	0	0	10	9	60	84	0	0	0	0	0	0	3	0	3	
Wirt Court-House.....	3	11	0	7	0	7	3	45	8	84	0	0	0	5	0	10	8	40	63	
NORTH CAROLINA—																				
Chapel Hill.....	23	20	2	1	4	17	17	0	0	84	2	3	1	0	0	26	4	0	36	
Davidson College.....	1	24	1	5	4	7	3	11	26	82	0	8	0	0	1	22	1	5	37	

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NORTH CAROLINA—Cont'd.																			
Marlborough.....	34	12	2	0	6	5	5	8	6	82	10	13	0	2	0	5	5	17	52
Murfreesborough.....	3	22	4	3	1	9	16	10	10	78	1	11	0	0	0	4	17	4	37
SOUTH CAROLINA—																			
Aiken.....	1	6	1	0	1	6	1	0	0	16	—	—	—	—	—	—	—	—	—
All Saints.....	23	5	7	9	9	14	11	5	0	84	12	5	0	1	0	19	12	3	52
Charleston, [Dawson].....	1	21	5	0	0	11	2	9	0	55	—	—	—	—	—	—	—	—	—
Charleston, [Johnson].....	4	8	1	1	3	8	1	15	1	42	—	—	—	—	—	—	—	—	—
St. John's.....	3	24	3	20	1	12	0	19	0	82	1	6	2	5	1	5	9	16	45
GEORGIA—																			
Athens.....	8	14	6	3	3	5	11	17	15	83	0	0	2	1	0	0	0	0	3
Hillsborough.....	4	16	6	1	0	18	20	19	0	84	0	0	1	1	0	0	0	0	2
Savannah.....	10	16	5	5	11	9	10	18	0	84	0	0	0	0	0	4	5	0	9
Sparta.....	6	19	5	3	2	20	13	16	0	84	1	10	1	1	0	8	18	7	46
Whitemarsh Island.....	9	18	4	0	7	7	4	13	22	84	1	3	0	0	1	8	8	6	27
Zebulon.....	0	12	21	2	2	16	21	10	0	84	4	3	4	0	0	1	5	4	21
FLORIDA—																			
Alachua County.....	8	6	2	11	2	28	2	20	0	79	—	—	—	—	—	—	—	—	—
Alligator.....	15	16	0	0	0	18	4	23	2	84	4	0	0	0	0	19	5	6	38
Atsena.....	3	22	7	5	11	12	5	17	2	84	1	11	4	5	8	7	5	10	51
Belair.....	8	29	5	10	2	2	5	7	15	84	0	3	1	0	0	13	24	4	47
Jacksonville.....	3	18	0	1	4	29	5	23	0	83	0	6	1	1	0	33	3	7	51
St Augustine.....	14	27	1	1	0	10	2	29	0	84	8	15	0	0	0	8	1	26	58
Salt Ponds.....	9	14	7	7	3	3	0	12	1	56	—	—	—	—	—	—	—	—	—
ALABAMA—																			
Carlowville.....	8	13	13	5	7	10	17	11	0	84	0	0	1	1	5	0	0	0	13
Greene Springs.....	14	8	7	7	0	12	7	17	8	80	9	3	3	0	2	1	5	10	33
Greensborough.....	6	7	3	16	8	7	5	32	0	84	4	2	4	3	0	8	17	6	44
MISSISSIPPI—																			
Columbus.....	15	10	14	1	11	5	12	16	0	84	3	1	1	0	1	9	22	5	42
Paulding.....	7	19	5	0	1	15	9	19	0	84	8	13	0	5	1	15	7	15	64
LOUISIANA—																			
Black River.....	32	7	1	11	24	1	1	7	0	84	5	2	0	0	2	18	13	1	41
New Orleans.....	0	35	0	4	0	13	0	32	0	84	—	—	—	—	—	—	—	—	—
Trinity.....	15	2	3	1	27	3	2	1	6	60	3	3	0	0	5	7	4	2	24
TEXAS—																			
Austin, [Palm].....	23	10	14	4	12	15	3	0	0	84	9	0	0	0	0	7	4	1	27
Austin, [Van Nostrand].....	31	0	1	0	25	1	18	2	2	83	6	0	0	0	5	0	10	2	32
Goliad County.....	41	5	3	23	8	1	2	1	0	84	5	3	0	1	13	11	13	0	52
Lavaca.....	12	10	7	14	10	12	5	11	0	81	3	2	2	0	4	5	4	3	23
Union Hill.....	21	5	4	0	27	3	8	1	11	84	27	0	0	0	14	3	9	1	60
Washington.....	26	0	0	1	34	1	1	1	14	78	3	4	2	0	0	0	0	0	11
TENNESSEE—																			
Glenwood.....	12	10	7	13	6	11	2	16	7	84	2	1	2	1	0	7	31	7	51
KENTUCKY—																			
Bardstown.....	5	8	5	4	12	14	13	15	0	76	1	1	1	1	3	19	11	8	45
Danville.....	5	1	10	4	8	11	20	25	0	84	0	1	2	0	0	11	28	5	47
Millersburg.....	2	5	10	3	0	2	7	8	46	83	0	3	8	0	0	6	11	9	37
Paris.....	6	14	0	6	10	22	14	12	0	84	0	0	0	0	7	2	17	0	26
Springdale.....	4	8	5	1	2	19	4	25	16	84	—	—	—	—	—	—	—	—	—
OHIO—																			
Bellefontaine.....	5	16	2	4	1	14	18	21	0	81	4	13	2	1	0	20	6	17	63
Bowling Green.....	3	2	0	0	0	5	1	2	0	13	—	—	—	—	—	—	—	—	—
Cincinnati, [Harper].....	14	0	4	0	0	12	23	31	0	84	—	—	—	—	—	—	—	—	—
Cincinnati, [Hurt].....	7	3	8	1	5	19	16	21	1	84	1	1	6	2	2	5	15	16	49
Cleveland.....	5	9	5	6	16	18	11	13	0	83	2	0	0	0	0	4	12	5	23
Edinburg.....	1	19	28	11	0	6	3	4	12	81	0	2	2	0	0	17	35	8	67
Hillsborough.....	0	16	0	13	1	27	0	27	0	84	0	0	0	1	0	13	0	2	16
Hiram.....	5	2	5	7	10	28	13	12	1	83	1	0	0	0	0	1	19	6	27
Jackson, [Jackson Co.].....	16	1	22	3	1	0	19	4	18	84	5	1	5	1	0	1	39	4	56
Jackson, [Monroe Co.].....	4	12	3	1	18	1	0	0	21	60	0	4	1	0	0	0	0	0	5
Jefferson.....	4	11	5	7	2	16	9	30	0	84	7	12	2	7	4	6	10	26	74
Madison, [Atkins].....	4	2	3	5	14	14	15	3	24	84	0	0	0	0	2	2	6	0	10





## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
WISCONSIN—Continued.																			
Milwaukee, [Winkler] . . .	7	0	0	3	0	15	16	29	0	84	1	0	3	0	0	9	22	18	56
New London . . . . .	0	0	0	1	0	19	36	20	0	81	1	10	7	10	0	12	4	10	54
Platteville . . . . .	1	11	0	19	0	6	7	32	0	84	2	0	0	0	0	0	0	0	2
Racine . . . . .	7	16	1	0	5	20	28	1	3	81	2	0	0	0	0	0	0	0	2
St. Croix . . . . .	9	0	0	1	18	6	0	2	18	60	0	0	0	0	3	0	0	0	3
IOWA—																			
Bellevue . . . . .	5	5	8	6	0	3	12	35	0	80	0	0	2	0	0	0	4	7	13
Border Plains . . . . .	4	2	5	13	11	1	9	37	2	84	0	0	0	0	0	0	0	3	3
Camanche . . . . .	5	6	18	1	3	8	28	2	8	79	1	5	9	0	0	0	5	2	22
Dubuque . . . . .	18	7	0	10	14	0	2	17	7	84	0	1	0	2	1	3	0	11	24
Fairfield . . . . .	2	9	1	7	5	8	3	32	17	84	2	1	0	0	0	1	0	1	5
Fort Madison . . . . .	1	13	2	13	1	11	2	41	0	84	4	0	2	3	0	4	18	15	52
Franklin . . . . .	10	7	11	8	3	0	9	22	5	84	—	—	—	—	—	—	—	—	—
Iowa City . . . . .	3	4	6	18	0	5	4	40	4	84	—	—	—	—	—	—	—	—	—
Muscatine . . . . .	6	4	10	6	7	5	29	17	0	84	0	0	0	0	0	0	2	2	4
Pleasant Plain . . . . .	2	11	2	9	9	3	16	31	1	84	0	0	0	1	0	2	7	5	15
Poultney . . . . .	10	3	7	4	7	3	8	25	11	78	0	0	0	0	1	1	1	8	11
Rossville . . . . .	5	8	10	1	10	7	16	21	6	84	—	—	—	—	—	—	—	—	—
Sioux City . . . . .	9	13	0	12	5	3	0	41	0	83	5	1	1	2	0	0	0	10	19
MINNESOTA—																			
Burlington . . . . .	13	0	0	0	2	2	8	3	0	28	—	—	—	—	—	—	—	—	—
Hazlewood . . . . .	6	7	7	4	8	6	8	35	0	81	4	2	9	1	0	1	2	5	24
Lapham . . . . .	0	0	8	1	1	0	0	6	0	24	—	—	—	—	—	—	—	—	—
Princeton . . . . .	9	7	10	0	11	9	18	14	6	84	2	1	10	0	1	3	5	0	22
Wabashaw . . . . .	0	4	2	7	11	0	24	24	4	84	1	2	2	0	0	2	0	0	13
NEBRASKA—																			
Bellevue . . . . .	36	9	6	0	14	1	10	3	0	79	16	7	4	0	3	5	7	4	46
Omaha . . . . .	15	7	5	9	5	1	0	27	15	84	4	8	5	6	2	2	2	23	52
KANSAS—																			
Burlingame . . . . .	12	4	2	14	4	4	5	27	12	84	—	—	—	—	—	—	—	—	—
Lawrence . . . . .	19	17	10	15	0	2	5	16	0	84	—	—	—	—	—	—	—	—	—
Leaven' th City, [Berthoud] . . .	0	28	1	1	0	7	0	16	7	60	0	28	0	7	0	7	0	13	55
Leaven' th City, [McCarty] . . .	11	28	3	6	15	1	1	19	0	84	8	14	4	3	2	1	5	18	55
Manhattan . . . . .	12	23	12	0	4	8	4	4	11	84	6	1	1	5	3	4	2	3	25
Topeka . . . . .	15	12	3	5	9	6	7	14	12	83	0	0	0	0	0	0	1	3	4
MEXICO—																			
Cordova . . . . .	8	20	0	3	9	0	2	8	0	56	—	—	—	—	—	—	—	—	—
Mirador . . . . .	17	18	23	38	51	18	0	3	0	168	—	—	—	—	—	—	—	—	—
Vera Cruz . . . . .	8	0	0	0	0	0	0	0	0	8	—	—	—	—	—	—	—	—	—
CALIFORNIA—																			
Marysville . . . . .	16	0	0	0	51	0	0	17	0	84	—	—	—	—	—	—	—	—	—
Sacramento . . . . .	20	5	5	23	12	7	1	11	0	84	0	0	1	0	6	11	5	7	32
San Francisco . . . . .	14	2	0	0	10	6	15	0	37	84	11	0	0	1	5	7	19	2	45
WEST INDIES—																			
Centre Signal Station, Ber . . .	5	0	1	0	5	2	1	7	0	21	—	—	—	—	—	—	—	—	—
Nassau, Bahamas . . . . .	0	14	0	2	0	8	8	8	0	48	—	—	—	—	—	—	—	—	—
St. George's, Bermuda . . . . .	2	2	0	3	1	11	0	9	0	28	—	—	—	—	—	—	—	—	—
SOUTH AMERICA—																			
Catharina Sophia, Surinam . . .	1	46	22	6	0	0	0	0	0	75	0	30	31	0	0	0	0	0	64



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA.—																			
Montreal .....	18	5	2	1	3	21	19	23	1	93	9	1	1	1	3	14	12	19	60
Red River Settlement .....	13	0	5	1	12	2	4	8	48	93	4	5	11	8	4	0	3	1	36
Rigolet .....	10	7	17	1	4	2	9	5	7	62	—	—	—	—	—	—	—	—	—
St John's .....	3	12	0	14	2	31	21	10	0	93	—	—	—	—	—	—	—	—	—
St. Martin .....	1	8	2	7	1	44	8	22	0	93	—	—	—	—	—	—	—	—	—
Stanbridge .....	16	4	2	18	9	1	19	17	7	93	—	—	—	—	—	—	—	—	—
Toronto .....	2	9	2	6	0	10	4	45	15	93	—	—	—	—	—	—	—	—	—
Windsor .....	19	2	2	2	2	15	20	17	10	89	1	1	0	1	0	0	1	0	4
Wolfville .....	4	6	2	2	2	25	9	28	0	78	4	4	1	0	2	20	6	21	58
MAINE.—																			
Cornish, [Guptill] .....	9	3	0	3	5	7	6	60	0	93	1	0	0	0	0	0	0	3	4
Cornish, [West] .....	4	8	2	0	10	16	26	27	0	93	2	0	0	0	0	0	3	2	7
Gardiner .....	2	23	1	8	0	5	1	38	15	93	3	1	0	2	1	2	1	16	26
Monson .....	16	2	5	0	5	3	5	56	1	93	—	—	—	—	—	—	—	—	—
Perry .....	9	3	1	2	5	18	3	51	1	93	9	1	0	0	2	11	3	26	52
Portland .....	8	12	1	3	8	8	17	36	0	93	5	0	0	0	2	2	10	12	31
Steuben .....	13	23	0	1	0	16	7	26	7	93	9	8	0	0	0	6	8	8	39
NEW HAMPSHIRE.—																			
Concord .....	4	8	6	1	1	1	1	60	0	82	1	0	0	3	0	0	0	1	5
Concord, [Colby] .....	0	9	0	4	0	8	2	46	0	69	0	0	0	0	0	0	0	3	3
Francetown, [Bixby] .....	3	5	0	0	2	7	15	34	0	66	0	3	0	0	0	10	19	14	46
North Barnstead .....	0	3	0	0	0	6	8	72	0	89	0	3	0	0	0	3	12	31	49
Shelburne .....	0	0	10	0	0	0	73	0	10	93	0	0	0	3	1	3	13	27	47
West Enfield .....	0	0	0	4	10	5	3	71	0	93	0	0	0	5	8	9	2	37	61
VERMONT.—																			
Brandon .....	30	0	1	5	10	4	3	27	12	92	4	0	0	0	2	3	6	22	37
Burlington .....	23	21	1	1	5	11	2	29	0	93	—	—	—	—	—	—	—	—	—
Craftsbury .....	2	13	1	9	18	2	5	40	3	93	8	5	0	2	2	3	8	13	41
Rupert .....	—	—	—	—	—	—	—	—	—	—	6	0	0	2	5	33	18	3	67
St Johnsbury .....	17	0	1	0	13	0	8	52	2	93	0	0	0	0	1	1	12	7	21
MASSACHUSETTS.—																			
Amherst .....	4	4	1	15	3	7	8	49	0	91	2	1	0	1	2	3	2	18	29
Bridgewater .....	6	9	0	1	5	18	12	42	0	93	2	0	2	5	2	2	5	8	26
Cambridge .....	1	5	4	6	3	17	16	25	15	92	—	—	—	—	—	—	—	—	—
Florida .....	2	0	0	3	1	8	40	39	0	93	1	0	0	0	2	9	25	30	67
Lawrence .....	0	4	0	11	0	23	3	52	0	93	—	—	—	—	—	—	—	—	—
Mendon .....	0	3	0	0	2	54	13	18	0	90	1	1	0	0	5	27	16	13	63
Nantucket .....	7	12	0	5	3	18	10	34	4	93	—	—	—	—	—	—	—	—	—
New Bedford .....	4	11	0	9	3	16	8	42	0	93	2	2	0	0	0	0	2	12	18
Newburyport .....	4	0	1	6	12	4	15	32	0	74	—	—	—	—	—	—	—	—	—
Richmond .....	0	2	0	3	1	14	0	71	0	91	2	2	0	4	2	12	3	29	54
Westfield .....	5	5	2	8	4	10	36	18	0	89	—	—	—	—	—	—	—	—	—
Williamstown .....	10	0	3	4	7	4	13	41	11	93	0	1	3	0	0	1	0	0	5
Worcester .....	14	3	3	3	4	13	31	15	0	86	—	—	—	—	—	—	—	—	—
RHODE ISLAND.—																			
Providence .....	2	6	0	3	12	10	4	56	0	93	—	—	—	—	—	—	—	—	—
CONNECTICUT.—																			
Columbia .....	1	6	0	0	0	11	8	45	22	93	1	1	0	0	0	7	2	29	40
Pomfret .....	5	6	0	3	7	7	3	59	0	90	3	2	0	2	3	4	0	26	40
Saybrook .....	12	3	4	5	3	9	12	33	11	92	3	3	0	0	1	4	5	14	30
Wallingford .....	11	7	0	4	16	4	5	46	0	93	2	1	0	0	0	3	19	12	37
NEW YORK.—																			
Angelica .....	0	2	3	5	4	35	23	21	0	93	0	0	0	1	0	14	19	1	35
Baldwinsville .....	11	0	8	0	0	4	43	27	0	93	3	0	0	0	0	1	32	17	53
Bellport .....	13	3	6	4	7	8	19	33	0	93	—	—	—	—	—	—	—	—	—
Beverly .....	12	6	0	6	3	25	3	33	1	89	2	3	0	1	4	20	20	8	58
Buffalo .....	5	8	1	3	10	37	21	8	0	93	0	0	0	0	0	1	1	4	6
Canton .....	4	7	0	3	1	12	11	25	6	69	1	3	0	0	0	9	3	14	30
Cazenovia .....	3	0	0	0	8	11	9	58	3	92	1	1	1	2	0	11	16	45	77
Clinton .....	4	2	1	0	5	23	15	43	0	93	5	0	0	0	0	10	6	33	54
Covert .....	4	2	0	9	2	6	34	26	10	93	1	0	0	0	1	4	16	13	35
Eden .....	2	0	2	4	32	21	13	6	0	80	0	0	0	0	0	8	27	4	39

## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Fishkill.....	6	23	0	17	5	16	6	17	0	90	2	1	0	2	0	1	6	18	30
Flatbush.....	10	7	4	2	9	4	18	39	0	93	8	1	0	0	0	4	4	11	28
Fort Edward.....	8	19	2	4	0	24	6	28	0	91	8	1	0	0	0	4	4	11	28
Morrisania.....	0	6	2	5	4	21	17	29	0	93	0	1	1	2	0	18	28	4	54
New York city.....	0	8	0	14	1	19	25	26	0	93	0	1	1	2	0	18	28	4	54
Nichols.....	4	0	7	20	4	0	23	35	0	93	1	0	0	7	1	0	16	36	61
Ogdensburg.....	11	1	1	0	5	3	3	7	0	31									
Oswego.....	10	6	7	8	13	4	28	13	2	91	1	1	0	0	5	3	39	16	65
Ovid.....	4	2	1	1	18	10	42	15	0	93	0	1	0	0	0	0	0	0	1
Pompey.....	6	4	0	0	2	10	37	34	0	93	4	1	2	0	2	6	22	17	54
Rochester.....	12	3	5	1	4	10	30	28	0	93	0	0	0	0	1	3	16	8	28
Sag Harbor.....	3	3	5	4	16	8	22	31	1	93	0	0	0	0	1	3	16	8	28
Saratoga.....	0	13	0	1	0	31	4	44	0	93	0	16	0	1	0	31	3	41	92
Spencertown.....	40	0	0	5	13	0	0	29	0	87	3	0	0	0	11	0	0	6	20
Wampsville.....	1	0	5	7	5	6	64	5	0	93	1	0	4	7	3	8	54	1	78
Waterford.....	15	3	0	2	6	10	33	16	8	93	1	0	0	0	1	1	2	4	9
Wellsville.....	0	1	76	1	0	0	13	2	0	93	0	0	0	1	0	1	1	1	4
NEW JERSEY—																			
Bloomfield.....	1	9	0	2	1	25	4	51	0	93									
Lumberville.....	6	7	1	6	2	14	6	42	0	84									
Newark.....	7	5	1	5	0	12	5	27	0	62									
Sergeantsville.....	14	3	2	4	1	20	35	14	0	93	3	2	0	1	1	14	8	1	33
PENNSYLVANIA—																			
Bedford.....	0	0	0	8	0	13	4	56	0	81	0	8	0	32	0	0	0	5	45
Berwick.....	4	5	14	2	4	7	46	10	0	92									
Byberry.....	3	11	1	1	4	21	25	25	2	93	0	0	1	0	1	8	46	14	70
Cannonsburg.....	0	4	10	0	0	8	64	7	0	93	0	1	0	0	0	0	0	0	1
Chromedale.....	8	9	3	2	10	4	3	37	17	93	2	1	0	0	1	2	12	22	40
Easton.....	5	4	2	4	5	1	25	31	10	87	2	1	0	0	0	2	12	12	29
Fleming.....	2	6	2	7	0	24	14	37	1	93	2	0	0	0	0	5	7	39	53
Gettysburg.....	6	6	0	0	8	12	11	40	10	93	0	0	0	1	0	8	18	32	59
Harrisburg, [Heisely].....	2	2	2	7	10	4	9	56	0	92	0	0	0	2	3	1	3	26	35
Harrisburg, [Hickok].....	7	3	7	2	5	16	40	12	0	92	0	0	0	0	0	5	12	1	18
Indiana.....	11	4	0	5	13	19	11	30	0	93									
Lewisburg.....	12	6	3	1	5	6	11	33	16	93	2	0	0	0	1	2	7	20	32
Meadville.....	13	0	0	2	7	9	17	12	33	93	3	0	0	0	1	9	20	11	44
Morrisville.....	4	8	5	2	7	14	23	22	5	90	0	4	0	0	0	7	19	14	44
Mount Joy.....	1	3	2	27	0	2	0	7	50	92	0	0	0	1	0	0	1	0	2
Murrysville.....	0	10	8	2	0	31	12	16	14	93	0	0	0	0	0	7	14	25	46
Norristown.....	1	4	5	1	0	0	55	12	0	84	0	0	0	0	0	0	40	2	42
North Whitehall.....	3	3	0	0	2	5	18	31	31	93	1	0	0	0	0	1	18	15	35
Philadelphia.....	1	8	2	4	3	19	18	33	0	93	0	0	0	0	1	3	0	8	18
Pittsburg, [Martin].....	1	2	6	4	8	15	33	8	16	93	1	0	1	0	2	8	23	4	39
Pocopson.....	9	6	2	1	4	18	26	20	0	86	2	0	0	0	0	4	10	17	33
Reading.....	4	2	0	3	1	5	17	26	0	61	3	0	0	0	1	4	16	14	38
Shamokin.....	1	0	1	0	17	8	66	0	0	93	1	0	0	0	0	0	48	2	51
Somerset.....	3	1	2	0	6	6	43	12	20	93	0	0	0	0	0	5	38	19	62
Tarentum.....	17	0	1	0	6	16	7	8	32	93	1	0	0	0	0	5	24	25	55
West Haverford.....	3	5	1	1	4	9	13	22	2	60	2	0	0	0	0	0	16	17	35
Westtown.....	7	2	4	2	1	17	6	54	0	93	2	0	0	2	0	0	6	22	32
DELAWARE—																			
Milford.....	3	0	1	2	0	9	14	25	0	60	3	1	2	0	0	2	20	2	30
MARYLAND—																			
Annapolis.....	12	8	2	5	7	19	13	18	0	93	1	0	0	0	0	9	12	1	23
Baltimore.....	7	6	1	3	5	10	23	33	0	88									
Bladensburg.....	1	4	2	4	0	16	2	33	0	62									
Chestertown.....	20	6	5	5	9	5	14	24	0	88									
Frederick.....	0	8	0	0	7	13	22	27	16	93	0	0	0	0	1	1	30	5	37
Sykesville.....	7	12	2	11	11	18	25	7	0	93	0	1	2	0	2	0	42	1	57
DISTRICT OF COLUMBIA—																			
Washington.....	6	7	2	4	14	4	8	31	13	89	0	0	0	0	0	1	0	4	11





## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—																				
Bellefontaine	7	17	3	6	2	19	14	21	0	89	1	5	0	1	0	38	10	13	68	
Bowling Green	0	0	0	0	0	3	1	1	0	5										
Cincinnati, [Harper]	3	8	8	0	5	23	32	14	0	93										
Cincinnati, [Hurt]	4	14	7	1	7	8	26	6	18	91	0	5	1	0	4	6	12	3	31	
Cleveland	6	5	2	15	15	9	16	19	6	93	0	0	0	0	0	4	13	8	25	
Edinburg	1	16	10	36	0	8	0	2	20	93	0	0	1	0	0	13	29	24	67	
Hillsborough	0	28	0	13	1	22	8	21	0	93	0	0	0	0	1	10	3	5	19	
Hiram	7	7	1	1	12	24	13	21	3	89	0	0	0	0	1	2	18	8	29	
Jackson, (Jackson county)	15	0	12	0	5	0	43	0	18	93	6	0	3	0	4	0	27	1	41	
Jackson, (Monroe county)	11	1	3	2	10	2	0	0	25	54	0	0	3	0	0	0	0	0	3	
Jefferson	3	0	0	3	0	24	7	56	0	93	1	0	0	5	0	21	9	49	85	
Madison, [Atkins]	4	3	1	1	13	14	15	11	30	92	0	0	0	0	0	0	11	0	11	
Madison, [King]	5	3	1	7	10	20	12	19	13	90	0	0	0	0	1	19	27	16	63	
Medina	10	3	4	5	5	21	12	33	0	93	4	18	28	30	5	3	2	0	93	
New Lisbon	10	3	1	2	7	22	17	30	1	93	4	0	0	0	6	17	14	25	66	
Northwood	7	5	5	6	5	17	20	20	8	93	4	2	0	2	4	12	13	23	60	
Ripley	5	1	0	13	2	1	1	19	20	62	2	0	0	0	0	0	2	12	16	
Savannah	3	2	2	16	1	14	12	43	0	93	2	0	0	12	0	15	6	30	65	
Urbana	1	5	4	10	5	14	7	15	32	93	5	2	0	0	0	5	16	6	34	
Welchfield	0	2	2	8	2	35	14	28	0	93	0	0	0	0	1	1	1	4	7	
Westerville	8	1	0	0	23	21	4	34	2	93	4	0	1	0	0	4	13	18	40	
MICHIGAN—																				
Battle Creek	2	1	16	5	15	11	19	12	12	93	1	0	0	0	0	15	35	9	60	
Cooper	0	2	10	0	1	3	59	2	16	93	0	0	10	3	4	3	32	2	54	
Grand Rapids, [Currier]	2	19	2	12	5	23	4	19	7	93	1	0	0	1	0	4	5	4	15	
Grand Rapids, [Streng]	4	1	22	12	10	9	18	17	0	93	1	1	0	0	1	13	41	13	70	
Marquette	6	13	4	19	7	7	2	35	0	93										
Monroe	0	4	4	15	4	1	9	56	0	93	0	4	4	14	2	0	4	48	76	
New Buffalo											2	0	1	0	1	13	23	25	65	
Port Huron	5	1	0	7	7	14	16	36	7	93	0	0	0	0	0	0	11	23	43	
INDIANA—																				
Evansville	8	23	2	18	6	16	8	8	0	89	0	3	1	2	0	20	8	8	42	
Logansport	0	2	2	21	5	20	24	19	0	93	0	1	0	0	4	21	25	16	67	
Madison	5	8	10	11	7	12	21	19	0	93	2	5	7	6	0	8	5	8	47	
Michigan City	18	2	3	22	24	6	6	10	2	93	13	1	0	0	16	3	6	5	44	
New Harmony	8	1	18	8	14	4	11	13	0	77										
Richmond, [Moore]	0	3	5	4	2	6	9	4	17	50										
ILLINOIS—																				
Athens	2	18	7	21	6	14	0	23	0	91	0	0	0	0	0	2	27	12	41	
Augusta	5	4	18	14	11	11	15	14	1	93	0	1	2	0	3	6	23	0	37	
Amora	1	13	13	2	21	11	19	13	0	93	3	0	0	0	1	18	26	15	63	
Batavia, [Mead]	0	18	0	17	3	30	7	18	0	93	0	8	0	3	0	17	0	35	69	
Brighton	3	2	7	14	20	27	10	7	0	90	0	2	3	16	5	20	3	13	62	
Edgington	1	17	2	14	4	27	4	24	0	93	1	11	2	8	3	42	3	21	91	
Elgin	8	13	4	6	14	8	10	13	17	93	0	0	0	0	0	1	1	1	3	
Evanston	12	13	0	10	12	8	13	22	0	90	0	0	0	1	0	0	0	0	1	
Fremont Centre	0	15	13	12	18	11	7	17	0	93										
Hillsborough	4	1	14	1	0	3	5	11	3	44	0	0	0	0	0	0	2	1	3	
Jacksonville	2	2	3	5	7	5	3	1	0	31										
Manchester	5	7	9	3	30	7	20	12	0	93	5	4	6	2	21	7	13	5	63	
Marengo	0	5	3	32	8	32	10	3	0	93										
Ottawa	0	14	8	12	8	18	4	21	5	90	1	1	0	0	1	7	2	14	26	
Pekin	6	8	9	14	21	7	0	28	0	93	5	1	0	3	3	7	8	13	40	
Peoria	7	9	20	1	18	2	34	2	0	93	2	0	0	0	0	1	5	1	0	
Riley	1	1	13	5	10	10	26	17	10	93										
South Pass	3	11	8	5	9	12	19	6	20	93	10	3	2	1	5	2	12	5	40	
Waynesville	5	3	21	0	13	3	29	5	13	92	0	0	0	0	5	4	15	2	28	
West Salem	7	7	9	8	18	1	3	18	22	93	0	0	0	0	3	14	35	3	55	
West Urbana	4	17	4	9	16	14	7	22	0	93	0	0	1	0	4	0	4	4	13	
Wheaton	4	8	14	2	0	24	14	13	8	93	0	2	1	0	1	6	13	11	34	
Winnebago	1	10	6	23	8	16	7	22	0	93	1	0	1	0	0	9	12	17	40	



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MISSOURI—																				
St. Louis.....	12	11	14	13	11	14	16	2	0	93	5	2	1	1	12	9	6	1	37	
Springfield.....	6	4	1	10	30	2	3	2	22	80	5	2	1	1	12	9	6	1	37	
WISCONSIN—																				
Appleton.....	5	30	4	2	1	31	5	12	0	93	4	24	0	2	1	25	5	6	67	
Bay City.....	2	39	0	11	7	21	1	12	0	93	0	2	0	0	0	13	1	9	25	
Peloit.....	10	7	3	20	15	11	8	19	0	93	2	0	0	0	0	4	4	2	12	
Janesville.....	7	4	3	12	7	11	22	11	16	93										
Kenosha.....	2	3	17	6	12	18	16	9	6	89										
Lind.....	5	8	8	9	17	4	19	9	1	80	0	2	2	0	8	2	13	3	30	
Madison.....	0	2	4	17	15	17	13	22	1	91	0	0	0	0	0	7	11	3	21	
Manitowoc.....	13	6	9	8	18	3	11	25	0	93	2	1	0	0	2	1	12	3	21	
Menasha.....	4	1	16	5	1	14	18	11	23	93	3	0	5	0	1	9	9	4	37	
Milwaukee, [Tomeroy] ..	11	19	2	19	5	5	8	24	0	93	0	0	0	0	0	0	0	1	1	
Milwaukee, [Winkler] ..	8	8	15	9	1	12	18	22	0	93										
Mount Morris.....	2	10	9	10	12	3	10	33	4	93	0	0	2	1	0	4	8	4	19	
New London.....	7	1	7	0	9	27	28	14	0	93	10	0	0	0	3	24	21	13	71	
Platteville.....	0	1	16	18	10	8	7	33	0	93	0	1	2	2	1	30	11	13	60	
Racine.....	10	19	3	9	20	3	26	0	0	90	4	0	0	0	2	1	8	1	16	
St. Croix.....	6	0	0	1	22	4	7	5	18	63										
Waukesha.....	16	2	5	1	6	5	9	6	43	93	0	0	0	0	0	1	1	0	2	
IOWA—																				
Bellevue.....	2	5	0	28	8	12	12	26	0	93	0	1	0	1	0	5	6	3	22	
Border Plains.....	6	2	5	24	17	4	4	23	0	85	0	0	0	0	2	6	5	6	19	
Camanche.....	0	1	2	6	12	7	7	0	10	45	3	8	7	1	0	2	0	0	21	
Dubuque.....	17	2	1	9	16	16	4	11	17	93	2	2	1	2	1	12	4	12	36	
Fairfield.....	2	3	1	19	4	24	4	12	24	93	2	4	3	3	0	0	0	1	13	
Fort Madison.....	0	9	1	23	3	26	4	26	1	93	3	3	0	3	1	22	17	14	63	
Franklin.....	2	4	8	19	7	9	17	21	6	93										
Iowa City.....	4	6	6	27	3	20	8	14	5	93										
Muscatine.....	0	5	18	12	13	9	19	17	0	93	0	0	0	0	0	3	0	5	8	
Pleasant Plain.....	1	5	8	19	15	15	16	13	0	92	2	1	0	0	0	8	5	4	20	
Poultney.....	1	1	8	17	10	6	19	0	12	82	0	0	0	0	2	4	5	2	13	
Rossville.....	5	3	8	15	11	5	13	14	8	82										
Sioux City.....	15	4	1	16	19	4	12	17	0	88	4	1	0	5	5	4	7	7	33	
MINNESOTA—																				
Burlington.....	5	0	2	0	12	3	9	0	0	31										
Hazlewood.....	4	2	1	26	18	8	9	25	0	93	1	0	9	10	8	0	3	3	34	
Princeton.....	1	3	9	8	3	7	22	17	23	93	1	1	7	3	2	0	20	2	36	
Wabashaw.....	3	4	4	11	18	15	25	7	6	93	4	11	7	6	0	1	0	2	31	
NEBRASKA—																				
Bellevue.....	25	4	4	5	37	9	2	5	1	92	7	4	1	5	11	4	4	5	41	
Omaha.....	3	4	1	15	18	11	5	22	14	93	2	2	4	2	15	17	3	12	57	
KANSAS—																				
Burlingame.....	8	6	3	16	22	2	8	10	18	93										
Lawrence.....	3	11	15	21	6	13	7	17	0	93	0	0	0	0	2	0	0	0	2	
Leavenworth C'y, [McCarty] ..	5	14	9	13	39	6	0	7	0	93	3	2	2	2	2	16	8	5	40	
Manhattan.....	12	11	10	4	8	22	0	0	26	93	12	12	1	1	1	7	4	2	40	
Moneka.....	0	0	0	0	0	18	2	24	3	47	2	0	1	0	0	0	0	0	3	
Topeka.....	7	7	0	6	33	6	5	8	20	92										
CALIFORNIA—																				
Marysville.....	19	0	0	0	0	56	0	18	0	93										
Sacramento.....	16	4	4	21	13	14	2	19	0	93	0	0	0	11	3	12	17	5	48	
San Francisco.....	14	3	0	0	13	10	19	3	31	93	11	0	0	2	6	18	19	3	59	
Union Rancho.....	0	1	0	2	27	23	13	21	3	90										
MEXICO—																				
Cordova.....	17	10	7	1	3	6	9	9	0	62										
Mirador.....	0	39	27	81	15	6	0	6	0	174										
WEST INDIES—																				
Centre Sig. Station, Ber...	7	1	0	1	4	4	3	4	0	24										
Nassau, Bahamas.....	2	24	10	2	0	6	0	8	0	52										
St. George's, Bermuda.....	1	5	0	0	0	14	1	10	0	31										
SOUTH AMERICA—																				
Catharina Sophia, Surinam	6	52	19	14	1	1	0	0	0	93	0	28	31	15	1	0	0	0	75	

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	7	19	3	7	5	11	12	28	3	90	5	13	3	6	5	6	9	17	64
Red River Settlement .....	24	7	5	3	21	1	0	12	17	90	6	3	2	15	3	5	1	2	37
Rigolet .....	7	18	8	0	1	3	6	7	10	60	—	—	—	—	—	—	—	—	—
St. John's .....	6	15	3	6	11	12	17	25	10	90	—	—	—	—	—	—	—	—	—
St. Martin .....	1	28	1	15	0	22	7	16	0	90	—	—	—	—	—	—	—	—	—
Stanbridge .....	12	6	4	31	8	3	16	7	3	90	—	—	—	—	—	—	—	—	—
Toronto .....	2	25	2	10	4	8	11	31	5	90	—	—	—	—	—	—	—	—	—
Windsor .....	13	5	4	4	12	16	8	13	13	88	—	—	—	—	—	—	—	—	—
Wolfville .....	1	12	5	9	4	10	6	35	11	90	4	2	0	4	3	8	6	17	44
MAINE—																			
Cornish, [Gupfill] .....	10	11	0	7	11	6	2	43	0	90	—	—	—	—	—	—	—	—	—
Cornish, [West] .....	10	19	5	4	6	12	22	12	0	90	0	11	0	0	0	1	1	3	5
Gardiner .....	1	23	2	9	3	10	1	23	14	86	0	5	1	0	2	7	4	11	30
Monson .....	2	22	1	7	9	10	9	26	4	90	—	—	—	—	—	—	—	—	—
Perry .....	7	11	6	9	8	13	4	32	0	90	7	4	11	1	5	6	5	14	42
Portland .....	14	11	9	12	10	3	23	10	0	90	1	0	0	0	4	2	15	5	27
Stonewall .....	0	29	2	8	0	23	4	22	2	90	3	2	0	1	0	11	16	8	38
NEW HAMPSHIRE—																			
Concord .....	0	14	0	16	0	4	2	51	2	89	0	0	1	0	11	0	0	8	11
Francestown, [Bixby] .....	5	6	4	12	5	11	12	22	1	83	1	2	7	7	1	6	25	15	64
Shelburne .....	0	0	26	0	0	0	53	0	9	90	0	0	2	4	0	6	12	28	52
Stratford .....	4	8	10	7	11	12	20	14	11	86	2	1	4	5	8	5	19	13	57
West Enfield .....	0	0	0	6	24	11	4	44	1	90	2	0	11	5	15	12	4	28	66
VERMONT—																			
Brandon .....	14	1	1	4	27	2	7	26	8	90	0	0	0	0	11	10	7	27	44
Burlington .....	3	6	11	3	8	21	6	43	0	90	—	—	—	—	—	—	—	—	—
Craftsbury .....	1	10	3	3	27	11	8	24	3	90	3	1	1	1	4	10	16	20	56
Rupert .....	—	—	—	—	—	—	—	—	—	—	4	0	0	7	11	29	2	13	66
St. Johnsbury .....	12	2	6	6	16	1	19	26	1	89	1	1	0	0	7	4	14	5	32
MASSACHUSETTS—																			
Amherst .....	4	10	3	19	2	11	7	31	0	87	0	0	0	1	1	3	3	16	24
Bridgewater .....	13	12	12	3	6	9	26	9	0	90	2	0	1	1	7	12	9	5	37
Cambridge .....	11	10	9	4	3	23	10	12	12	89	—	—	—	—	—	—	—	—	—
Florida .....	3	8	0	6	1	17	2	53	0	90	2	8	0	5	1	18	3	38	75
Lawrence .....	11	18	4	11	0	9	0	48	0	90	—	—	—	—	—	—	—	—	—
Mendon .....	0	25	1	1	4	33	3	23	0	90	0	23	2	1	2	26	3	13	70
Nantucket .....	3	15	4	10	5	21	9	20	3	90	—	—	—	—	—	—	—	—	—
New Bedford .....	5	14	1	11	6	21	6	26	0	90	0	1	0	0	0	0	4	7	12
Newburyport .....	9	8	4	4	12	1	10	17	0	65	—	—	—	—	—	—	—	—	—
Richmond .....	0	12	0	10	10	18	0	50	0	90	11	10	0	10	2	14	5	28	69
Westfield .....	1	9	1	10	3	13	20	31	0	88	—	—	—	—	—	—	—	—	—
Williamstown .....	4	2	3	14	3	8	12	28	6	80	0	2	4	0	11	3	4	4	17
Worcester .....	3	8	10	4	5	19	30	5	11	84	—	—	—	—	—	—	—	—	—
RHODE ISLAND—																			
Providence .....	2	19	1	1	12	17	7	31	0	90	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia .....	5	6	4	0	6	5	11	34	24	90	2	4	1	0	4	7	5	21	44
New London .....	8	10	1	13	5	21	0	31	0	89	—	—	—	—	—	—	—	—	—
Pomfret .....	3	14	2	4	6	12	2	46	0	89	1	7	0	1	3	4	4	31	51
Saybrook .....	3	12	3	5	3	11	3	11	7	58	0	0	0	0	1	4	6	5	17
Wallingford .....	16	6	4	8	14	7	11	24	0	90	0	2	0	0	0	11	17	6	36
NEW YORK—																			
Angelica .....	0	11	1	18	4	32	17	18	0	90	0	1	1	3	11	24	7	3	39
Baldwinsville .....	6	1	5	9	10	9	19	30	0	89	1	0	2	1	1	4	37	12	58
Beverly .....	4	13	0	8	3	37	1	18	1	85	0	5	1	7	6	13	30	6	68
Buffalo .....	3	8	6	4	15	32	16	5	0	89	0	0	0	0	0	4	4	0	8
Canton .....	0	22	0	3	1	42	3	17	2	90	0	13	0	3	1	32	1	8	58
Cazenovia .....	0	1	4	11	14	9	10	40	1	90	0	1	1	8	5	7	20	25	67
Clinton .....	4	1	6	7	11	18	12	36	0	90	0	0	0	5	1	13	5	26	50
Covert .....	4	0	0	28	0	3	23	20	12	90	0	0	0	3	4	3	22	8	40
Eden .....	4	6	12	18	24	15	5	1	0	85	0	1	1	2	0	6	26	4	40
Fishkill .....	2	19	2	15	8	14	10	20	0	90	0	0	0	0	11	1	3	0	4
Flatbush .....	6	18	9	5	11	5	14	22	0	90	2	3	1	5	0	8	10	15	44



## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
New York—Continued.																			
Fort Edward.....	3	14	0	0	2	26	17	23	0	90	1	0	1	0	0	4	10	9	25
Houseville.....	9	3	4	23	6	2	16	25	2	90	1	0	0	0	0	10	17	10	38
Morrisania.....	9	20	5	12	6	9	21	8	0	90	—	—	—	—	—	—	—	—	—
New York city.....	3	27	4	9	1	11	22	13	0	90	3	0	3	7	0	19	36	2	70
Nichols.....	0	0	4	36	3	1	6	40	0	90	0	0	0	14	4	1	8	27	54
Ogdensburg.....	11	1	2	0	1	8	4	3	0	30	—	—	—	—	—	—	—	—	—
Oswego.....	6	7	9	16	7	6	33	3	3	90	—	—	—	—	—	—	—	—	—
Ovid.....	10	1	5	7	14	12	22	19	0	90	1	0	0	1	8	8	27	12	57
Rochester.....	13	4	7	8	12	9	27	10	0	90	5	2	4	3	7	9	21	9	60
Sag Harbor.....	3	12	5	4	—	7	8	12	0	57	0	0	0	1	1	4	11	1	18
Saratoga.....	0	10	0	4	0	41	2	33	0	90	0	12	0	4	0	42	2	30	90
Wampsville.....	0	1	12	3	13	2	50	9	0	90	1	0	12	3	13	2	34	6	71
Waterford.....	13	5	1	3	25	13	18	8	3	89	0	0	0	0	0	2	8	1	11
Wellsville.....	0	0	52	0	0	1	30	1	3	87	0	0	0	0	1	0	1	0	2
New Jersey—																			
Bloomfield.....	0	34	0	4	0	21	2	21	0	82	—	—	—	—	—	—	—	—	—
Lambertville.....	3	20	1	—	8	10	3	25	0	76	—	—	—	—	—	—	—	—	—
Newark.....	5	16	3	9	2	9	6	10	0	60	—	—	—	—	—	—	—	—	—
PENNSYLVANIA—																			
Bedford.....	0	0	1	20	0	20	—	35	—	78	0	18	2	24	0	—	1	15	60
Berwick.....	0	2	28	7	5	4	29	4	0	79	—	—	—	—	—	—	—	—	—
Byberry.....	3	26	5	8	6	11	12	19	0	90	0	12	2	2	1	14	34	25	90
Cannonsburg.....	0	5	22	5	0	—	44	5	—	90	0	0	0	0	0	—	1	0	1
Easton.....	8	6	10	9	8	0	25	13	10	89	0	0	1	3	1	7	14	8	34
Fleming.....	3	1	7	17	1	18	17	26	0	90	0	0	1	6	2	8	20	26	63
Gettysburg.....	4	22	3	0	7	20	9	21	4	90	0	4	4	2	7	17	14	19	67
Harrisburg, [Heisely].....	4	4	18	9	2	5	24	21	0	90	2	4	1	2	1	3	10	14	37
Harrisburg, [Hickok].....	10	12	15	3	12	7	18	13	0	90	0	0	5	0	2	2	6	4	19
Indiana.....	6	7	20	14	10	9	14	10	0	90	1	0	0	2	1	1	4	3	12
Lewisburg.....	9	8	2	13	8	3	13	16	18	90	0	0	1	3	1	6	9	17	37
Meadville.....	1	0	1	11	20	—	13	13	25	90	0	0	0	11	5	12	12	11	51
Morrisville.....	1	17	6	11	6	28	10	11	0	90	0	17	2	4	2	10	24	16	75
Mount Joy.....	1	1	0	24	1	0	1	12	50	90	0	0	0	1	0	1	0	0	2
Murrysville.....	0	7	10	18	3	24	10	6	10	88	0	0	0	0	2	17	11	14	44
Norristown.....	0	10	19	6	—	6	28	9	0	78	0	11	16	4	0	7	19	4	61
North Whitehall.....	1	3	10	0	3	4	18	15	36	90	0	0	2	—	0	3	16	4	25
Philadelphia.....	0	29	4	12	1	13	11	20	0	90	0	—	1	0	2	1	9	3	18
Pittsburg, [Martin].....	2	0	18	7	6	8	18	7	24	90	0	0	1	2	1	9	17	5	35
Pocopson.....	8	13	15	4	9	10	16	9	0	84	1	0	0	0	1	5	12	6	25
Reading.....	3	2	10	4	1	6	16	7	11	69	3	0	8	1	2	5	14	7	40
Shamokin.....	0	1	6	7	15	12	49	0	0	90	0	0	0	0	0	3	55	7	65
Somerset.....	2	1	1	9	15	7	20	8	27	90	0	0	1	7	7	11	34	9	69
Tarentum.....	1	10	2	4	3	15	11	14	30	90	0	0	0	3	0	18	36	6	63
West Haverford.....	2	11	7	3	4	7	9	14	3	60	2	2	2	1	0	3	17	16	43
Westtown.....	7	8	11	13	4	8	6	27	0	84	0	1	0	3	0	2	3	23	32
DELAWARE—																			
Milford.....	0	7	10	3	1	21	7	2	0	51	10	1	7	0	5	4	19	1	47
MARYLAND—																			
Annapolis.....	7	21	4	8	14	10	7	11	8	90	3	1	0	0	0	24	2	3	33
Baltimore.....	9	11	7	6	8	6	13	11	0	71	—	—	—	—	—	—	—	—	—
Bladensburg.....	2	16	4	6	1	10	5	16	0	60	—	—	—	—	—	—	—	—	—
Chestertown.....	8	9	23	4	5	8	16	5	0	78	—	—	—	—	—	—	—	—	—
Frederick.....	4	19	0	5	3	14	10	16	18	89	1	1	0	0	5	2	28	5	42
Sykesville.....	10	15	8	16	22	5	10	4	0	90	3	5	10	8	1	9	44	1	81
DISTRICT OF COLUMBIA—																			
Washington.....	6	12	12	8	14	7	6	12	13	90	0	0	0	0	0	2	7	0	9
VIRGINIA—																			
Alexandria.....	9	17	8	13	13	8	4	18	0	90	—	—	—	—	—	—	—	—	—
Crichton's Store.....	18	11	8	2	15	24	8	3	1	99	0	0	0	0	0	3	7	0	10
Kanawha.....	22	0	1	1	39	2	1	3	10	79	0	0	0	0	4	8	16	8	36
Montross.....	1	4	14	4	2	12	15	6	32	90	2	1	0	3	3	6	13	2	30
Mossy Creek.....	3	21	0	11	8	24	0	20	3	90	3	14	0	5	0	20	0	12	54
Poplar Grove.....	0	0	8	0	0	10	17	25	30	90	2	1	0	1	2	26	13	17	62

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
<b>VIRGINIA—Continued</b>																				
Portsmouth	6	28	9	2	2	21	14	8	0	90										
Rose Hill	3	15	8	5	4	10	7	5	5	62	0	0	0	0	0	0	2	0	2	
Rougemont	12	9	16	1	17	2	24	3	5	89	5	3	3	1	8	0	21	3	44	
Smithfield	10	25	4	6	9	8	5	8	11	75	2	6	1	0	3	4	15	13	44	
Winchester	1	0	1	2	6	3	7	9	61	90	0	0	1	0	0	0	1	0	2	
Wirt Court-House	0	5	0	1	0	26	1	32	21	86	0	2	0	0	0	39	5	26	72	
<b>NORTH CAROLINA—</b>																				
Chapel Hill	12	24	4	5	4	16	21	4	0	90	3	10	2	1	3	22	15	1	57	
Davidson College	0	23	0	2	1	47	5	3	6	87	0	12	0	1	0	36	2	0	51	
Mar. bench	6	3	2	3	33	15	6	6	16	90	7	1	3	3	4	12	19	4	53	
Murfreesborough	1	18	9	10	1	24	7	6	11	87	0	12	1	2	0	11	31	4	61	
<b>SOUTH CAROLINA—</b>																				
All Saints	6	11	3	7	13	48	1	6	0	90	5	4	1	1	11	39	9	4	66	
Charleston, [Dawson]	1	10	1	5	2	30	3	8	0	60										
Charleston, [Johnson]	4	1	0	1	3	14	2	3	0	28										
Columbia	4	6	1	0	11	7	15	15	0	59	4	5	1	1	10	5	8	8	42	
St. John's	0	15	0	12	3	23	0	18	0	71	2	5	11	2	0	5	10	11	33	
<b>GEORGIA—</b>																				
Athens	7	6	11	8	12	6	4	17	18	87	11	11	1	0	11	11	0	0	1	
Hillsborough	7	4	4	5	9	22	23	13	3	90	11	11	2	0	11	0	11	0	2	
Savannah	4	4	1	15	13	33	3	16	11	89	0	11	0	0	0	2	4	1	7	
Sparta	11	6	6	7	7	36	12	8	0	88	4	11	1	0	2	15	19	5	52	
Whitemarsh Island	7	5	0	4	23	20	8	14	9	90	4	4	0	0	2	9	10	8	37	
Zebulon	1	1	7	7	4	12	27	15	11	74	8	1	0	0	7	6	11	4	37	
<b>FLORIDA—</b>																				
Alachua county	3	4	1	14																



## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Bowling Green	1	14	0	4	2	21	18	4	26	90	0	9	0	4	0	19	18	13	63
Cincinnati, [Harper]	12	1	15	0	2	19	32	8	0	89									
Cincinnati, [Hurt]	2	4	0	3	2	33	31	8	7	90	2	1	0	4	1	29	16	6	59
Cleveland	3	11	2	17	10	4	11	8	1	67	0	1	0	2	1	5	11	3	23
Edinburg	1	17	5	36	0	23	0	3	5	90	0	6	0	3	0	12	38	18	77
Hillsborough	1	15	0	16	2	40	0	16	0	90	0	1	0	1	0	9	3	7	21
Hiram	4	7	9	7	6	24	9	15	3	84	1	0	3	0	2	6	8	5	25
Jackson, (Jackson county)	6	0	9	0	15	0	50	0	10	90	2	0	3	0	7	1	51	0	64
Jackson, (Monroe county)	18	7	8	1	22	1	0	0	26	83	0	0	0	0	1	9	8	1	19
Jefferson	0	6	0	18	1	37	0	28	0	90	0	5	0	17	1	33	0	28	84
Lancaster	7	11	10	6	14	21	16	4	1	90	1	0	0	1	4	18	35	5	64
Madison, [Atkins]	6	9	1	4	16	2	16	4	20	78	0	0	0	1	0	0	7	2	10
Madison, [King]	4	15	5	9	8	14	10	17	8	90	0	2	2	7	4	25	15	14	69
Medina	12	9	10	5	7	20	13	14	0	90	6	19	25	13	8	8	6	5	90
Mount Union	2	9	3	6	0	28	5	13	14	80	0	18	13	8	0	0	1	2	42
New Lisbon	7	3	9	16	9	13	11	21	1	90	2	2	7	11	6	12	14	16	70
Northwood	2	7	8	8	1	23	18	18	5	90	3	6	4	4	3	16	24	21	81
Ripley	1	0	1	13	3	5	2	10	17	52	0	0	0	0	1	2	1	7	11
Savannah	3	0	0	32	0	18	18	19	0	90	0	0	0	19	0	22	14	26	81
Urbana	1	6	8	20	3	11	11	10	20	90	1	4	2	3	3	15	26	16	70
Welchfield	8	2	10	23	5	19	14	9	0	90	0	0	0	0	0	2	1	0	3
Westerville	12	2	2	0	13	34	18	9	0	90	2	4	1	0	5	29	25	13	79
MICHIGAN—																			
Battle Creek	6	3	12	7	13	7	22	2	18	90	3	1	5	0	3	11	34	11	68
Cooper	1	0	12	0	0	0	53	1	23	90	1	1	21	7	0	4	5	0	39
Detroit	1	31	7	5	0	35	10	1	0	90	1	22	9	9	3	33	9	3	89
Grand Rapids, [Streng]	13	8	25	1	11	15	9	8	0	90	5	4	9	4	0	12	32	16	82
Marquette	2	16	7	15	4	11	7	28	0	90									
Monroe	10	4	12	18	0	14	1	13	0	72	5	4	7	19	0	13	4	11	63
New Buffalo											0	5	8	7	1	12	29	11	73
Port Huron	17	11	0	10	11	9	12	15	5	90	3	5	0	1	2	11	15	13	50
INDIANA—																			
Cannelton	4	4	8	20	12	13	11	18	0	90	1	0	0	1	10	10	8	12	42
Evansville	6	19	7	10	17	15	3	13	0	90	0	1	0	3	1	39	8	5	57
Logansport	1	1	5	15	6	25	17	20	0	90	0	1	1	8	3	25	29	14	81
Madison	1	3	7	16	9	7	26	21	0	90	1	2	8	14	7	6	12	9	59
Michigan City	13	11	5	17	24	7	3	10	0	90	7	2	2	5	12	6	4	13	51
New Harmony	8	3	3	15	24	11	10	8	0	82									
Richmond, [Austin]	1	10	5	1	7	13	7	4	2	50	0	4	1	0	4	5	11	5	30
Richmond, [Moore]	0	5	13	6	4	23	9	6	23	89									
ILLINOIS—																			
Athens	1	12	2	20	10	22	4	17	0	88	0	0	0	2	0	15	15	27	59
Augusta	2	6	8	10	6	22	9	25	2	90	0	4	3	4	3	7	11	19	51
Aurora	3	15	9	11	9	11	22	10	0	90	1	4	3	4	4	12	31	9	68
Batavia, [Mead]	0	28	2	7	1	32	4	16	0	90	0	17	1	5	0	28	8	24	83
Brighton	0	3	2	13	6	30	7	29	0	90	2	6	1	2	2	29	5	20	67
Edgington	3	30	1	9	12	3	1	31	0	90	4	26	1	6	13	10	2	26	88
Elgin	7	18	10	6	10	9	11	13	6	90	0	0	0	0	0	0	2	1	3
Evanston	5	8	9	8	4	21	0	8	0	63									
Jacksonville	2	1	1	3	3	9	2	9	0	30									
Manchester	6	13	5	4	11	12	22	16	1	90	3	7	2	4	11	15	15	14	71
Marengo	0	14	8	20	8	35	3	1	1	90									
Ottawa	4	12	10	9	8	12	9	18	3	85	2	2	0	1	1	4	8	12	30
Pekin	13	5	7	13	23	4	6	19	0	90	8	1	4	7	8	5	12	20	65
Peoria	12	11	8	1	11	10	30	7	0	90	1	0	0	0	2	2	0	2	16
Riley	4	11	12	2	10	7	17	14	9	86									
South Pass	2	9	5	1	26	13	10	4	19	89	6	1	0	3	5	4	2	5	26
Waynesville	8	1	17	3	15	10	18	9	8	89	3	2	5	1	10	5	21	7	54
West Salem	5	9	7	9	26	6	8	8	12	90	2	0	0	0	4	19	30	12	67
West Urbana	1	22	7	8	18	17	10	7	0	90	0	0	0	1	0	6	2	3	12
Wheaton	4	20	9	8	10	11	16	10	2	90	2	2	0	0	0	7	13	6	30
Winnebago	2	21	8	9	7	17	11	15	0	90	1	0	0	2	1	3	12	22	41

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MISSOURI—																				
St. Louis.....	5	12	5	19	12	11	18	4	0	90										
Springfield.....	4	5	1	12	13	11	6	5	14	71	2	2	0	0	8	11	14	4	41	
WISCONSIN—																				
Appleton.....	5	34	2	7	1	31	0	10	0	90	4	28	1	8	2	20	0	10	73	
Bay City.....	2	52	0	1	6	13	10	6	0	90	5	8	0	0	0	6	1	8	28	
Beloit.....	3	26	2	7	15	19	7	11	0	90	0	1	0	0	0	1	1	0	3	
Green Bay.....	25	4	11	6	8	8	13	6	9	90	22	3	6	5	5	7	10	7	65	
Janesville.....	1	21	7	10	0	14	14	10	4	90										
Kenosha.....	2	10	22	11	16	8	13	6	2	90										
Madison, [Sterling].....	0	24	3	7	9	13	14	12	0	82	0	0	0	0	0	3	2	0	5	
Manitowoc.....	16	0	9	7	15	6	7	21	0	90	1	0	0	2	2	0	6	9	20	
Milwaukee, [Pomeroy].....	2	28	8	15	2	11	1	23	0	90										
Milwaukee, [Winkler].....	5	24	12	17	0	6	16	10	0	90										
Mount Morris.....	6	16	13	8	6	6	15	19	1	90	0	0	3	1	1	4	18	4	31	
New London.....	23	15	9	3	3	7	24	6	0	90	22	14	0	0	0	11	19	15	81	
Platteville.....	6	11	21	14	3	9	9	17	0	90	5	5	9	3	0	24	16	12	74	
Racine.....	19	7	7	5	25	5	0	10	0	87	4	0	2	0	2	2	3	1	14	
Waukesha.....	10	11	6	1	12	4	14	8	23	89	5	2	4	0	0	5	11	7	34	
IOWA—																				
Bellevue.....	11	0	10	9	4	13	20	14	0	90	2	2	1	3	1	4	7	9	29	
Border Plains.....	18	7	9	17	6	1	2	26	3	89	0	0	0	0	0	1	2	6	9	
Camanche.....	0	10	19	8	10	9	14	3	15	88	5	9	9	6	0	5	5	1	38	
Dubuque.....	10	11	7	17	8	11	2	14	9	89	0	3	4	4	1	3	30	54		
Fairfield.....	3	7	3	16	1	15	4	20	21	90	1	6	4	3	0	0	0	0	14	
Fort Madison.....	4	11	1	17	3	23	1	30	0	90	6	4	4	6	4	28	9	15	76	
Franklin.....	12	17	5	0	7	8	9	20	6	90										
Iowa City.....	7	2	4	29	2	9	11	20	0	90	1	7	5	10	2	1	5	5	36	
Muscatine.....	10	7	16	9	2	12	23	11	0	90	0	4	0	3	0	8	1	8	24	
Pleasant Plain.....	3	7	10	20	1	15	13	19	1	89	0	0	0	2	3	8	11	14	38	
Poultney.....	3	14	16	5	4	6	17	10	10	85	1	4	2	0	0	2	9	7	25	
Rossville.....	9	5	16	8	9	6	12	16	0	90										
Sioux City.....	8	3	4	19	0	1	8	25	0	77	6	2	0	2	1	1	7	8	29	
MINNESOTA—																				
Burlington.....	1	2	11	2	7	2	1	3	0	29										
Hazlewood.....	7	11	4	6	19	5	2	36	0	90	3	7	10	1	8	0	3	9	41	
Princeton.....											13	3	2	0	2	0	39	1	60	
NEBRASKA—																				
Bellevue.....	40	8	6	8	18	1	5	0	3	89	17	9	0	3	11	0	5	5	50	
Elkham.....	18	9	15	16	6	4	5	17	0	90	1	0	0	0	0	0	0	0	1	
Omaha.....	12	8	3	14	8	5	2	23	15	90	13	6	2	7	5	9	10	17	49	
KANSAS—																				
Burlingame.....	8	10	3	13	18	9	2	16	11	90										
Cayuga.....	14	9	8	4	11	11	10	11	5	83										
Lawrence.....	10	17	9	9	22	9	6	8	0	90										
Leaven' th City, [Berthoud].....	0	18	10	12	0	29	1	17	3	90	0	20	5	18	0	27	0	11	81	
Leaven' th City, [McCarty].....	11	13	8	6	16	16	2	12	1	85	8	4	0	1	2	11	9	10	45	
Manhattan.....	5	14	11	8	4	17	3	17	11	90	5	5	5	4	5	14	5	13	56	
Moneka.....	0	0	0	0	0	3	7	16	0	26	1	0	6	0	0	0	0	0	7	
Topeka.....	5	12	5	10	19	8	4	17	10	90										
MEXICO—																				
Cordova.....	10	8	4	3	7	12	10	2	4	60										
Minatitlan.....	5	7	0	0	2	5	0	0	7	26										
CALIFORNIA—																				
Marysville.....	3	0	0	13	11	39	0	24	0	90										
Sacramento.....	13	7	4	12	9	16	7	22	0	90	0	1	0	5	2	5	9	7	29	
San Francisco.....	4	2	0	1	2	6	36	12	27	90	2	1	0	0	1	8	16	8	36	
WEST INDIES—																				
Centre Signal Station, Ber.....	1	1	0	0	5	4	0	0	0	11										
Nassau, Bahamas.....	2	8	8	18	0	8	8	0	0	52										
St. George's, Bermuda.....	1	2	0	5	2	12	2	6	0	30										
SOUTH AMERICA—																				
Catharina Sophia, Surinam.....	2	52	20	12	2	2	0	0	0	90	0	35	37	13	0	0	0	0	85	



No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	8	16	3	7	13	7	9	12	18	93	4	13	2	7	12	8	7	11	64	
Red River Settlement .....	21	2	3	0	27	4	3	7	18	85	3	9	0	0	13	5	1	1	44	
Rigolet .....	8	21	16	0	0	1	1	5	10	62										
St. John's .....	0	64	0	10	0	9	5	5	0	93										
St. Martin .....	0	22	5	27	4	0	6	20	0	93										
Stanbridge .....	10	11	8	33	9	2	9	5	6	93										
Toronto .....	2	36	5	6	5	9	2	21	7	93										
Windsor .....	8	12	3	5	4	3	6	12	23	76										
Wolfville .....	4	20	1	12	2	2	1	25	26	93	5	0	5	5	6	1	20		48	
MAINE—																				
Cornish, [Guptill] .....	12	5	3	18	13	7	7	28	0	93										
Cornish, [West] .....	10	15	10	11	13	11	7	16	0	93	2	0	0	0	0	0	4	2	8	
Dexter .....	1	6	5	12	9	8	11	38	3	93										
Gardiner .....	12	10	0	21	8	12	2	13	11	89	5	7	0	2	4	4	3	9	34	
Perry .....	5	13	1	17	11	19	0	25	0	91	3	8	1	8	4	4	9	14	51	
Portland .....	9	13	18	7	17	11	8	8	0	91	7	1	1	1	1	4	11	4	30	
Steuben .....	2	18	0	10	0	35	2	21	5	93	4	9	0	0	0	11	9	5	38	
NEW HAMPSHIRE—																				
Concord .....	0	25	0	18	0	6	0	23	9	81	0	0	0	0	0	0	0	1	1	
Francetown, [Bixby] .....	7	7	14	16	9	5	15	20	0	93	4	3	18	12	1	4	19	9	70	
Shelburne .....	0	0	27	0	0	0	56	0	10	93	1	1	4	11	0	5	14	19	55	
Stratford .....	3	18	13	7	11	10	13	18	0	93	8	1	2	3	16	10	17	8	65	
West Enfield .....	0	6	0	8	37	5	2	35	0	93	1	6	0	6	22	8	2	20	65	
VERMONT—																				
Brandon .....	17	0	3	8	32	4	3	20	6	93	10	0	1	2	0	12	4	14	43	
Burlington .....	8	12	1	12	16	29	1	14	0	93										
Craftsbury .....	1	21	1	8	32	5	9	13	3	93	5	5	2	0	8	7	14	18	59	
Rupert .....											2	1	0	5	6	54	2	11	81	
St. Johnsbury .....	11	4	1	6	37	1	10	22	1	93	4	1	0	1	8	0	11	5	30	
MASSACHUSETTS—																				
Amherst .....	7	14	6	23	6	5	4	27	0	92	0	10	1	6	1	2	12	14	46	
Bridgewater .....	8	12	29	8	7	8	17	4	0	93	5	2	3	5	5	3	12	1	36	
Cambridge .....	6	21	21	6	5	13	1	11	9	93										
Florida .....	0	11	3	31	3	4	28	13	0	93	0	15	3	22	3	6	25	3	77	
Lawrence .....	4	25	6	20	1	6	1	30	0	93										
Mendon .....	0	60	1	0	4	16	4	8	0	93	2	42	1	1	4	19	3	7	79	
Nantucket .....	4	34	8	10	6	16	3	8	4	93										
New Bedford .....	3	31	4	13	8	19	3	12	0	93	1	4	0	0	0	2	4	13	24	
Newburyport .....	5	6	10	10	4	1	4	11	0	51										
Richmond .....	0	11	0	16	0	31	1	34	0	93	0	11	0	16	0	27	4	24	82	
Westfield .....	10	22	7	13	8	5	12	16	0	93										
Williamstown .....	5	2	3	31	6	4	6	14	5	76	0	0	0	1	1	0	0	0	2	
Worcester .....	11	7	14	12	3	14	16	6	0	83										
RHODE ISLAND—																				
Providence .....	4	34	3	5	12	11	2	22	0	93										
CONNECTICUT—																				
Columbia .....	3	34	0	2	0	14	2	17	21	93	1	25	0	0	0	15	1	16	58	
New London .....	4	19	20	12	3	24	6	5	0	93										
Pomfret .....	4	31	3	6	10	13	0	25	0	92	1	18	1	4	6	9	1	13	53	
Saybrook .....	3	15	18	14	7	13	4	9	9	92	4	5	7	4	3	5	9	5	42	
Wallingford .....	13	18	1	15	7	15	6	18	0	93	2	8	2	3	1	3	18	7	44	
NEW YORK—																				
Baldwinsville .....	5	1	14	19	8	9	11	25	0	92	3	1	2	6	3	16	22	15	68	
Bellport .....	5	11	14	24	7	10	13	9	0	93										
Beverly .....	9	13	0	10	3	32	0	20	0	87	3	8	3	11	3	18	14	15	75	
Buffalo .....	12	13	5	12	10	28	9	3	0	92	0	0	0	2	0	3	2	0	7	
Canton .....	8	24	1	5	2	32	2	17	1	92	1	17	1	2	0	27	1	14	63	
Cazenovia .....	5	0	6	14	20	5	5	38	0	93	6	0	2	12	10	8	16	23	77	
Clinton .....	12	2	10	15	10	13	7	24	0	93	9	1	3	9	8	8	10	22	69	
Covert .....	13	3	4	35	2	1	5	18	12	93	6	0	0	13	8	2	12	15	55	
Eden .....	3	6	30	18	17	4	3	0	0	81	0	5	8	0	1	1	12	0	27	
Fishkill Landing .....	2	36	1	26	8	8	2	10	0	93										





## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
VIRGINIA—Continued.																			
Rougemont .....	7	19	8	1	15	8	17	8	7	90	4	6	3	0	8	4	24	2	51
Smithfield .....	10	24	4	13	16	15	5	6	0	93	7	13	1	2	0	7	17	12	59
Winchester .....	0	1	1	4	1	3	15	4	64	93	0	0	0	1	0	0	3	1	5
Wirt Court-House .....	0	3	0	11	1	39	0	32	9	93	0	8	0	2	0	39	3	28	80
NORTH CAROLINA—																			
Chapel Hill .....	9	24	6	2	13	16	20	3	0	93	3	11	1	0	1	23	9	1	49
Davidson College .....	0	24	0	1	0	51	5	3	5	89	0	13	0	0	1	40	1	2	57
Marlborough .....	8	3	2	1	25	9	3	13	14	78	1	4	0	3	1	10	8	9	36
Murfreesborough .....	3	19	3	14	7	24	9	5	5	89	6	12	4	7	1	2	33	1	66
SOUTH CAROLINA—																			
All Saints .....	4	9	5	6	23	27	11	4	0	93	5	9	2	2	1	21	31	6	72
Charleston, [Dawson] .....	0	2	3	14	4	22	4	5	0	61	—	—	—	—	—	—	—	—	—
Charleston, [Johns. n.] .....	1	6	1	1	4	11	3	4	0	31	—	—	—	—	—	—	—	—	—
Columbia .....	3	5	5	1	11	17	15	5	0	62	2	0	3	2	8	7	13	2	37
St. John's .....	0	8	0	16	1	30	0	20	0	75	5	1	2	0	1	7	8	15	39
GEORGIA—																			
Athens .....	0	9	3	17	15	7	4	18	6	79	—	—	—	—	—	—	—	—	—
Hillsborough .....	2	6	1	16	6	20	24	12	0	87	0	1	2	0	0	0	0	0	3
Savannah .....	2	11	4	16	17	23	6	14	0	93	1	0	0	0	0	1	1	1	4
Sparta .....	1	9	2	14	10	31	11	15	0	93	0	3	1	4	2	16	13	10	49
Whitemarsh Island .....	0	13	5	7	29	8	11	13	7	93	1	3	0	2	3	7	11	10	37
Zebulon .....	0	0	4	12	2	13	37	8	0	76	5	0	2	3	5	4	6	4	29
FLORIDA—																			
Alachua County .....	1	20	3	26	1	22	2	17	0	92	—	—	—	—	—	—	—	—	—
Alligator .....	1	2	4	16	4	11	15	4	36	93	1	3	3	5	3	9	11	2	37
Atsena .....	5	13	8	10	5	9	36	3	4	93	0	10	2	5	5	7	15	3	47
Belair .....	0	2	2	7	7	1	11	2	24	56	0	0	0	1	5	7	5	2	20
Jacksonville .....	0	25	0	11	3	38	5	10	1	93	0	4	1	2	0	37	10	5	59
St. Augustine .....	0	37	4	22	0	3	4	23	0	93	0	22	2	15	0	4	4	17	64
Salt Ponds .....	5	9	12	15	4	2	3	10	2	62	—	—	—	—	—	—	—	—	—
ALABAMA—																			
Carlowville .....	2	2	12	9	8	6	37	2	0	78	0	0	0	0	5	1	0	2	8
Greene Springs .....	3	3	7	40	2	11	12	2	12	92	0	1	2	4	2	19	15	8	51
Greensborough .....	16	1	2	12	24	13	8	17	0	93	0	0	0	1	9	14	25	8	57
Selma .....	18	4	0	20	18	15	3	15	0	93	4	7	0	0	4	20	22	18	84
MISSISSIPPI—																			
Columbus .....	3	4	3	13	29	5	21	14	0	92	0	0	0	0	2	18	27	6	53
Natchez .....	11	4	2	8	15	40	4	9	0	93	—	—	—	—	—	—	—	—	—
Paulding .....	3	11	3	16	7	30	7	15	0	92	0	3	0	8	7	33	11	13	75
LOUISIANA—																			
Black River .....	13	0	4	10	44	7	4	1	1	93	3	0	0	2	19	15	7	10	56
New Orleans .....	0	5	0	29	0	49	0	10	0	93	—	—	—	—	—	—	—	—	—
TEXAS—																			
Austin, [Palm] .....	8	8	7	12	20	26	11	1	0	93	1	0	0	0	1	1	2	3	8
Austin, [Van Nostrand] .....	16	0	3	0	67	0	5	2	0	93	5	0	1	0	37	0	2	0	45
Goliad County .....	10	6	4	68	3	0	0	1	0	92	7	1	4	16	10	6	9	19	72
Larissa .....	3	9	22	17	22	5	6	3	1	88	0	1	0	1	17	6	7	2	34
New Braunfels .....	20	1	21	20	17	0	4	4	3	90	1	0	3	0	0	1	0	0	5
Union Hill .....	15	1	5	7	59	1	0	0	5	93	4	0	6	0	58	0	0	0	68
Washington .....	62	0	0	3	13	0	3	0	8	89	22	4	0	1	0	0	2	2	31
TENNESSEE—																			
Glenwood .....	3	12	6	12	22	15	7	7	9	93	1	2	1	2	5	32	39	9	91
Memphis .....	4	2	7	10	28	17	7	16	2	93	—	—	—	—	—	—	—	—	—
KENTUCKY—																			
Bardstown .....	8	17	6	3	6	39	8	4	0	91	4	8	3	2	6	27	13	12	75
Louisville .....	5	23	3	14	0	34	9	4	0	93	0	7	0	1	0	29	14	8	59
Millersburg .....	1	9	8	1	6	5	21	12	30	93	0	2	1	4	2	37	4	56	56
Nolin .....	13	1	0	5	29	17	23	4	0	93	4	6	22	10	6	1	1	1	51
Paris .....	2	10	2	11	5	32	11	19	0	92	1	0	4	1	10	4	37	0	57
Springdale .....	7	9	8	1	9	31	7	2	19	93	—	—	—	—	—	—	—	—	—
OHIO—																			
Bellefontaine .....	3	19	7	7	5	23	12	13	0	89	1	22	2	7	1	34	6	12	85

## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
Ohio—Continued.																				
Bowling Green	2	16	0	11	1	21	9	12	16	88	2	2	0	2	3	34	14	10	67	
Cincinnati, [Harper]	12	4	13	1	1	19	33	10	0	93	0	0	0	0	0	0	1	0	1	
Cincinnati, [Hurt]	0	12	8	12	5	25	19	6	0	93	0	6	4	6	1	20	0	0	52	
Dayton	2	18	1	11	4	24	3	25	0	88	0	11	1	11	3	29	2	18	75	
Edinburg	2	41	0	18	2	20	0	7	2	92	0	6	1	8	0	27	24	17	83	
Hillsborough	0	15	0	22	1	28	1	20	0	93	0	0	0	2	1	14	0	0	28	
Hiram	8	7	4	16	17	10	10	15	0	87	0	0	0	0	11	0	15	8	37	
Jackson, (Jackson county)	6	1	12	0	11	0	50	1	8	92	5	0	4	1	8	4	45	2	69	
Jackson, (Monroe county)	11	3	3	11	6	0	0	2	43	79	0	1	0	0	3	0	0	1	5	
Jefferson	1	35	0	27	0	2	0	28	0	93	1	37	0	26	0	2	0	27	93	
Lancaster	0	14	7	11	14	11	20	7	0	93	3	4	1	0	8	10	32	8	66	
Madison, [Atkins]	4	13	0	6	14	0	13	8	19	83	0	1	0	0	0	2	5	0	10	
Madison, [King]	3	19	2	14	8	9	9	19	10	93	1	10	0	0	5	30	22	11	85	
Medina	8	15	5	13	8	18	7	17	0	91	9	19	11	21	4	14	4	11	93	
Mount Union	3	17	2	12	1	22	4	12	16	89	1	13	13	6	3	0	0	10	46	
New Lisbon	0	2	0	23	9	19	2	28	0	92	7	1	3	20	6	19	3	24	83	
Northwood	2	15	0	7	3	18	19	16	4	90	2	12	0	7	5	25	12	18	81	
Ripley	1	0	1	25	5	1	4	13	20	70	0	0	0	0	1	0	3	8	12	
Savannah	6	1	1	16	6	30	12	21	0	93	2	1	1	11	4	33	14	21	87	
Urbana	0	11	0	22	3	0	17	8	14	93	4	6	4	4	7	16	25	11	77	
Welchfield	1	9	4	26	6	19	0	19	0	93	0	0	0	0	0	1	1	2	4	
Westerville	17	6	4	6	4	25	22	0	0	93	7	4	3	6	1	30	21	13	85	
Michigan—																				
Battle Creek	0	8	17	10	12	10	11	15	6	93	3	3	0	0	3	18	39	13	79	
Cooper	0	0	18	0	0	0	56	3	16	93	2	0	25	28	2	9	6	1	73	
Detroit	1	11	29	20	5	15	8	4	0	93	2	18	17	26	10	12	4	3	92	
Grand Rapids, [Streng]	9	15	21	16	1	10	7	14	0	93	7	2	13	3	3	0	38	11	86	
Monroe	3	11	0	11	0	29	0	39	0	93	0	11	0	10	0	28	0	39	88	
New Buffalo	2	2	4	3	17	33	11	75	2	2	2	4	3	3	17	33	11	75	75	
Port Huron	17	6	5	9	7	9	7	19	3	82	3	2	3	5	5	7	8	12	45	
Marquette	2	13	6	20	1	3	7	40	1	93	2	13	6	20	1	3	7	40	93	
Indiana—																				
Cannelton	4	1	0	18	14	8	9	29	0	92	2	0	0	0	10	12	14	11	52	
Evansville	8	8	5	10	28	16	11	7	0	93	3	1	0	2	7	25	22	6	66	
Lafayette	0	4	7	8	5	24	31	14	0	93	0	2	7	5	1	22	29	20	86	
Madison	1	11	7	13	5	24	12	20	0	93	1	0	6	10	5	18	11	8	67	
Michigan City	27	9	10	14	20	4	5	2	1	92	11	1	5	0	12	6	4	3	48	
New Harmony	0	3	6	12	11	18	16	9	0	84	0	3	6	12	11	18	16	9	84	
Richmond, [Austin]	2	10	1	1	1	11	3	14	4	47	1	5	1	1	2	11	6	8	35	
Richmond, [Moore]	2	14	6	5	11	7	18	7	23	93	2	14	6	5	11	7	18	7	23	
Illinois—																				
Athens	1	18	0	35	3	6	2	23	0	88	0	1	0	0	0	8	13	23	45	
Augusta	7	11	8	18	6	20	10	7	0	93	0	7	6	7	4	16	15	6	67	
Aurora	11	9	5	12	15	15	8	18	0	93	5	3	4	3	0	19	30	0	73	
Batavia, [Mead]	1	26	1	10	0	28	3	24	0	93	0	20	0	0	1	30	3	27	87	
Brighton	0	16	2	16	2	22	6	29	0	93	0	19	2	9	2	17	2	14	65	
Edgington	2	22	0	18	4	10	2	35	0	93	2	23	0	18	4	9	8	32	91	
Elgin	12	13	6	15	10	11	7	15	3	92	0	0	0	0	0	1	1	4	6	
Jacksonville	5	2	3	3	0	5	0	6	0	24	0	0	0	0	0	0	0	0	24	
Manchester	5	11	0	2	13	14	29	13	0	93	3	10	6	2	11	13	22	15	82	
Marengo	0	14	11	23	6	32	5	2	0	93	0	14	11	23	6	32	5	2	93	
Ottawa	3	15	5	14	4	17	6	21	1	86	2	1	2	0	2	9	2	10	28	
Pekin	11	11	15	5	21	6	3	19	1	92	0	2	8	2	8	13	17	23	82	
Peoria	12	12	18	5	19	10	15	2	0	93	0	0	1	0	0	2	6	1	10	
Riley	12	18	1	14	7	10	7	12	12	93	12	18	1	14	7	10	7	12	93	
South Pass	11	10	3	1	12	11	5	3	37	93	2	3	0	1	4	1	1	0	12	
Warsaw	3	20	2	25	3	15	6	19	0	93	7	2	0	1	0	10	13	12	45	
Waynesville	13	3	24	0	11	1	26	1	14	93	7	3	8	0	11	2	29	1	61	
West Salem	8	11	6	12	13	11	5	8	19	93	0	0	0	0	4	24	29	6	63	
West Urbana	4	24	2	17	5	18	4	16	0	90	1	0	0	0	0	6	5	4	16	
Wheaton	11	10	6	11	16	16	7	14	1	92	0	0	0	0	1	2	11	5	19	
Winnebago	10	20	3	14	9	16	4	17	0	93	0	2	0	0	0	10	14	12	38	



## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MISSOURI—																				
St. Louis.....	13	9	6	16	13	16	16	4	0	93										
WISCONSIN—																				
Appleton.....	3	47	4	5	2	23	3	6	0	93	3	38	2	4	2	25	3	9	86	
Bay City.....	0	47	2	3	11	19	4	7	0	93	0	6	0	1	1	14	2	3	27	
Beloit.....	29	13	2	9	12	11	8	8	0	92	1	0	0	0	1	0	2	1	5	
Green Bay.....	28	10	9	1	17	1	2	8	17	93	21	5	5	0	11	0	0	5	47	
Janesville.....	11	17	9	9	14	4	12	13	4	93										
Kenosha.....	2	18	23	19	28	3	5	2	0	91										
Madison.....	6	14	8	9	9	3	5	29	1	84	0	0	0	0	0	1	1	1	3	
Manitowoc.....	20	13	4	14	13	9	4	16	0	93	2	3	3	5	3	0	9	2	27	
Milwaukee, [Pomeroy].....	13	32	3	17	3	6	3	16	0	93										
Milwaukee, [Winkler].....	2	39	11	20	0	2	6	13	0	93										
New London.....	14	6	5	9	4	20	24	11	0	93	15	15	5	0	0	10	12	26	83	
Platteville.....	12	22	8	16	6	3	3	25	0	93	11	19	5	0	4	11	6	31	87	
Waukesha.....	8	23	11	0	9	1	0	7	25	93	5	2	2	0	0	0	1	4	14	
IOWA—																				
Bellevue.....	7	10	4	15	3	11	10	33	0	93	1	1	1	2	1	2	4	12	24	
Border Plains.....	24	5	10	11	7	5	6	20	5	93	0	0	0	0	1	1	2	5	9	
Dubuque.....	7	20	7	12	5	7	0	18	17	93	2	11	7	3	2	11	5	13	54	
Fairfield.....	1	16	0	16	2	5	1	27	25	93	0	4	2	4	0	0	0	0	10	
Fort Madison.....	3	17	2	12	1	27	3	27	1	93	3	5	8	5	4	22	17	18	82	
Franklin.....	16	13	6	7	12	6	4	10	19	93										
Iowa City.....	2	7	7	17	3	25	9	17	0	93	0	1	3	1	1	3	1	1	11	
Muscatine.....	19	6	14	8	10	10	10	16	0	93	2	0	1	0	0	15	2	7	27	
Pleasant Plain.....	2	17	5	10	12	15	4	24	2	91	0	0	0	0	0	14	8	4	26	
Rossville.....	12	10	17	9	8	8	11	13	5	93										
Sioux City.....	11	8	15	10	9	2	2	29	0	86	3	2	4	2	6	1	2	11	31	
MINNESOTA—																				
Burlington.....	1	7	11	3	8	1	0	2	0	31										
Hazlewood.....	12	3	2	17	18	7	0	34	0	93	7	3	9	4	3	1	2	4	33	
Lapham.....	1	2	3	9	10	6	5	6	0	42	0	3	4	4	11	3	7	4	36	
Princeton.....	30	4	27	4	8	0	19	1	0	93	13	1	3	0	3	2	34	4	60	
Wabashaw.....	4	7	17	9	3	0	8	0	21	69	3	6	8	3	2	0	5	0	27	
NEBRASKA—																				
Bellevue.....	39	11	8	4	11	2	9	1	1	86	21	2	4	1	9	1	12	3	53	
Brownville.....	4	11	4	13	12	7	0	30	0	81	3	3	0	6	9	7	5	10	43	
Elkham.....	9	24	6	11	5	8	7	11	1	82										
Omaha.....	7	11	8	7	6	11	6	10	27	93	11	8	9	5	5	17	10	8	73	
KANSAS—																				
Burlingame.....	11	7	3	15	16	1	10	10	20	93										
Lawrence.....	19	11	9	8	24	6	7	9	0	93										
Leaven' th C'y, [Berthoud].....	0	11	0	18	0	56	2	6	0	93	0	10	0	22	1	33	0	9	75	
Leaven' th C'y, [McCarty].....	13	11	2	5	14	6	1	9	6	67	10	3	0	0	4	7	11	9	44	
Manhattan.....	10	9	20	2	7	11	4	9	21	93	12	4	10	0	5	8	10	8	57	
Mapleton.....	3	11	21	4	7	21	15	10	0	92	0	0	1	0	2	1	3	1	8	
Topeka.....	1	15	3	9	16	4	7	8	30	93										
MEXICO—																				
Cordova.....	0	12	3	1	4	7	16	8	2	62										
Minatitlan.....	2	20	2	5	4	10	0	1	16	60										
CALIFORNIA—																				
Marysville.....	3	0	0	0	0	72	10	8	0	93										
Sacramento.....	8	8	1	15	17	23	4	17	0	93	0	0	0	11	2	13	4	0	30	
San Francisco.....	1	0	0	0	0	7	54	0	31	93	3	0	0	0	1	8	32	1	45	
WEST INDIES—																				
Nassau, Bahamas.....	0	18	12	12	2	4	2	2	0	52										
SOUTH AMERICA—																				
Catharina Sophia, Surinam.....	0	38	28	23	3	1	0	0	0	93	0	18	36	19	0	1	0	0	74	





## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW JERSEY—Continued.																			
Lambertville .....	6	8	4	10	10	25	1	19	0	83	---	---	---	---	---	---	---	---	---
Newark .....	1	14	2	18	1	13	6	5	0	60	---	---	---	---	---	---	---	---	---
PENNSYLVANIA—																			
Bedford .....	0	0	0	7	1	32	1	37	0	78	1	25	1	22	0	0	0	7	56
Berwick .....	4	3	26	1	10	14	26	3	3	90	---	---	---	---	---	---	---	---	---
Cannonsburg .....	0	1	11	1	0	6	64	4	3	90	---	---	---	---	---	---	---	---	---
Easton .....	5	4	2	9	4	14	12	6	16	72	2	0	1	0	2	8	7	3	23
Fleming .....	2	2	12	8	1	34	14	12	5	90	1	0	3	3	0	20	12	20	59
Gettysburg .....	15	13	3	1	14	20	5	10	8	89	4	5	3	0	6	16	18	21	72
Harrisburg, [Heisely] .....	6	0	4	5	8	10	48	3	6	90	4	0	0	0	5	9	22	2	42
Harrisburg, [Hickok] .....	7	5	17	3	14	18	16	9	0	89	0	3	2	2	3	1	0	0	11
Indiana .....	0	8	9	14	6	21	14	12	0	90	---	---	---	---	---	---	---	---	---
Lewisburg .....	6	10	0	4	13	14	4	9	29	89	2	3	0	0	6	6	5	6	28
Meadville .....	5	3	0	0	15	5	11	10	41	90	3	3	0	2	2	13	13	14	50
Morrisville .....	0	10	10	7	13	29	3	1	17	90	1	10	1	2	0	29	15	5	63
Mount Joy .....	2	0	1	31	0	1	1	8	45	89	---	---	---	---	---	---	---	---	---
Murrysville .....	1	5	4	7	1	33	0	8	24	83	0	0	1	3	0	19	2	14	39
Norristown .....	1	2	17	4	6	19	21	8	0	78	1	1	9	2	1	8	28	4	54
North Whitehall .....	1	4	5	1	11	10	5	2	51	90	0	4	0	0	3	3	15	10	35
Philadelphia .....	4	16	7	0	4	30	3	26	0	90	2	0	1	0	0	13	5	8	29
Pittsburg, [Marine Hosp'l] .....	2	0	4	3	12	10	18	4	37	90	0	0	1	0	2	11	14	0	28
Pocopson .....	10	9	5	2	8	28	16	3	8	90	7	2	1	1	5	9	11	8	44
Shamokin .....	0	0	3	3	21	10	53	0	0	90	1	0	0	0	0	3	53	1	58
Somerset .....	3	0	0	9	5	15	18	10	30	90	4	1	0	4	3	19	31	6	68
Tarentum .....	2	4	1	1	5	14	4	8	51	90	1	1	2	0	3	9	23	9	48
West Haverford .....	1	4	6	3	3	20	5	12	6	60	7	1	4	1	0	6	13	14	46
Westtown .....	4	4	7	14	2	22	4	32	0	89	3	0	2	2	0	5	5	29	46
DELAWARE—																			
Milford .....	1	18	8	4	4	26	5	7	0	73	16	5	7	0	3	4	14	2	51
MARYLAND—																			
Annapolis .....	7	26	4	15	11	14	2	7	4	90	2	0	0	0	0	29	3	0	34
Baltimore .....	27	6	7	9	16	7	6	10	2	90	0	0	0	0	1	1	0	0	2
Bladensburg .....	4	8	6	0	0	17	4	6	0	45	---	---	---	---	---	---	---	---	---
Chestertown .....	6	7	14	10	5	14	20	12	0	88	---	---	---	---	---	---	---	---	---
Frederick .....	3	8	3	4	4	9	14	16	26	87	2	2	2	1	3	5	22	10	47
Leitersburg .....	6	5	1	5	12	30	13	12	3	87	8	5	0	2	2	12	13	13	55
Sykesville .....	17	14	5	10	13	17	11	2	0	90	1	4	7	8	4	13	38	2	77
DISTRICT OF COLUMBIA—																			
Washington .....	7	8	10	7	15	11	9	11	11	89	---	---	---	---	---	---	---	---	---
VIRGINIA—																			
Buffalo .....	0	0	58	0	6	3	23	0	0	90	0	0	14	0	5	0	17	0	36
Crichton's Store .....	25	4	0	3	16	37	2	2	1	90	0	0	0	0	0	4	24	0	28
Kanawha .....	25	0	0	0	43	0	1	1	20	90	4	0	2	3	5	8	13	3	38
Montross .....	4	8	7	2	11	11	10	5	32	90	4	2	1	1	4	13	10	1	36
Poplar Grove .....	0	0	16	1	0	4	20	1	44	86	2	1	5	2	2	19	17	8	56
Portsmouth .....	1	17	2	11	5	32	13	8	0	89	---	---	---	---	---	---	---	---	---
Rose Hill .....	4	9	7	1	6	13	3	2	8	53	---	---	---	---	---	---	---	---	---
Rougemont .....	8	16	4	2	26	2	8	6	17	89	3	7	1	1	4	1	21	3	41
Smithfield .....	14	2	9	23	24	5	7	0	90	6	8	1	0	1	16	19	14	65	
Winchester .....	0	0	0	0	0	5	23	1	58	87	---	---	---	---	---	---	---	---	---
Wirt Court-House .....	0	4	0	5	0	35	0	7	27	78	0	0	0	0	0	48	0	14	62
NORTH CAROLINA—																			
Chapel Hill .....	7	14	1	4	14	42	8	0	0	90	5	12	2	0	6	26	4	2	57
Davidson College .....	0	18	0	1	2	54	3	0	12	90	1	10	1	1	1	46	0	0	60
Marlborough .....	2	5	2	0	25	14	2	5	26	81	0	1	1	2	6	19	9	5	43
Murfreesborough .....	2	10	2	14	10	29	3	4	14	88	1	8	0	4	1	16	25	4	59
SOUTH CAROLINA—																			
All Saints .....	4	9	6	3	36	17	12	3	0	90	5	9	0	1	16	37	12	1	81
Charleston, [Dawson] .....	0	9	0	24	3	21	0	2	0	59	---	---	---	---	---	---	---	---	---
Charleston, [Johnson] .....	3	2	2	0	15	7	0	1	0	30	---	---	---	---	---	---	---	---	---
Columbia .....	4	3	4	10	13	18	7	1	0	60	4	2	1	0	3	7	5	2	24
St. John's .....	0	14	0	40	2	21	0	8	0	85	2	8	5	3	4	3	0	0	25

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
GEORGIA—																				
Athens .....	0	8	5	19	15	13	2	5	21	88	11	1	0	0	1	0	11	0	2	
Hillsborough .....	1	15	11	21	8	20	9	7	11	90	1	0	1	0	1	0	1	0	4	
Savannah .....	3	6	4	36	15	19	1	5	0	89	1	0	1	0	1	0	1	0	4	
Sparta .....	0	13	7	24	13	16	5	12	0	90	2	4	3	10	7	17	4	5	52	
Whitemarsh Island .....	4	6	4	16	26	11	8	4	11	90	1	7	3	3	8	7	11	5	43	
Zabulon .....	0	5	16	9	8	6	10	12	0	66	2	2	13	9	12	5	2	4	49	
FLORIDA—																				
Alachua County .....	1	26	6	29	1	12	0	13	0	88	1	0	13	17	11	4	0	1	36	
Alligator .....	2	1	5	54	0	3	2	1	22	90	1	12	12	15	3	11	7	7	68	
Atsena .....	3	12	15	15	2	23	12	5	3	90	1	12	12	15	3	11	7	7	68	
Jacksonville .....	2	27	3	28	6	21	1	2	11	90	1	11	2	14	2	20	5	4	59	
Memory .....	5	5	26	9	0	1	2	2	33	83	1	4	4	4	1	3	3	1	21	
St. Augustine .....	0	31	30	19	0	7	0	3	0	90	0	32	30	17	11	8	0	1	88	
Salt Ponds .....	2	7	26	18	2	1	2	0	2	60										
ALABAMA—																				
Greene Springs .....	0	11	8	35	0	8	5	4	25	85	7	2	0	5	15	18	2	3	52	
Greensborough .....	17	6	4	22	16	6	5	12	0	88	4	1	1	9	8	3	12	3	41	
Selma .....	5	11	5	33	6	15	5	12	0	90	14	5	0	16	7	16	3	27	88	
MISSISSIPPI—																				
Columbus .....	7	11	8	10	41	3	7	10	0	90	11	0	5	3	26	1	14	4	57	
Natchez .....	2	12	1	11	18	32	3	11	0	90										
Paulding .....	0	3	8	19	4	40	4	9	11	87	1	2	5	21	4	39	4	7	83	
LOUISIANA—																				
Black River .....	10	2	3	14	45	7	0	8	1	90	9	3	3	4	15	12	11	8	54	
New Orleans .....	0	0	0	53	0	37	0	0	0	90										
TEXAS—																				
Austin, [Palm] .....	10	3	0	5	52	16	4	11	0	90										
Austin, [Van Nostrand] .....	13	0	3	11	66	11	8	0	0	90	1	0	2	1	38	0	2	0	44	
Goliad .....	11	11	11	47	5	0	1	0	0	79	26	2	7	10	1	1	11	11	57	
Larissa .....	4	6	15	27	18	11	1	11	4	89	2	0	0	7	18	4	11	1	35	
New Braunfels .....	25	2	21	16	14	1	9	2	0	90	2	0	0	0	0	0	11	0	2	
Union Hill .....	10	1	3	11	53	4	0	0	8	90	8	0	1	11	46	3	0	2	66	
Washington .....	55	0	11	0	13	0	11	1	15	84	12	3	0	1	0	1	1	2	20	
TENNESSEE—																				
Glenwood .....	4	6	5	21	24	7	4	3	16	90	2	5	3	4	11	21	24	4	77	
Memphis .....	4	4	5	10	22	18	7	14	6	90										
KENTUCKY—																				
Bardstown .....	7	3	9	11	13	32	3	10	0	86	3	2	2	5	10	25	8	8	51	
Louisville .....	7	8	0	30	5	30	4	6	0	90	2	2	0	1	0	22	13	5	45	
Millersburg .....	2	11	1	2	0	5	28	7	45	90	0	1	11	0	11	11	48	11	49	
Paris .....	2	8	6	8	11	39	4	10	0	88	1	0	3	0	10	5	20	11	39	
Springdale .....	5	3	3	4	4	22	7	2	40	90										
OHIO—																				
Bellefontaine .....	11	9	2	11	1	41	11	11	0	82	11	10	0	1	0	53	1	6	71	
Bowling Green .....	0	7	3	3	0	26	2	3	43	87	1	6	0	1	0	28	7	6	49	
Cincinnati, [Harper] .....	9	0	2	0	4	45	19	11	0	90										
Cincinnati, [Hurt] .....	2	3	3	8	15	24	6	6	22	89	2	3	11	11	9	18	6	3	47	
Dayton .....	3	11	1	11	5	38	11	16	1	86	2	9	0	5	2	31	0	10	59	
Elmberg .....	0	41	4	5	0	14	0	14	12	90	0	4	1	1	0	21	35	2	64	
Hillsborough .....	0	10	0	22	2	37	1	18	0	90	0	11	0	0	1	11	1	5	18	
Hiram .....	4	8	7	3	26	15	10	12	1	86	0	3	4	0	0	6	11	5	29	
Jackson, (Jackson Co.) .....	0	0	14	0	38	1	23	0	11	82	2	11	2	0	19	1	16	0	40	
Jackson, (Monroe Co.) .....	12	5	3	2	2	11	0	0	52	76	0	11	0	0	0	1	0	0	1	
Jefferson .....	1	8	0	24	0	47	0	10	0	90	0	34	0	11	1	8	0	17	69	
Lancaster .....	3	16	7	4	10	25	15	8	2	90	4	3	1	1	2	18	16	4	49	
Madison, [Atkins] .....	2	4	0	0	12	4	14	3	29	68	0	4	2	11	0	4	0	0	19	
Madison, [King] .....	4	6	0	6	11	17	8	11	26	89	1	5	0	1	5	31	11	6	60	
Medina .....	5	13	1	6	2	39	5	19	11	90	1	28	24	23	3	8	0	3	90	
Mount Union .....	2	2	1	1	0	11	1	3	17	38	0	5	3	2	2	1	0	0	13	
New Lisbon .....	7	10	1	10	11	22	11	18	0	90	2	3	0	3	3	17	11	17	56	
Northwood .....	2	8	5	1	0	15	39	4	4	78	2	9	0	0	0	9	30	11	61	
Ripley .....	1	3	1	17	3	1	2	8	33	69	0	1	1	11	0	0	5	5	12	



## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Savannah .....	1	3	1	14	1	54	0	10	0	90	1	3	1	0	0	46	6	8	65
Urbana .....	2	2	0	10	10	8	8	7	42	89	2	6	0	1	1	14	24	4	52
Welchfield .....	3	3	0	18	28	29	6	3	0	90	0	0	0	0	1	2	0	0	3
Westerville .....	2	5	2	0	21	29	16	12	3	90	1	6	3	0	8	26	19	11	74
MICHIGAN—																			
Battle Creek .....	2	5	3	5	11	18	18	2	26	90	0	2	0	0	0	16	38	2	58
Cooper .....	0	0	5	0	0	0	22	0	63	90	3	1	2	5	1	8	1	3	24
Detroit .....	2	4	2	28	7	31	16	0	0	90	0	3	2	34	19	26	6	0	90
Forestville .....	7	28	1	29	3	19	9	9	1	106	0	24	16	5	3	1	2	0	51
Grand Rapids, [Streng] ..	1	9	9	3	2	23	32	3	0	87	2	14	5	2	1	12	46	3	85
Marquette .....	4	4	15	30	1	7	12	15	0	88	0	11	4	34	0	3	0	6	58
Monroe .....	0	10	5	65	0	4	0	6	0	90	1	4	1	1	2	22	29	6	66
New Buffalo .....	20	2	2	4	22	23	6	5	2	86	1	0	0	0	0	15	8	3	27
Port Huron .....	3	1	2	32	15	8	13	15	0	89	1	1	1	6	7	6	3	8	33
INDIANA—																			
Cannelton .....	4	8	2	9	43	17	3	3	0	89	0	3	0	6	15	19	9	7	59
Evansville .....	2	3	2	2	20	39	19	3	0	90	1	6	0	3	2	27	34	4	77
Logansport .....	4	1	1	22	5	32	17	8	0	90	1	1	1	11	3	16	7	3	43
Madison .....	17	6	3	10	29	10	2	3	10	90	5	1	2	3	17	12	5	2	47
Michigan City .....	5	2	4	10	24	17	7	6	0	75	1	5	0	1	1	15	11	3	37
New Harmony .....	8	7	0	3	3	16	4	3	13	57	1	5	0	1	1	15	11	3	37
Richmond, [Austin] .....	0	5	6	4	2	23	7	5	37	89	1	5	0	1	1	15	11	3	37
Richmond, [Moore] .....																			
ILLINOIS—																			
Athens .....	0	11	1	42	2	19	1	6	0	82	4	2	0	2	0	11	6	31	56
Augusta .....	2	9	6	11	19	23	10	0	10	90	3	6	2	2	14	12	12	1	52
Aurora .....	4	10	1	10	30	25	5	5	0	90	0	1	4	0	3	25	35	1	69
Batavia, [Capon] .....	0	12	1	3	4	42	20	4	0	86	0	13	0	4	0	48	3	6	74
Batavia, [Mead] .....	0	19	0	8	0	58	1	4	0	90	0	18	9	5	0	12	1	7	52
Brighton .....	1	10	5	20	9	34	1	9	0	90	0	18	9	5	0	12	1	7	52
Edgington .....	5	10	0	11	11	33	5	15	0	90	1	5	0	9	13	50	0	4	82
Elgin .....	4	8	6	19	8	20	5	1	17	88	0	0	1	1	0	1	5	0	8
Jacksonville .....	3	2	2	0	9	9	0	1	0	26	4	3	1	7	31	16	8	2	72
Manchester .....	6	6	2	5	48	11	11	1	0	90	4	3	1	7	31	16	8	2	72
Marengo .....	0	8	8	33	5	36	0	0	0	90	1	3	0	4	6	12	1	3	30
Ottawa .....	2	13	0	13	12	29	7	2	4	82	1	3	0	4	6	12	1	3	30
Pekin .....	7	6	4	11	40	0	4	4	8	90	5	6	0	3	8	13	7	7	49
Peoria .....	1	7	4	5	57	9	7	0	0	90	0	0	0	1	9	7	3	0	20
Riley .....	7	4	4	6	13	25	9	7	15	90	1	0	0	0	1	1	0	1	4
South Pass .....	5	4	1	6	33	5	3	3	27	87	1	0	0	0	1	1	0	1	4
Upper Alton .....	1	0	0	1	0	66	4	15	0	87	1	2	0	1	1	67	4	14	90
Warsaw .....	1	9	1	43	5	23	2	6	0	90	3	1	0	3	2	17	4	8	38
Waynesville .....	7	3	6	0	15	5	31	0	23	90	5	1	2	1	13	6	20	0	48
West Salem .....	7	5	3	8	32	7	0	3	25	90	1	1	0	4	13	8	21	6	54
West Urbana .....	2	15	3	20	24	21	4	1	0	90	1	0	1	2	3	6	3	1	17
Wheaton .....	2	14	4	4	22	25	6	2	10	89	1	1	0	0	2	3	8	2	17
Winnebago .....	0	9	6	28	10	29	3	5	0	90	0	0	0	1	1	9	19	7	37
MISSOURI—																			
St. Louis .....	6	10	2	27	21	16	4	4	0	90	1	3	2	0	1	22	37	10	76
WISCONSIN—																			
Appleton .....	0	23	0	0	1	60	3	3	0	90	0	18	3	0	0	44	0	1	66
Bay City .....	0	41	1	2	13	26	3	4	0	90	0	6	0	0	2	16	3	2	29
Beloit .....	9	8	4	9	29	23	5	3	0	90	1	1	1	0	2	2	2	0	9
Green Bay .....	15	5	5	0	16	18	10	0	18	87	8	3	2	0	8	11	2	1	35
Janesville .....	3	9	11	12	21	18	9	0	7	90	1	3	2	0	0	0	0	0	0
Kenosha .....	0	10	13	2	31	19	8	4	0	87	0	0	0	0	0	3	0	1	4
Madison .....	1	4	2	22	13	16	5	10	5	78	0	0	0	0	0	3	0	1	4
Manitowoc .....	14	8	5	20	17	9	11	6	0	90	0	1	6	0	1	5	13	0	26
Milwaukee, [Pomeroy] .....	1	20	3	23	10	20	3	10	0	90	1	3	2	0	1	22	37	10	76
Milwaukee, [Winkler] .....	5	15	11	23	9	9	15	3	0	90	1	3	2	0	1	22	37	10	76
New London .....	5	1	3	6	18	43	7	7	0	90	1	3	2	0	1	22	37	10	76
Platteville .....	0	6	12	31	15	10	4	6	0	90	2	4	10	8	1	33	3	6	67
Waukesha .....	0	7	0	0	21	15	6	1	39	89	3	3	2	0	0	0	3	1	12

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
IOWA—																			
Bellevue.....	5	3	4	30	11	18	9	10	0	90	1	1	1	3	1	0	0	0	13
Border Plains.....	6	2	11	16	25	10	5	9	6	90	1	1	0	1	10	5	4	2	24
Dubuque.....	3	2	3	17	15	24	4	6	15	89	2	3	1	4	6	21	14	9	60
Fairfield.....	3	3	0	20	5	30	0	2	27	90	0	1	10	0	0	0	0	2	13
Port Madison.....	1	5	0	21	4	44	2	12	1	90	2	2	0	5	9	25	16	3	62
Franklin.....	3	1	10	7	23	12	5	4	25	90	0	0	1	0	0	0	0	0	1
Iowa City.....	0	4	1	25	10	34	2	1	10	87									
Muscatine.....	1	5	10	14	33	10	11	6	0	90	0	0	0	0	0	14	0	3	17
Pleasant Plain.....	1	7	1	14	23	31	2	0	5	90	0	0	0	2	3	17	10	3	35
Poultney.....	6	1	8	13	9	14	5	2	12	70	2	0	3	1	10	11	6	1	34
Sioux City.....	12	3	11	11	32	0	2	10	0	84	2	2	0	1	18	1	1	8	33
MINNESOTA—																			
Burlington.....	0	0	16	2	0	1	2	0	0	30									
Forest City.....	0	2	0	1	0	22	0	3	53	81									
Hazlewood.....	0	4	5	10	25	17	5	18	0	90	0	4	4	3	0	1	3	2	16
Lapham.....	4	4	17	15	17	6	21	6	0	90	4	2	12	3	13	4	13	2	53
Princeton.....	16	2	11	0	19	7	10	3	10	81	3	0	4	0	13	4	22	3	49
Wabashaw.....	12	8	21	4	2	0	0	2	35	90	5	7	11	1	5	0	8	0	37
NEBRASKA—																			
Bellevue.....	19	0	0	3	55	1	1	0	0	85	12	0	2	1	13	2	6	0	36
Brownville.....	0	1	1	14	19	30	0	24	0	89	0	0	1	11	2	16	0	14	50
Elkham.....	15	9	5	29	23	7	0	2	0	90	2	0	1	0	1	3	1	0	8
Omaha.....	1	5	6	7	34	13	4	7	0	77	11	11	4	2	5	5	7	7	52
KANSAS—																			
Burlingame.....	8	2	1	7	52	4	0	2	14	90									
Lawrence.....	7	2	4	11	52	3	3	2	4	88									
Leaven' th City, [Berthoud].....	0	6	0	3	0	34	0	3	2	48	0	4	0	5	0	33	0	0	42
Leaven' th City, [McCarty].....	4	7	2	7	49	15	1	4	1	90	3	3	0	0	10	22	7	0	51
Manhattan.....	2	7	4	5	20	21	2	1	27	89	2	4	4	0	12	5	5	0	32
Mapleton.....	0	3	6	21	16	29	9	0	0	90	0	0	0	0	1	0	0	0	1
Topeka.....	0	9	4	2	44	5	5	1	20	90									
MEXICO—																			
Cordova.....	10	17	9	4	3	4	6	7	0	60									
Minatitlan.....	2	21	0	2	2	7	2	2	19	57									
CALIFORNIA—																			
Marysville.....	3	0	0	0	0	74	0	7	0	90									
Sacramento.....	2	1	1	15	31	22	0	12	0	90	0	0	0	13	1	7	1	0	22
San Francisco.....	0	0	0	0	0	0	58	1	31	90	1	0	0	0	2	5	38	5	51
WEST INDIES—																			
Nassau, Bahamas.....	0	12	16	14	0	10	0	0	0	52									
SOUTH AMERICA—																			
Catharina Sophia, Surinam.....	3	22	17	23	11	2	0	0	0	78	0	9	29	24	0	0	0	0	62



NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>BRITISH AMERICA—</b>																			
Montreal .....	2	18	0	1	1	22	4	7	38	93	1	22	0	2	2	27	6	11	71
Red River Settlement.....	7	5	10	0	21	5	15	4	20	87	11	15	5	2	3	4	10	2	52
St John's.....	4	20	1	11	1	22	11	23	0	93	---	---	---	---	---	---	---	---	---
St Martin.....	1	23	3	21	11	21	5	8	0	93	---	---	---	---	---	---	---	---	---
Stanbridge.....	14	3	10	21	15	5	9	9	7	93	---	---	---	---	---	---	---	---	---
Toronto.....	3	21	3	20	3	9	1	20	13	93	---	---	---	---	---	---	---	---	---
Windsor.....	7	2	7	16	1	8	23	14	6	84	1	0	0	0	0	0	3	2	H
<b>MAINE—</b>																			
Cornish, [Guptill].....	10	14	1	10	9	11	17	26	0	93	---	---	---	---	---	---	---	---	---
Cornish, [West].....	8	13	10	0	8	23	18	13	0	93	0	0	0	0	0	0	n	1	7
Dexter.....	3	23	0	4	5	16	1	37	4	93	---	---	---	---	---	---	---	---	---
Gardiner.....	6	22	6	14	4	17	2	11	11	93	5	7	0	2	2	14	2	14	46
Perry.....	0	16	2	23	7	17	3	23	2	93	0	8	2	4	0	4	4	15	37
Portland.....	8	11	12	9	18	8	7	16	0	89	2	3	2	3	1	3	13	8	35
Steuben.....	0	24	0	15	7	26	4	13	4	93	5	14	1	0	0	16	10	6	52
<b>NEW HAMPSHIRE—</b>																			
Concord.....	0	17	0	10	0	17	0	14	9	67	0	0	0	0	0	1	1	0	2
Shelburne.....	0	0	21	0	0	0	50	0	14	85	0	2	9	4	1	0	31	11	58
Stratford.....	1	13	21	8	10	12	12	16	0	93	4	0	5	3	9	9	24	16	70
West Enfield.....	5	3	0	5	12	16	2	49	1	93	5	3	0	4	4	0	3	40	68
<b>VERMONT—</b>																			
Brandon.....	10	0	5	12	29	6	5	23	2	92	6	0	0	0	0	15	1	45	67
Burlington.....	6	2	0	14	1	35	2	32	0	92	---	---	---	---	---	---	---	---	---
Craftsbury.....	3	15	2	3	28	9	10	20	3	93	2	6	0	1	10	6	23	14	62
Rupert.....	---	---	---	---	---	---	---	---	---	---	28	0	0	0	10	31	0	9	78
St. Johnsbury.....	6	3	0	10	10	5	21	36	1	92	2	0	1	0	2	6	19	4	34
<b>MASSACHUSETTS—</b>																			
Amherst.....	18	6	3	10	21	15	1	17	0	91	4	1	0	4	11	6	0	4	30
Bridgewater.....	11	15	11	1	5	34	10	6	0	93	9	2	1	0	0	14	8	2	36
Cambridge.....	3	7	9	2	0	40	4	14	14	93	---	---	---	---	---	---	---	---	---
Florida.....	0	3	1	0	1	8	75	5	0	93	0	3	1	0	0	14	55	4	77
Lawrence.....	2	19	0	6	1	31	4	28	2	93	---	---	---	---	---	---	---	---	---
Mendon.....	0	22	0	0	3	48	2	18	0	93	0	24</							

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW JERSEY—Continued.																			
Lambertville	4	15	2	10	15	26	3	13	0	88									
Newark	0	10	3	10	1	24	0	8	0	62									
PENNSYLVANIA—																			
Bedford	1	0	1	23	2	17	2	35	0	81	3	12	3	29	0	0	10	57	
Berwick	4	2	38	2	8	6	29	4	0	93									
Canonsburg	0	4	27	5	0	18	26	13	0	93	11	12	27	4	7	4	5	2	72
Chambersburg	0	8	22	6	10	5	12	3	18	93	7	4	5	2	11	12	27	4	72
Easton	9	5	4	12	9	8	13	23	4	87									
Fleming	1	3	18	12	0	20	15	20	4	93	1	0	0	0	2	0	8	36	55
Gettysburg	9	13	1	2	21	21	11	10	5	93	3	5	0	3	0	18	19	27	81
Harrisburg, [Heisely]	0	0	3	5	14	25	34	10	0	91	0	0	1	0	4	14	24	0	49
Harrisburg, [Hickok]	17	8	0	5	18	14	14	9	0	93	0	0	1	1	3	3	3	0	11
Indiana	11	13	11	17	15	6	8	12	0	93									
Lewisburg	4	8	0	5	9	19	1	15	31	92	2	3	0	1	1	7	0	12	32
Mendville	1	3	0	6	12	11	3	12	45	93									
Morrisville	3	5	3	5	28	20	0	5	18	93	0	1	0	2	0	22	22	0	55
Mount Joy	16	0	0	24	1	0	0	14	38	93									
Murrysville	0	8	11	5	0	33	6	5	25	93	2	0	1	2	1	26	7	16	55
Norristown	0	1	5	13	7	26	25	4	0	81	0	1	0	3	3	12	28	2	55
North Whitehall	1	1	4	0	11	4	9	6	57	93	1	1	0	0	9	1	23	5	40
Philadelphia	4	17	1	10	16	29	4	12	0	93	2	1	0	2	2	9	9	11	36
Pittsburg, [M. H.]	2	0	8	2	9	9	23	3	37	93	1	0	0	1	1	7	16	2	28
Pocapson	9	6	0	4	21	27	14	6	0	87	0	2	0	2	4	7	13	0	43
Shamokin	0	0	3	0	11	3	76	0	0	93	0	0	1	0	0	0	64	0	65
Somerset	4	2	1	17	3	11	19	10	26	93	4	0	2	9	4	13	26	24	82
Tarentum	11	5	4	4	4	11	16	8	30	93	0	2	0	0	2	11	36	13	64
Westtown	10	4	0	9	9	29	0	20	0	93	2	3	1	0	3	10	0	23	51
MARYLAND—																			
Annapolis	5	17	10	13	20	15	1	4	8	93	5	0	1	0	0	22	10	3	41
Baltimore	14	4	3	6	20	10	7	10	0	74	0	0	0	0	1	0	0	0	1
Bladensburg	1	8	5	4	2	17	2	4	0	43									
Chestertown	2	6	24	11	6	25	13	5	0	92									
Frederick	3	21	2	7	1	8	11	12	28	93	1	2	0	1	3	8	29	6	50
Leitersburg	2	6	6	5	28	23	13	8	2	93	3	2	1	4	9	13	26	28	86
Sykesville	5	18	8	10	25	17	8	2	0	93	3	4	0	5	1	10	45	2	73
DISTRICT OF COLUMBIA—																			
Washington	5	6	12	16	31	2	2	6	11	91	0	0	0	0	1	0	3	0	4
VIRGINIA—																			
Buffalo	11	3	49	0	4	0	26	0	0	93	14	1	27	0	5	0	14	0	61
Orrington's Store	26	14	3	2	16	22	5	4	0	92	0	0	0	0	0	17	17	4	38
Kanawha	21	3	0	5	33	1	1	4	16	84	2	2	0	3	3	17	10	8	45
Lewinsville	9	7	0	8	1	2	48	17	1	93									
Montross	0	10	10	7	5	23	2	2	35	93	2	5	2	4	5	14	3	1	36
Poplar Grove	0	0	17	3	0	2	26	1	29	78	0	2	3	0	7	7	17	16	58
Portsmouth	2	17	12	10	4	30	11	6	0	92									
Rose Hill	2	6	3	0	5	13	1	2	5	45	0	0	0	0	0	0	0	2	2
Rougemont	14	12	10	0	26	1	11	6	13	93	8	2	4	1	8	1	20	5	49
Smithfield	10	26	11	9	18	13	1	5	0	93	0	8	7	2	6	15	7	18	69
Wirt Court-House	0	3	0	10	0	19	1	11	41	85	0	0	0	7	1	29	3	20	60
NORTH CAROLINA—																			
Chapel Hill	10	22	2	1	0	19	22	5	0	90	10	11	2	0	11	8	11	4	57
Davidson College	0	26	0	1	1	36	8	2	10	84	0	18	1	0	2	26	5	5	57
Marlborough											0	2	0	0	0	0	1	2	9
Murfreesborough	4	18	2	12	3	14	4	5	17	79	2	13	0	6	2	10	9	7	49
SOUTH CAROLINA—																			
All Saints	5	13	11	9	24	6	22	3	0	93	8	17	6	3	7	7	28	5	81
Charleston, [Dawson]	0	14	1	15	1	21	4	6	0	62									
Columbia											7	1	5	4	9	7	10	0	45
St. John's	0	7	0	25	3	14	3	16	0	68	8	3	1	0	3	7	0	4	32
GEORGIA—																			
Athens	2	15	9	9	0	10	4	11	19	88									
Savannah	7	12	3	11	14	36	0	4	0	93	0	1	0	0	1	0	1	0	3



## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
GEORGIA—Continued.																				
Sparta .....	7	15	5	10	5	29	7	13	0	91	3	12	2	2	2	12	8	11	52	
Whitemarsh Island .....	0	18	2	1	16	7	28	2	13	93	3	14	2	4	5	6	6	6	46	
FLORIDA—																				
Alachua County .....	1	13	0	13	1	54	0	8	0	90	—	—	—	—	—	—	—	—	—	
Alligator .....	0	5	6	34	7	11	5	3	22	93	1	5	19	3	1	4	6	3	42	
Atsena .....	4	5	6	12	4	24	27	8	3	93	3	9	4	12	6	17	17	9	77	
Belair .....	2	10	2	10	6	10	13	6	21	90	1	7	22	8	2	8	22	7	77	
Jacksonville .....	0	7	4	7	4	36	29	4	2	93	3	4	13	10	8	7	6	1	52	
St. Augustine .....	3	21	5	14	1	16	0	33	0	93	0	19	2	8	0	17	2	32	80	
Salt Ponds .....	0	4	22	15	14	3	1	2	1	62	—	—	—	—	—	—	—	—	—	
Micanopy .....	2	2	11	3	0	10	12	3	33	76	0	0	0	0	2	3	3	2	10	
ALABAMA—																				
Carlowville .....	10	0	3	1	13	16	41	9	0	93	0	0	0	0	6	0	2	0	8	
Greene Springs .....	1	2	10	22	1	13	16	1	22	83	7	3	4	4	3	5	9	0	35	
Greensborough .....	12	4	2	16	7	20	10	10	0	81	2	0	7	2	0	7	21	4	43	
Selma .....	16	8	22	4	6	4	20	11	0	93	4	2	6	16	3	11	15	36	93	
MISSISSIPPI—																				
Columbus .....	11	11	14	17	14	9	10	7	0	93	1	7	4	6	8	13	9	4	52	
Natchez .....	14	6	1	7	14	37	2	12	0	93	5	15	14	12	6	0	2	8	62	
Paulding .....	1	15	4	8	0	27	9	10	0	74	0	13	2	0	0	31	10	7	69	
LOUISIANA—																				
Black River .....	11	9	7	14	35	10	6	1	0	93	4	7	6	8	7	15	3	6	56	
New Orleans .....	0	0	0	15	0	78	0	0	0	93	—	—	—	—	—	—	—	—	—	
TEXAS—																				
Austin, [Palm] .....	2	0	3	6	44	35	3	0	0	93	0	2	1	0	0	0	0	0	3	
Austin, [Van Nostrand] ..	1	0	1	1	81	0	5	0	3	92	1	0	1	2	28	0	1	0	33	
Goliad .....	2	1	3	60	14	2	2	1	0	85	22	4	9	21	3	0	0	0	59	
Larissa .....	2	11	19	9	11	29	6	5	1	93	0	2	4	3	7	13	3	2	34	
New Braunfels .....	5	0	16	33	11	2	19	7	0	93	0	0	0	0	0	0	0	1	1	
Union Hill .....	0	0	1	5	67	13	0	0	7	93	0	0	0	6	52	3	0	0	61	
TENNESSEE—																				
Glenwood .....	6	9	3	18	16	11	6	3	21	93	6	9	7	7	7	11	26	12	85	
Memphis .....	5	7	11	16	10	18	8	8	10	93	—	—	—	—	—	—	—	—	—	
KENTUCKY—																				
Bardstown .....	13	14	2	13	13	18	10	7	0	90	7	6	3	8	5	18	9	9	65	
Danville .....	6	23	0	3	22	23	7	9	0	93	4	5	0	0	4	19	8	20	60	
Louisville .....	3	18	1	20	2	14	0	6	0	64	2	3	0	1	1	13	3	9	32	
Paris .....	7	10	3	12	9	31	2	18	0	92	3	0	2	0	10	0	27	2	44	
Springdale .....	4	12	8	2	1	23	7	2	34	93	—	—	—	—	—	—	—	—	—	
OHIO—																				
Bellefontaine .....	5	20	0	9	1	39	2	6	0	82	0	13	1	11	7	39	3	2	70	
Bowling Green .....	2	15	3	2	0	20	2	1	44	89	3	5	0	2	0	14	13	20	57	
Cincinnati, [Harper] .....	6	9	6	23	21	9	7	12	0	93	—	—	—	—	—	—	—	—	—	
Cleveland .....	27	10	1	19	14	13	6	1	7	89	1	2	1	0	1	9	15	3	32	
Dayton .....	8	21	1	8	3	28	0	12	0	81	4	11	0	5	1	29	0	10	60	
Edinburg .....	0	28	5	30	1	11	0	11	4	90	0	5	1	1	0	15	37	12	71	
Hillsborough .....	0	13	0	29	0	31	0	18	1	92	1	1	0	1	0	9	0	7	19	
Hiram .....	13	11	9	3	11	9	11	17	4	88	4	2	0	0	3	2	16	15	42	
Jackson, (Monroe county) ..	12	6	3	2	10	0	0	0	39	72	—	—	—	—	—	—	—	—	—	
Jefferson .....	1	4	0	7	5	64	1	8	0	90	0	0	0	0	4	30	0	0	34	
Lancaster .....	12	16	2	9	10	17	19	8	0	93	7	3	0	1	2	9	25	16	63	
Madison, [Atkins] .....	7	12	0	1	7	5	7	5	25	69	0	3	0	0	1	0	7	0	11	
Madison, [King] .....	9	22	5	4	4	15	9	12	13	93	1	9	1	1	2	14	26	19	73	
Medina .....	6	17	0	8	4	26	2	18	0	81	0	29	20	23	7	11	0	2	92	
New Lisbon .....	9	7	7	11	5	18	9	27	0	93	5	3	1	3	1	16	18	22	69	
Northwood .....	7	16	14	7	6	19	3	4	5	81	6	15	14	7	6	16	2	2	68	
Ripley .....	0	1	0	8	2	0	0	21	26	58	0	0	0	0	0	0	1	5	6	
Savannah .....	4	9	2	11	0	44	8	15	0	93	5	8	1	0	0	39	8	12	73	
Urbana .....	3	12	2	16	8	11	3	6	32	93	5	11	1	4	0	18	24	11	74	
Welchfield .....	3	4	6	19	7	29	11	14	0	93	0	0	0	0	0	0	2	1	3	
Westerville .....	14	5	3	5	9	13	12	6	1	68	5	2	16	3	1	8	10	7	52	

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MICHIGAN—																				
Battle Creek .....	2	12	10	0	11	17	11	1	29	93	■	3	1	0	1	13	47	3	68	
Cooper .....	0	0	8	1	0	■	2	0	82	93	4	0	0	0	0	0	2	2	8	
Detroit .....	1	2	14	33	5	36	■	0	0	93	0	2	7	42	5	36	1	0	93	
Forestville .....	13	36	3	28	3	15	13	13	0	124	7	12	38	6	4	7	4	0	78	
Grand Rapids, [Streng] ..	4	19	7	6	■	23	11	14	0	93	1	8	9	0	2	12	39	15	86	
Marquette .....	0	12	13	18	2	8	19	21	0	93	—	—	—	—	—	—	—	—	—	
Monroe .....	3	32	0	0	0	6	2	49	1	93	3	27	0	0	0	8	0	42	80	
New Buffalo .....	—	—	—	—	—	—	—	—	—	—	1	1	3	4	2	21	29	16	77	
Port Huron .....	32	9	0	2	4	25	3	7	5	87	4	0	0	0	0	14	12	6	36	
INDIANA—																				
Cannelton .....	9	5	7	18	13	5	16	20	0	93	5	2	1	3	5	8	7	9	40	
Evansville .....	2	2	7	8	38	18	7	■	0	88	3	0	1	3	7	14	7	11	46	
L'gansport .....	10	1	2	5	12	26	20	17	0	93	6	2	0	0	3	14	41	18	84	
Marion .....	8	6	7	16	5	25	12	14	0	93	4	3	2	3	3	15	7	8	45	
Michigan City .....	31	12	4	8	17	5	1	2	11	91	13	0	0	0	9	7	1	10	40	
New Harmony .....	7	2	8	6	16	17	8	4	0	68	—	—	—	—	—	—	—	—	—	
Richmond, [Moore] .....	0	10	9	3	6	11	5	9	39	92	—	—	—	—	—	—	—	—	—	
ILLINOIS—																				
Athens .....	1	13	1	32	0	21	3	14	0	85	0	2	0	1	0	10	9	28	50	
Augusta .....	3	14	10	12	11	19	9	5	10	93	4	4	2	■	7	16	17	9	63	
Aurora .....	6	16	0	14	17	14	9	11	0	93	2	6	0	0	0	21	40	13	82	
Batavia, [Dapon] .....	6	25	7	4	5	30	13	3	0	93	—	—	—	—	—	—	—	—	—	
Batavia, [Mead] .....	0	38	0	1	0	48	0	6	0	93	■	20	0	0	0	43	0	18	81	
Brighton .....	5	8	3	20	17	31	1	8	0	93	1	12	11	18	■	13	1	0	62	
Edgington .....	5	25	1	25	4	16	0	17	0	93	4	16	1	6	1	25	0	36	89	
Elgin .....	1	27	2	18	11	3	10	13	8	93	1	0	0	1	0	2	0	2	6	
Jacksonville .....	7	2	1	2	14	4	0	1	0	31	—	—	—	—	—	—	—	—	—	
Manchester .....	19	12	3	8	34	5	10	2	0	93	18	5	1	7	23	2	8	10	74	
Marengo .....	0	15	16	27	4	28	2	1	0	93	—	—	—	—	—	—	—	—	—	
Ottawa .....	3	20	5	12	11	11	5	10	2	79	4	2	■	0	3	5	9	4	27	
Pekin .....	15	13	4	15	21	6	3	8	7	92	6	8	6	4	11	7	15	10	67	
Peoria .....	8	18	18	5	31	3	7	3	0	93	1	0	0	0	2	■	3	0	6	
Riley .....	3	8	10	10	5	21	10	10	16	93	—	—	—	—	—	—	—	—	—	
Upper Alton .....	9	8	0	8	15	18	23	10	2	93	9	9	0	8	15	28	12	12	93	
Warsaw .....	2	15	2	49	2	13	3	7	0	93	2	1	0	3	3	12	8	0	38	
Waynesville .....	22	2	15	0	6	■	23	3	22	93	8	1	3	0	5	3	24	0	44	
West Salem .....	9	5	3	7	21	4	3	1	40	93	5	4	0	2	2	5	17	21	56	
West Urbana .....	11	14	6	14	15	19	5	9	0	93	■	1	0	0	1	1	1	2	6	
Wheaton .....	4	25	4	12	7	23	4	6	5	90	■	0	0	0	0	1	5	1	7	
Winnebago .....	9	18	8	17	7	19	8	7	0	93	■	0	0	■	0	7	30	11	48	
MISSOURI—																				
St. Louis .....	13	15	10	15	16	5	7	12	0	93	—	—	—	—	—	—	—	—	—	
WISCONSIN—																				
Appleton .....	1	37	0	5	2	34	2	12	0	93	1	27	1	5	2	32	0	11	79	
Bay City .....	0	51	0	0	8	29	3	2	0	93	0	4	0	0	0	25	4	0	33	
Beloit .....	16	17	9	6	20	11	13	1	0	93	3	2	18	4	1	2	2	0	32	
Green Bay .....	19	7	9	4	20	4	3	2	25	93	8	5	3	4	10	1	3	2	36	
Kenosha .....	0	28	13	7	12	19	7	2	0	88	—	—	—	—	—	—	—	—	—	
Madison .....	8	16	3	13	12	1	4	12	2	71	1	0	0	0	0	4	1	0	6	
Manitowoc .....	17	7	4	14	18	11	10	12	0	93	2	0	1	0	2	0	26	10	41	
Milwaukee, [Pomeroy] ..	1	27	6	21	4	10	5	15	3	92	—	—	—	—	—	—	—	—	—	
Milwaukee, [Winkler] ..	4	25	14	16	4	9	10	11	0	93	—	—	—	—	—	—	—	—	—	
New London .....	■	5	2	1	14	37	8	20	0	93	10	3	3	2	0	23	23	14	78	
Platteville .....	11	6	23	25	8	9	3	8	0	93	13	3	5	9	1	23	4	21	79	
Waukesha .....	11	5	4	0	16	0	5	2	44	93	2	1	0	0	2	3	5	0	13	
IOWA—																				
Bellevue .....	10	3	7	10	13	18	9	22	0	92	—	—	—	—	—	—	—	—	—	
Border Plains .....	7	6	14	26	10	7	1	13	9	93	0	0	3	2	1	6	10	8	30	
Dubuque .....	7	5	1	13	8	23	1	8	26	92	5	5	1	6	2	19	14	16	68	
Fairfield .....	0	4	0	23	5	21	0	9	31	93	0	2	1	0	0	0	0	0	3	
Fort Madison .....	3	21	0	14	4	36	0	14	1	93	5	4	0	0	1	21	27	16	74	



## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
IOWA—Continued.																			
Franklin.....	12	1	8	13	17	8	1	7	23	90	—	—	—	—	—	—	—	—	—
Iowa City.....	3	0	2	40	7	22	5	14	0	93	0	0	0	0	2	4	2	0	8
Muscatine.....	6	15	7	26	10	13	4	12	0	93	0	9	0	0	0	24	2	5	40
Pleasant Plain.....	1	19	7	26	16	10	0	6	6	91	0	0	0	0	1	12	27	2	42
Poultney.....	8	3	7	12	6	10	3	2	20	71	0	4	0	2	2	7	3	0	18
Sioux City.....	11	7	2	21	27	0	0	4	0	72	14	1	3	5	15	0	0	2	40
MINNESOTA—																			
Burlington.....	0	1	17	6	7	0	0	0	0	31	—	—	—	—	—	—	—	—	—
Forest City.....	0	0	5	4	11	8	2	0	63	93	—	—	—	—	—	—	—	—	—
Hazlewood.....	2	14	0	15	21	6	6	29	0	93	—	—	—	—	—	—	—	—	—
Lapham.....	7	1	26	8	5	12	7	0	0	66	6	3	9	2	5	7	26	2	60
Princeton.....	2	1	7	2	7	0	4	1	6	30	0	0	0	1	6	2	10	0	19
Wabashaw.....	12	8	13	4	8	0	9	5	33	93	11	9	2	4	1	0	3	4	34
NEBRASKA—																			
Bellevue.....	17	8	9	9	38	0	0	0	3	84	5	1	2	6	20	3	5	2	44
Brownville.....	1	10	2	23	5	38	0	11	3	93	1	6	2	17	2	27	0	14	69
Elkham.....	11	15	12	26	17	6	3	3	0	93	0	0	0	0	2	0	3	0	5
Omaha.....	8	0	10	19	24	5	3	4	20	93	7	0	9	14	17	9	16	0	72
KANSAS—																			
Burlingame.....	10	2	4	19	35	0	3	8	12	93	—	—	—	—	—	—	—	—	—
Lawrence.....	23	2	1	5	54	0	0	0	6	91	—	—	—	—	—	—	—	—	—
Leavenworth City.....	8	5	4	21	25	11	0	6	3	93	6	1	2	4	3	19	13	7	55
Manhattan.....	4	6	7	15	25	13	0	1	22	93	1	2	5	3	5	2	1	0	19
Mapleton.....	0	9	23	4	17	23	16	1	0	93	0	0	1	0	0	1	1	0	3
MEXICO—																			
Cordova.....	12	19	4	7	6	5	2	3	4	62	—	—	—	—	—	—	—	—	—
Minatitlan.....	2	40	3	1	1	5	1	1	8	62	—	—	—	—	—	—	—	—	—
CALIFORNIA—																			
Marysville.....	0	0	0	3	0	90	0	0	0	93	—	—	—	—	—	—	—	—	—
Sacramento.....	3	2	1	17	35	21	9	5	15	93	0	0	0	2	0	5	1	0	8
San Francisco.....	0	0	0	0	1	10	67	0	0	93	0	0	0	1	3	16	38	0	58
WEST INDIES—																			
Nassau, Bahamas.....	0	0	18	24	2	2	0	0	8	54	—	—	—	—	—	—	—	—	—
SOUTH AMERICA—																			
Caraccas, Venezuela.....	0	0	46	46	0	0	0	1	0	93	0	0	32	30	1	0	0	1	64
Catharina Sophia, Surinam	6	25	20	15	13	2	0	3	0	84	0	11	18	16	0	0	0	0	45

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	0	8	0	3	5	10	4	12	51	93	6	9	1	6	9	15	4	14	64	
Red River Settlement .....	3	1	12	1	27	0	3	15	16	78	13	2	0	10	1	2	10	10	48	
St. John's .....	3	13	0	14	6	8	22	27	0	93	—	—	—	—	—	—	—	—	—	
St. Martin .....	0	17	2	29	1	31	4	9	0	93	—	—	—	—	—	—	—	—	—	
Stanbridge .....	0	6	9	25	16	1	12	7	11	93	—	—	—	—	—	—	—	—	—	
Toronto .....	3	10	0	16	3	13	3	32	13	93	—	—	—	—	—	—	—	—	—	
Windsor .....	7	5	9	6	0	7	10	8	12	70	0	0	0	0	0	0	1	1	2	
Wolfville .....	0	21	9	11	4	15	10	1	22	93	0	13	2	4	8	20	6	5	58	
MAINE—																				
Cornish, [Guptill] .....	10	8	2	24	12	16	5	16	0	93	—	—	—	—	—	—	—	—	—	
Cornish, [West] .....	5	17	10	10	10	13	23	5	0	93	0	0	0	0	0	0	1	0	1	
Dexter .....	0	8	3	13	3	3	3	0	0	42	—	—	—	—	—	—	—	—	—	
Gardiner .....	1	21	2	21	1	17	3	17	10	93	0	15	0	7	2	11	6	9	50	
Perry .....	4	16	2	28	3	23	5	10	0	91	4	11	0	5	6	8	4	11	49	
Portland .....	2	9	20	22	14	7	8	11	0	93	3	1	0	4	2	8	9	7	34	
Steuben .....	1	40	0	17	3	24	3	4	0	92	0	16	1	4	0	13	3	4	41	
NEW HAMPSHIRE—																				
Concord .....	0	21	0	18	0	10	6	17	6	78	0	0	0	1	0	2	0	0	3	
Shelburne .....	0	0	26	0	0	0	37	0	21	84	0	2	7	10	3	2	34	4	62	
Stratford .....	5	17	15	7	6	12	22	9	0	93	4	7	5	9	5	8	32	7	77	
West Enfield .....	1	1	0	17	21	20	4	29	0	93	0	0	0	18	6	7	5	32	68	
VERMONT—																				
Brandon .....	13	0	2	19	28	5	5	13	7	92	0	0	0	1	2	12	0	31	58	
Burlington .....	4	0	0	12	9	26	4	37	0	92	—	—	—	—	—	—	—	—	—	
Craftsbury .....	1	15	4	6	28	14	9	11	5	93	2	0	2	1	11	8	11	17	58	
Rupert .....	—	—	—	—	—	—	—	—	—	—	5	5	0	4	0	40	2	0	62	
St. Johnsbury .....	5	7	1	12	13	6	16	27	0	93	6	3	0	0	5	7	0	4	31	
MASSACHUSETTS—																				
Amherst .....	6	6	5	5	7	7	0	1	0	37	1	2	1	0	3	2	0	0	9	
Cambridge .....	2	18	14	6	3	19	11	5	15	93	—	—	—	—	—	—	—	—	—	
Florida .....	8	2	0	27	3	10	38	5	0	93	6	1	0	27	4	0	32	3	82	
Lawrence .....	0	20	11	20	1	21	3	17	0	93	—	—	—	—	—	—	—	—	—	
Mendon .....	0	28	0	5	4	32	2	22	0	93	0	26	0	0	3	29	3	14	81	
Nantucket .....	5	27	3	10	1	30	5	10	2	93	—	—	—	—	—	—	—	—	—	
New Bedford .....	4	22	2	11	8	27	3	16	0	93	2	6	2	1	1	5	4	5	26	
Newburyport .....	8	5	14	8	0	4	8	5	3	61	—	—	—	—	—	—	—	—	—	
Westfield .....	5	14	9	9	5	13	6	30	0	91	0	0	0	0	0	1	0	0	1	
Williamstown .....	6	5	19	0	10	1	21	19	6	93	—	—	—	—	—	—	—	—	—	
Worcester .....	3	24	9	15	4	10	4	14	0	83	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Providence .....	3	29	1	2	4	23	1	13	4	80	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Columbia .....	3	29	1	1	0	8	5	30	16	93	1	24	1	1	0	4	2	19	52	
Pomfret .....	7	24	5	7	5	23	1	21	0	93	5	16	4	6	1	13	6	12	63	
Saybrook .....	9	6	10	13	8	18	3	15	4	86	6	6	1	5	2	7	8	7	42	
Wallingford .....	8	13	3	15	19	8	2	25	0	93	2	9	4	0	2	6	19	7	49	
NEW YORK—																				
Baldwinsville .....	12	1	3	6	6	11	34	20	0	93	5	0	3	1	4	6	25	7	51	
Beverly .....	17	9	0	13	7	19	0	14	0	79	3	6	4	8	4	17	4	13	59	
Cazenovia .....	2	1	5	14	2	18	10	32	6	90	7	5	1	5	2	13	11	24	68	
Covert .....	3	3	0	34	5	0	12	30	1	94	0	0	0	13	8	11	14	21	67	
Eden .....	5	3	1	14	28	9	25	8	0	93	0	2	0	0	0	1	13	5	21	
Morrisania .....	12	10	14	11	12	10	15	9	0	93	—	—	—	—	—	—	—	—	—	
Nichols .....	1	1	8	37	10	1	4	31	0	93	0	1	2	17	3	11	7	28	69	
Ogdensburg .....	6	0	0	0	11	6	3	8	0	34	—	—	—	—	—	—	—	—	—	
Rochester .....	11	8	15	12	11	7	25	2	0	91	8	3	8	6	10	2	15	4	56	
Sag Harbor .....	5	7	10	8	8	19	12	8	0	77	2	1	0	0	2	5	8	4	22	
Saratoga .....	0	35	0	10	1	43	0	4	0	93	0	32	0	8	1	48	0	4	93	
Wampsville .....	0	2	9	7	17	2	56	0	0	93	0	2	8	0	14	3	42	0	75	
NEW JERSEY—																				
Bloomfield .....	1	20	0	16	4	20	2	30	0	93	—	—	—	—	—	—	—	—	—	
Lambertville .....	8	13	0	10	6	9	6	21	0	79	—	—	—	—	—	—	—	—	—	



## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY—Continued.																				
Newark .....	3	17	3	12	0	14	1	12	0	62	---	---	---	---	---	---	---	---	---	
PENNSYLVANIA—																				
Bedford .....	1	2	1	6	1	19	4	44	0	78	0	18	4	31	0	0	2	7	62	
Berwick .....	2	1	41	6	5	5	26	4	0	90	---	---	---	---	---	---	---	---	---	
Cannonsburg .....	0	8	16	2	0	7	40	20	0	93	---	---	---	---	---	---	---	---	---	
Carlisle .....	0	2	2	8	0	10	9	6	6	43	0	1	1	3	1	9	5	5	25	
Chambersburg .....	5	3	35	8	4	6	13	3	16	93	11	3	6	0	9	10	24	11	74	
Easton .....	17	12	3	22	5	1	9	21	3	93	---	---	---	---	---	---	---	---	---	
Fleming .....	0	2	13	17	1	14	11	34	1	93	3	3	3	9	4	3	12	24	61	
Gettysburg .....	11	6	3	3	19	25	10	10	6	93	9	5	0	3	5	15	21	18	76	
Harrisburg, [Heisely] .....	0	0	11	18	11	0	37	14	0	91	0	0	2	11	5	0	21	11	50	
Harrisburg, [Hickok] .....	19	7	16	3	8	11	24	4	0	92	0	3	1	0	1	1	5	0	11	
Indiana .....	18	12	14	6	3	16	8	16	0	93	---	---	---	---	---	---	---	---	---	
Lewisburg .....	9	14	1	15	10	17	1	6	18	91	4	2	0	1	5	3	7	5	27	
Meadville .....	9	4	0	6	6	8	8	5	36	82	3	1	0	3	2	12	15	8	44	
Morrisville .....	7	13	5	9	13	17	2	12	12	90	4	3	2	10	3	13	16	10	61	
Mount Joy .....	1	1	0	20	11	0	0	8	42	83	---	---	---	---	---	---	---	---	---	
Murrysville .....	2	5	17	4	1	41	0	12	11	93	1	1	3	1	0	25	9	22	62	
Norristown .....	1	2	6	16	3	17	28	5	0	78	0	3	11	3	1	6	34	4	62	
North Whitehall .....	1	5	9	0	6	4	10	8	50	93	1	7	5	0	1	3	13	6	37	
Philadelphia .....	3	20	6	13	3	22	7	19	0	93	2	5	1	1	2	7	8	10	36	
Pittsburg, (M. H.) .....	3	1	8	1	11	13	24	4	28	93	1	0	2	0	3	16	12	0	34	
Pocopson .....	6	8	10	2	7	26	18	9	7	93	10	6	2	2	5	0	24	1	59	
Shamokin .....	0	0	9	0	13	5	66	0	0	93	1	0	0	0	1	0	75	0	77	
Somerset .....	6	3	3	5	3	8	27	7	31	93	10	1	6	1	2	14	41	12	87	
Tarentum .....	5	5	4	2	8	12	11	15	30	93	2	1	0	4	2	9	26	14	58	
Westtown .....	3	7	1	16	9	21	5	31	0	93	3	4	1	6	2	4	6	29	55	
MARYLAND—																				
Annapolis .....	4	18	3	19	16	14	1	7	11	93	6	6	0	0	0	35	2	1	50	
Baltimore .....	24	2	7	13	19	3	9	11	4	92	0	0	0	0	1	1	0	0	2	
Bladensburg .....	1	14	1	3	3	11	1	7	0	41	---	---	---	---	---	---	---	---	---	
Frederick .....	1	18	0	2	1	8	19	15	25	89	2	0	0	6	2	3	31	6	50	
Leitersburg .....	11	3	5	5	23	17	15	7	7	93	10	2	7	3	5	7	32	18	84	
Sykesville .....	5	20	9	12	25	7	11	4	0	93	4	7	3	7	0	4	53	3	81	
DISTRICT OF COLUMBIA—																				
Washington .....	10	5	8	6	25	5	5	5	21	90	1	0	0	0	0	0	9	0	10	
VIRGINIA—																				
Buffalo .....	10	0	30	0	14	0	39	0	0	93	22	0	19	0	9	0	16	0	66	
Crichton's Store .....	34	5	1	9	10	18	7	7	1	92	1	0	0	0	0	16	17	3	37	
Kanawha .....	18	0	0	0	35	1	5	2	13	74	1	1	1	1	0	5	33	8	50	
Lewinsville .....	2	6	1	1	0	2	60	21	0	93	---	---	---	---	---	---	---	---	---	
Montross .....	7	8	13	0	3	8	4	2	48	93	6	8	5	1	0	7	5	2	34	
Poplar Grove .....	0	0	25	0	0	1	33	6	28	93	8	1	1	1	1	8	25	19	64	
Portsmouth .....	10	20	6	6	11	15	15	4	6	93	---	---	---	---	---	---	---	---	---	
Rose Hill .....	7	6	5	12	7	13	0	7	11	68	0	0	0	0	0	0	5	2	7	
Rougemont .....	14	10	9	2	16	7	15	6	10	89	11	4	1	1	3	2	25	9	56	
Smithfield .....	7	23	2	13	17	11	3	16	0	92	11	7	2	3	2	8	21	19	73	
Wirt Court House .....	4	4	0	6	0	32	0	17	30	93	0	6	0	0	0	27	0	42	75	
NORTH CAROLINA—																				
Chapel Hill .....	33	9	9	2	7	6	19	8	0	93	16	3	0	0	1	28	15	5	68	
Davidson College .....	4	13	0	0	0	24	5	3	18	67	5	11	0	0	0	29	4	3	52	
Marlborough .....	---	---	---	---	---	---	---	---	---	---	3	5	1	0	2	9	2	6	28	
Murfreesborough .....	0	29	0	5	6	26	1	4	15	86	1	11	0	2	0	16	3	1	34	
SOUTH CAROLINA—																				
All Saints .....	7	21	5	14	10	10	23	3	0	93	8	9	2	0	6	19	34	8	86	
Charleston, [Dawson] .....	0	13	1	11	3	32	0	2	0	62	---	---	---	---	---	---	---	---	---	
Charleston, [Johnson] .....	2	4	2	6	2	16	1	2	0	35	---	---	---	---	---	---	---	---	---	
Columbia .....	4	6	2	0	11	7	15	15	0	60	4	5	0	1	0	3	7	9	38	
St. John's .....	0	19	1	23	1	17	1	19	0	81	5	7	1	0	0	1	12	2	28	
GEORGIA—																				
Athens .....	3	10	10	18	8	0	8	15	20	92	---	---	---	---	---	---	---	---	---	
Savannah .....	8	17	1	14	13	28	4	8	0	93	0	0	0	0	2	0	3	0	5	

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
GEORGIA—Continued.																				
Sparta .....	2	18	6	14	8	23	9	11	0	91	3	11	3	1	0	11	12	8	57	
Whitemarsh Island .....	7	14	1	10	18	1	22	4	16	93	2	11	1	1	1	4	13	2	36	
FLORIDA—																				
Alachua County .....	0	27	0	20	11	30	1	14	0	92	3	3	7	1	4	6	0	1	25	
Alligator .....	2	5	14	18	11	12	0	1	30	93	3	3	7	1	4	6	0	1	25	
Atsena .....	1	18	12	5	8	20	14	1	1	93	2	20	15	6	9	14	6	5	77	
Belair .....	3	15	5	9	5	1	7	6	7	58	1	4	7	14	3	7	7	6	49	
Jacksonville .....	5	12	9	3	6	32	17	8	1	93	0	6	7	1	3	5	7	1	30	
Micanopy .....	0	3	21	5	1	4	7	1	28	70	0	1	1	0	1	1	1	1	11	
St Augustine .....	4	50	17	14	0	4	0	4	0	93	3	48	10	11	0	0	0	5	77	
Salt Ponds .....	3	7	13	20	8	5	2	2	2	62										
ALABAMA—																				
Carlowville .....	3	5	11	10	10	16	28	10	0	93	0	0	5	1	2	6	2	2	18	
Greene Springs .....	6	2	17	7	7	5	12	11	4	68	4	2	3	2	1	1	2	1	16	
Greensborough .....	1	0	0	1	5	2	7	5	0	26	0	0	0	0	0	1	13	0	14	
Selma .....	3	21	31	17	0	3	11	7	0	93	2	14	9	14	0	0	6	38	83	
MISSISSIPPI—																				
Columbus .....	29	12	14	4	3	1	14	11	0	93	1	2	5	3	3	4	10	1	45	
Natchez .....	17	27	4	9	4	20	2	10	0	93	4	9	17	3	0	3	0	0	36	
Paulding .....	0	35	6	7	1	15	3	12	0	79	1	23	5	7	1	14	3	11	64	
LOUISIANA—																				
Black River .....	33	18	2	7	24	2	1	1	0	93	8	11	2	6	5	3	2	10	49	
New Orleans .....	0	0	0	34	0	59	0	0	0	93										
TEXAS—																				
Austin, [Palm] .....	4	1	11	16	35	21	5	0	0	93	0	1	0	0	0	0	0	0	1	
Austin, [Van Nostrand] .....	17	2	15	1	42	1	0	0	7	93	2	0	2	0	16	0	1	0	21	
Goliad .....	13	9	11	26	6	0	8	2	0	75	20	9	14	4	10	0	4	0	61	
Larissa .....	5	17	19	18	7	18	5	2	1	92	1	5	0	1	8	2	1	0	18	
New Braunfels .....	27	1	11	16	9	3	17	9	0	93										
Union Hill .....	14	0	7	8	52	1	2	2	2	93	8	0	1	1	38	5	0	1	54	
TENNESSEE—																				
Glenwood .....	8	7	1	14	12	13	4	7	22	93	1	10	12	7	2	10	32	11	85	
Memphis .....	19	11	10	5	10	9	8	14	7	93										
KENTUCKY—																				
Bardstown .....	12	13	2	1	8	26	16	14	0	92	12	7	1	0	5	15	20	13	73	
Danville .....	13	2	1	1	2	36	9	21	0	93	3	2	1	1	0	15	16	24	62	
Louisville .....	4	33	1	14	6	19	5	11	0	93	0	6	0	0	0	16	16	11	49	
Paris .....	1	13	1	9	2	30	7	22	0	93	0	2	2	0	2	1	53	0	60	
Springdale .....	5	10	3	0	1	19	9	4	37	93										
OHIO—																				
Bellefontaine .....	1	12	3	3	3	34	7	18	0	81	0	8	0	10	0	35	3	18	74	
Bowling Green .....	1	8	5	0	0	10	0	3	58	85	2	2	1	1	0	1	14	17	46	
Cincinnati, [Harper] .....	3	11	4	7	2	8	14	24	0	73										
Cleveland .....	13	7	0	11	21	10	10	13	6	91	3	1	0	2	0	1	22	1	40	
Dayton .....	7	24	2	3	0	33	0	17	0	86	2	11	0	2	0	35	0	16	66	
Edinburg .....	0	32	10	27	1	6	2	9	6	93	1	4	0	0	0	15	33	17	69	
Hillsborough .....	1	19	0	8	0	42	0	20	1	91	0	0	0	0	0	8	0	7	15	
Hiram .....	12	11	2	11	7	9	1	24	5	90	2	1	1	0	0	0	17	12	35	
Hudson .....	7	1	4	12	5	20	24	12	0	93	0	0	0	0	0	1	0	1	2	
Jackson, [Monroe county] .....	13	5	3	5	10	0	0	0	34	70										
Jefferson .....	1	11	0	15	1	40	0	22	0	93	1	35	0	21	0	10	1	14	80	
Lancaster .....	1	11	3	4	1	32	9	29	0	93	1	10	0	8	1	12	17	14	69	
Madison, [Atkins] .....	1	1	1	3	15	6	16	3	31	90	1	0	0	0	0	0	19	2	22	
Madison, [King] .....	4	13	7	3	3	20	13	12	18	93	5	1	0	0	0	14	20	28	73	
Medina .....	5	11	2	13	3	14	22	15	0	85	1	11	33	42	0	4	0	3	93	
New Lisbon .....	4	5	3	6	7	19	12	37	0	93	1	3	0	0	3	20	12	25	64	
Ripley .....	0	4	0	13	1	1	0	21	24	62	0	3	0	2	0	0	0	7	12	
Savannah .....	1	7	0	16	0	21	23	23	0	93	1	4	0	8	0	23	21	16	73	
Urbana .....	1	6	4	1	0	1	5	18	41	93	5	3	2	0	0	8	30	12	60	
Welchfield .....	4	3	1	25	3	29	4	24	0	93	0	0	0	0	1	0	0	2	3	
Westerville .....	12	5	6	4	1	22	23	19	0	92	3	0	8	2	3	15	18	19	68	



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
<b>MICHIGAN—</b>																				
Battle Creek .....	6	0	5	4	8	15	9	15	31	93	3	1	1	0	0	5	39	10	59	
Cooper .....	0	0	3	0	0	0	4	0	86	93	0	0	0	0	0	0	3	5	8	
Detroit .....	0	0	10	19	8	45	6	4	1	93	0	0	2	31	6	45	4	5	93	
Grand Rapids, [Streng] ..	9	4	3	6	3	25	21	22	0	93	9	2	6	3	6	4	35	20	85	
Marquette .....	1	6	6	10	0	15	17	38	0	93										
Monroe .....	3	17	0	17	0	2	0	54	0	93	2	16	0	14	0	3	0	31	66	
New Buffalo .....											3	0	3	0	1	11	29	23	70	
Port Huron .....	16	1	0	9	4	27	2	24	5	88	7	0	0	0	1	22	0	15	54	
Thunder Bay Island .....	10	0	3	20	8	14	0	41	0	108	3	7	13	27	13	0	2	0	65	
<b>INDIANA—</b>																				
Cannelton .....	9	6	14	11	10	7	6	29	0	92	4	4	2	1	5	4	4	11	35	
Evansville .....	12	11	15	4	22	13	7	6	3	93	1	2	3	0	13	10	16	3	48	
Logansport .....	14	5	4	6	3	15	22	20	0	93	10	10	1	4	1	9	23	29	87	
Madison .....	6	6	5	10	12	22	16	16	0	93	2	1	3	5	7	13	12	4	47	
Michigan City .....	32	7	3	10	15	5	2	4	15	93	16	1	0	0	5	7	5	8	42	
New Harmony .....	8	2	5	2	17	11	7	16	0	68										
Richmond, [Austin] .....	0	16	1	0	7	13	4	11	2	60	7	3	1	0	2	11	11	12	47	
Richmond, [Moore] .....	0	5	2	0	5	10	2	2	15	41										
<b>ILLINOIS—</b>																				
Athens .....	4	28	0	19	5	15	3	12	0	86	0	0	0	0	0	0	27	27	54	
Augusta .....	6	13	13	5	10	12	10	10	14	93	2	5	2	3	1	4	21	8	46	
Aurora .....	10	0	4	13	9	22	14	15	0	93	4	3	0	1	0	10	25	27	70	
Batavia, [Capon] .....	15	18	8	11	11	16	9	5	0	93										
Batavia, [Mead] .....	0	28	0	3	0	45	0	17	0	93	0	17	0	2	0	35	0	24	78	
Brighton .....	2	32	0	5	15	17	2	11	0	90	0	13	3	0	2	16	6	10	56	
Edgington .....	6	17	2	2	3	29	3	30	1	93	6	13	0	1	1	34	3	27	85	
Elgin .....	3	7</																		

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
IOWA—Continued.																			
Iowa City .....	18	2	1	32	7	13	2	17	0	92	0	0	1	2	2	4	1	2	12
Muscatine .....	12	22	10	1	4	28	0	16	0	93	0	2	0	1	1	8	6	7	25
Pleasant Plain .....	6	7	4	13	23	13	5	13	0	87	1	1	0	0	2	9	19	13	45
Poultney .....	7	0	1	5	3	6	8	4	16	50	3	0	1	0	1	3	5	3	16
Rossville .....	10	1	0	10	10	14	0	20	14	93									
Sioux City .....	11	5	8	27	21	2	3	11	1	89	0	0	1	0	13	1	2	9	35
MINNESOTA—																			
Burlington .....	0	0	7	5	9	1	5	0	0	30									
Forest City .....	5	2	0	1	10	22	0	4	49	93									
Hazlewood .....	10	1	1	3	32	8	11	26	0	92	1	1	0	1	7	6	5	3	24
Princeton .....	14	5	6	6	16	17	8	0	12	93	7	1	1	0	13	6	12	7	47
Wabashaw .....	7	11	17	11	2	0	4	3	26	81	10	18	11	3	0	0	1	1	44
NEBRASKA—																			
Bellevue .....	28	1	4	7	33	2	1	2	15	93	13	1	0	3	5	3	3	2	30
Brownville .....	1	20	0	12	6	41	2	11	0	93	1	13	0	7	1	20	1	4	47
Elkham .....	12	10	6	24	22	7	2	8	2	93	0	0	0	0	0	0	1	0	1
Omaha .....	6	8	2	7	23	10	4	9	24	93	6	2	0	0	10	8	5	3	37
KANSAS—																			
Burlingame .....	16	4	6	12	17	12	0	4	22	93									
Lawrence .....	22	2	1	7	50	2	2	3	4	93									
Leavenworth C'y, [Berthoud] .....	0	3	0	0	1	51	13	13	12	93	0	4	0	0	0	34	3	13	54
Leavenworth C'y, [McCarty] .....	14	4	3	14	23	12	1	6	15	92	6	0	0	2	3	10	12	4	37
Manhattan .....	15	6	7	18	19	2	1	0	25	93	3	2	2	7	10	2	0	0	26
Mapleton .....	6	4	19	2	29	1	2	2	16	81	0	0	3	0	0	2	36	1	42
OREGON—																			
Fort Snyder .....	0	4	2	1	0	5	2	1	0	15	3	0	2	1	0	0	0	1	13
MEXICO—																			
Cordova .....	10	17	8	7	5	0	2	3	1	62									
Minatitlan .....	2	32	2	1	7	7	0	2	7	60									
CALIFORNIA—																			
Marysville .....	0	4	2	1	0	0	0	2	16	34									
Sacramento .....	3	4	5	18	29	19	11	4	0	93	0	0	3	12	0	2	0	0	17
San Francisco .....	0	0	0	1	0	7	57	0	28	93	2	0	0	2	8	10	42	0	64
WEST INDIES—																			
Nassau, Bahamas .....	0	2	12	26	2	8	0	0	2	52									
SOUTH AMERICA—																			
Caracas, Venezuela .....	0	0	46	45	0	0	2	0	0	93	1	0	8	16	7	0	1	1	34
Catharina Sophia, Surinam .....	2	15	14	20	3	0	0	0	0	54	0	7	13	12	0	0	0	0	32



## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	2	6	0	2	6	18	15	11	30	90	1	7	0	2	11	29	15	18	78	
Red River Settlement .....	8	0	0	0	8	4	12	4	1	37	3	3	7	5	4	2	0	1	25	
St. John's .....	2	36	0	7	6	11	12	16	0	90	—	—	—	—	—	—	—	—	—	
St. Martin's .....	0	8	0	12	4	46	8	8	0	86	—	—	—	—	—	—	—	—	—	
Stanbridge .....	6	4	6	34	16	5	8	3	5	87	—	—	—	—	—	—	—	—	—	
Toronto .....	3	7	3	20	5	23	2	21	11	90	—	—	—	—	—	—	—	—	—	
Windsor .....	11	4	0	1	11	22	7	11	24	86	0	1	0	11	0	2	0	0	3	
Wolfville .....	1	1	10	5	6	8	15	14	23	83	1	0	2	3	4	12	9	15	46	
MAINE—																				
Cornish, [Guptill] .....	5	0	1	4	14	11	21	34	0	90	—	—	—	—	—	—	—	—	—	
Cornish, [West] .....	5	3	8	2	7	33	22	10	0	90	4	0	0	0	0	3	3	0	10	
Dexter .....	14	8	3	10	10	8	11	24	1	89	—	—	—	—	—	—	—	—	—	
Gardiner .....	2	9	3	20	2	13	5	24	12	90	2	3	0	7	3	10	1	13	39	
Perry .....	1	6	1	10	7	28	4	28	0	85	0	0	0	4	3	16	11	11	40	
Portland .....	12	8	6	3	16	12	14	15	1	87	2	1	1	0	1	8	11	3	27	
Steuben .....	2	15	3	4	0	45	1	12	8	90	1	7	0	0	0	17	7	4	36	
NEW HAMPSHIRE—																				
Concord .....	1	14	0	10	0	22	1	28	10	86	0	0	0	0	0	0	1	1	2	
Shelburne .....	0	0	19	0	0	1	43	0	25	88	1	0	2	2	3	12	27	16	63	
Stratford .....	0	19	18	5	11	11	26	0	0	90	0	0	2	0	5	10	54	0	71	
West Enfield .....	0	0	0	9	18	32	2	29	0	90	0	0	0	10	3	14	1	26	54	
VERMONT—																				
Brandon .....	10	0	5	13	35	5	3	11	5	87	3	0	0	1	1	5	7	24	41	
Burlington .....	6	5	0	3	1	47	2	24	0	88	—	—	—	—	—	—	—	—	—	
Craftsbury .....	3	3	2	6	30	18	14	12	2	90	3	0	0	2	1	16	18	16	56	
Rupert .....	—	—	—	—	—	—	—	—	—	—	1	0	4	0	2	34	0	0	41	
St. Johnsbury .....	8	1	0	10	13	11	31	14	1	89	3	0	0	0	3	2	11	4	23	
MASSACHUSETTS—																				
Amherst .....	13	4	4	13	14	5	7	18	0	78	1	0	1	1	1	0	1	5	10	
Bridgewater .....	9	9	10	1	1	32	15	13	0	90	2	11	6	6	3	2	5	0	35	
Cambridge .....	2	3	3	7	1	39	9	8	18	90	—	—	—	—	—	—	—	—	—	
Florida .....	0	6	0	4	0	14	45	21	0	90	0	6	0	3	0	10	31	15	65	
Lawrence .....	2	7	3	4	4	23	0	47	0	90	—	—	—	—	—	—	—	—	—	
Mendon .....	0	13	1	6	0	40	1	29	0	90	0	6	2	4	1	30	1	17	61	
Nantucket .....	5	14	0	2	5	33	2	13	10	90	—	—	—	—	—	—	—	—	—	
New Bedford .....	12	9	1	5	2	39	6	15	1	90	2	5	1	1	0	11	8	2	25	
Newburyport .....	10	3	6	7	15	5	17	1	0	64	—	—	—	—	—	—	—	—	—	
Westfield .....	3	5	1	17	2	7	19	36	0	90	—	—	—	—	—	—	—	—	—	
Williamstown .....	1	1	7	6	5	15	23	6	23	87	—	—	—	—	—	—	—	—	—	
Worcester .....	16	13	5	3	5	11	12	20	0	85	—	—	—	—	—	—	—	—	—	
RHODE ISLAND—																				
Providence .....	3	14	1	3	0	34	5	29	1	90	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Columbia .....	1	2	1	1	0	29	3	35	18	90	0	2	1	1	0	13	2	17	36	
Middletown .....	7	1	3	6	6	22	6	11	28	90	1	1	1	0	0	19	8	5	35	
Pomfret .....	6	11	2	3	3	32	3	30	0	90	1	2	1	3	3	14	1	10	35	
Saybrook .....	12	2	1	7	8	25	7	20	6	88	2	0	1	0	0	7	11	9	30	
Wallingford .....	10	8	1	9	30	4	2	26	0	90	3	0	0	1	1	10	13	4	32	
NEW YORK—																				
Baldwinsville .....	0	1	8	5	6	17	41	7	0	85	0	1	2	0	0	5	30	7	45	
Beverly .....	11	5	0	10	11	23	0	18	0	78	1	2	3	3	5	13	4	4	35	
Cazenovia .....	6	1	2	4	6	28	11	30	1	89	0	0	0	1	3	15	17	23	59	
Covert .....	3	4	0	27	7	14	14	21	0	90	1	0	0	4	2	14	9	22	52	
Eden .....	3	11	13	2	22	23	10	2	0	86	3	3	0	0	0	5	15	3	29	
Morrisania .....	0	11	4	13	17	10	19	16	0	90	—	—	—	—	—	—	—	—	—	
Nichols .....	3	1	6	42	6	8	7	16	1	90	1	1	1	7	2	6	7	20	45	
Ogdenburg .....	2	0	1	1	6	9	9	2	0	30	—	—	—	—	—	—	—	—	—	
Rochester .....	8	5	1	1	6	22	16	5	0	64	10	1	0	1	5	11	23	6	57	
Sag Harbor .....	11	7	5	7	19	16	13	10	0	88	0	1	0	0	2	7	11	4	19	
Saratoga .....	0	22	0	4	3	50	1	10	0	90	0	22	1	4	3	49	1	10	90	
Wampsville .....	0	0	8	5	27	7	42	1	0	90	0	0	3	4	21	5	30	1	64	

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY—																				
Bloomfield	4	1	3	6	3	28	1	35	0	81										
Lambertville	5	7	3	3	13	21	4	24	0	80										
Newark	5	0	3	7	1	20	5	10	0	60										
PENNSYLVANIA—																				
Bedford	0	0	0	23	1	13	4	37	0	78	2	4	3	19	0	1	0	11	40	
Berwick	3	3	34	1	8	6	32	2	1	90										
Cannonsburg	2	1	20	0	0	11	38	15	3	90										
Carlisle	0	1	2	8	4	13	13	11	35	87	0	2	0	2	2	8	4	9	27	
Chambersburg	13	3	28	4	4	0	4	0	34	90	2	3	4	0	0	9	23	2	49	
Chromedale	0	7	3	13	0	15	10	12	13	73										
Easton	15	8	5	18	6	6	4	20	4	86										
Fleming	3	8	8	12	0	19	15	24	1	90	0	0	0	2	0	0	10	17	35	
Gettysburg	6	6	2	0	19	23	8	18	8	90	1	2	1	3	1	15	16	13	52	
Harrisburg, [Heisely]	4	0	2	3	25	11	27	16	0	88	2	0	0	1	9	2	7	0	27	
Harrisburg, [Hickok]	18	6	11	7	11	5	23	7	0	88	0	1	0	0	0	0	5	0	6	
Lewisburg	10	1	5	9	4	17	7	7	29	89	2	0	1	2	0	0	1	6	18	
Meadville	2	2	0	0	21	6	7	8	44	90	0	1	1	0	1	12	10	16	41	
Morrisville	0	9	1	5	13	23	13	3	14	90	2	2	1	4	2	15	14	1	41	
Mount Joy	4	1	0	26	3	1	1	10	44	90										
Murrysville	0	7	10	5	3	30	5	5	18	83	0	1	0	1	1	18	6	8	35	
Norristown	0	2	3	14	7	8	40	4	0	78	0	0	4	4	0	8	25	0	41	
North Whitehall	1	3	4	2	0	0	5	12	48	90	0	0	3	1	5	2	7	7	25	
Philadelphia	1	16	3	2	5	33	8	22	0	90	0	0	0	1	1	9	3	4	18	
Pittsburg, [M. H.]	2	0	10	2	13	5	15	3	40	90	0	0	0	1	3	8	11	2	25	
Pocapon	15	7	7	2	8	18	17	2	0	76	6	1	2	3	3	9	11	2	37	
Shamokin	0	0	16	0	4	1	69	0	0	90	0	0	0	3	0	43	1	47	47	
Somerset	0	1	5	4	6	16	10	12	36	90	1	0	0	6	4	20	18	12	61	
Tarentum	8	3	0	2	1	16	8	9	42	89	3	0	0	0	1	12	14	11	41	
Westtown	8	0	4	9	10	24	7	28	0	90	0	1	0	4	3	4	21	36	36	
MARYLAND—																				
Annapolis	12	15	0	11	24	6	3	3	10	90	3	1	0	0	0	22	0	1	27	
Baltimore	25	3	4	5	19	5	12	9	7	89										
Bladensburg	4	8	3	3	1	12	2	7	0	40										
Chestertown	0	5	10	4	9	17	8	4	0	63	5	11	4	0	3	0	1	0	24	
Frederick	10	11	0	5	1	5	18	9	29	88	1	0	1	0	2	1	19	6	30	
Leitersburg	4	3	2	4	22	17	11	8	19	90	0	2	5	1	2	12	18	16	62	
Sykesville	13	13	5	8	16	9	17	0	0	90	1	0	4	3	0	6	40	5	59	
DISTRICT OF COLUMBIA—																				
Washington	0	3	10	5	19	4	3	7	24	84	0	0	0	0	0	0	2	0	0	
VIRGINIA—																				
Crichton's Store	42	3	1	3	15	17	5	1	3	90	0	0	0	0	0	15	6	0	21	
Holliday's Cove											0	0	0	0	10	11	21	5	47	
Lewinsville	7	11	9	20	15	7	10	11	0	90										
Lewisburg	0	16	3	2	3	10	0	1	0	35										
Montross	4	7	7	2	11	7	0	5	41	90	0	0	1	0	4	7	8	0	20	
Poplar Grove	0	1	17	0	0	0	28	0	38	90	0	3	0	0	4	13	18	12	50	
Portsmouth	14	25	12	0	3	12	9	6	0	87										
Rougemont	11	8	5	0	30	4	23	0	1	88	3	7	0	0	1	2	21	2	36	
Smithfield	18	17	5	1	15	9	8	17	0	90	7	8	3	1	1	6	8	12	46	
Stribling Springs	1	13	1	11	4	28	0	16	5	79	1	6	0	2	0	17	1	1	28	
Wirt Court-House	0	5	0	2	2	23	1	16	37	86	0	4	0	4	0	24	0	17	49	
NORTH CAROLINA—																				
Chapel Hill	21	15	3	2	7	16	22	4	0	90	2	9	0	0	1	28	3	0	43	
Davidson College	0	25	0	0	0	12	6	0	4	47	0	7	0	1	1	14	0	1	24	
Murfreesborough	2	34	0	3	7	15	1	5	16	83	0	0	0	0	0	1	1	0	2	
SOUTH CAROLINA—																				
All Saints	30	28	4	6	9	4	5	4	0	90	11	13	0	1	3	15	21	7	71	
Charleston, [Dawson]	0	30	4	14	0	9	1	2	0	60										
Charleston, [Johnson]	5	10	2	4	1	4	0	4	0	30										
Columbia	14	2	11	4	13	6	7	3	0	60	12	1	9	3	9	4	2	2	42	
St. John's	2	23	2	18	4	8	2	26	0	85	1	4	3	2	1	3	13	2	29	



## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
GEORGIA—																				
Athens .....	1	10	17	17	11	1	2	12	17	85	0	0	1	0	0	0	1	0	2	
Augusta .....	11	38	10	8	0	4	4	15	0	90	0	22	2	1	1	21	1	0	61	
Savannah .....	8	30	7	15	7	15	3	5	0	90	0	6	7	8	3	6	11	5	46	
Sparta .....	6	34	9	14	3	11	4	8	0	89	0	6	7	8	3	6	11	5	46	
Whitemarsh Island .....	7	27	5	10	5	4	6	6	20	90	2	12	0	7	5	7	7	5	45	
FLORIDA—																				
Alachua County .....	4	34	2	12	2	11	1	24	0	90	2	10	3	10	2	4	1	3	35	
Alligator .....	2	33	8	13	2	7	1	3	21	90	5	25	6	10	0	7	5	2	60	
Atsena .....	12	29	8	13	0	13	10	3	2	90	1	9	5	4	4	12	3	3	41	
Jacksonville .....	14	16	10	12	5	16	2	14	1	90	1	0	0	0	0	0	0	0	1	
Micanopy .....	12	16	19	5	1	0	4	2	27	86	0	49	25	1	0	2	0	4	86	
St. Augustine .....	1	48	25	10	0	1	0	5	0	90	0	49	25	1	0	2	0	4	86	
Salt Ponds .....	11	16	13	10	7	1	2	0	0	60	0	49	25	1	0	2	0	4	86	
ALABAMA—																				
Carlowville .....	5	9	21	4	12	5	27	7	0	90	0	0	0	0	4	0	3	0	7	
Greene Springs .....	6	5	9	27	12	8	11	5	7	90	9	1	2	5	7	1	7	6	38	
Selma .....	13	18	30	17	0	7	4	1	0	90	3	8	11	17	2	6	1	11	59	
MISSISSIPPI—																				
Columbus .....	26	11	19	12	0	4	3	0	0	90	3	3	4	4	4	2	9	3	35	
Natchez .....	25	16	4	7	6	20	0	12	0	90	3	9	3	3	0	9	4	3	34	
Paulding .....	2	23	10	16	0	14	0	15	0	80	2	10	2	11	0	16	0	7	48	
LOUISIANA—																				
Black River .....	37	16	6	12	14	5	0	0	0	90	7	5	1	6	3	4	3	9	38	
New Orleans .....	0	37	0	15	0	30	0	8	0	90	0	37	0	15	0	30	0	8	90	
TEXAS—																				
Austin, [Palm] .....	1	5	33	7	32	9	3	0	0	90	0	0	0	0	1	2	0	0	3	
Austin, [Van Nostrand] ..	18	0	7	0	44	0	19	0	2	90	0	0	1	2	10	0	0	0	13	
Goliad .....	37	13	12	18	8	1	1	0	0	90	15	1	10	2	12	4	16	5	65	
Larissa .....	6	15	26	9	4	14	2	7	4	87	1	1	0	1	2	8	0	0	13	
New Braunfels .....	37	1	9	15	13	1	1	13	0	90	0	0	0	0	0	0	0	0	0	
Union Hill .....	36	1	0	3	43	0	1	4	2	90	8	0	0	8	35	0	0	2	53	
TENNESSEE—																				
Glenwood .....	6	12	2	22	19	3	4	5	17	90	4	2	0	6	3	7	25	10	57	
Memphis .....	21	9	6	9	14	6	1	19	5	90	0	9	6	9	14	6	1	19	5	
KENTUCKY—																				
Bardstown .....	10	9	2	1	20	22	20	6	0	90	5	1	0	0	7	11	15	9	48	
Louisville .....	3	15	0	32	12	21	2	5	0	90	0	3	0	0	2	23	6	2	36	
Paris .....	5	10	0	9	11	32	5	16	0	88	0	0	1	0	7	1	29	0	38	
Springdale .....	1	10	1	1	2	36	7	0	32	90	0	10	1	1	2	36	7	0	32	
OHIO—																				
Bellefontaine .....	2	10	2	9	1	36	13	11	0	84	0	7	0	1	1	33	3	7	52	
Bowling Green .....	0	4	1	1	2	35	2	3	39	87	0	4	0	0	0	15	8	14	41	
Cincinnati, [Harper] .....	2	2	4	4	17	28	15	18	0	90	0	0	0	0	0	0	0	0	0	
Cleveland .....	9	0	0	23	27	11	5	10	4	89	4	0	0	0	1	10	10	10	35	
Dayton .....	0	14	2	6	3	36	2	21	0	84	0	1	0	3	2	28	1	11	46	
Edinburg .....	2	52	4	11	0	0	3	14	3	89	0	0	1	0	0	16	22	10	49	
Hillsborough .....	0	14	1	26	0	32	0	13	0	86	0	1	0	1	1	9	0	1	13	
Hiram .....	9	7	1	6	14	34	5	5	3	84	2	0	0	1	1	6	13	8	31	
Hudson .....	0	3	1	2	6	15	8	1	0	36	0	0	0	0	0	0	1	0	1	
Jackson, [Monroe county] ..	7	2	2	1	7	1	1	0	43	64	0	2	2	1	7	1	0	43	64	
Jefferson .....	0	11	0	12	0	30	0	37	0	90	0	25	0	0	0	0	0	0	25	
Lancaster .....	7	10	7	8	18	14	20	6	0	90	3	3	0	0	3	11	13	12	45	
Madison, [Atkins] .....	0	6	1	2	11	13	11	7	20	71	2	0	0	0	0	0	4	0	6	
Madison, [King] .....	2	1	0	17	10	21	7	18	14	90	2	0	0	0	0	30	6	19	57	
Medina .....	7	7	1	14	25	24	3	7	2	90	5	0	0	0	2	24	3	14	48	
New Lisbon .....	2	4	2	16	5	28	11	20	1	89	1	1	0	5	1	11	12	10	41	
Northwood .....	0	27	3	6	10	13	5	12	0	76	2	8	2	0	3	4	3	9	31	
Ripley .....	0	5	0	11	0	6	1	10	34	67	0	2	0	0	0	1	0	7	10	
Savannah .....	0	2	0	14	0	28	19	27	0	90	0	1	0	4	0	18	11	15	49	
Urbana .....	1	5	2	10	5	14	1	4	42	84	1	1	0	0	3	11	14	10	40	
Welchfield .....	3	3	6	22	27	14	5	10	0	90	0	0	0	1	1	1	0	3	6	
Westerville .....	6	7	3	0	16	23	26	7	1	89	2	0	1	0	8	17	20	4	52	

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MICHIGAN—																				
Battle Creek .....	1	3	4	3	30	17	12	5	15	90	0	1	0	0	0	8	32	5	46	
Cooper .....	0	0	3	3	7	3	21	0	53	90	1	0	0	0	0	0	11	7	19	
Detroit .....	0	0	1	15	14	28	23	9	0	90	0	0	1	30	8	25	19	7	90	
Grand Rapids .....	2	7	3	9	13	32	11	13	0	90	4	7	0	0	2	11	42	10	76	
Marquette .....	1	3	18	9	2	12	27	18	0	90										
New Buffalo .....											1	2	0	1	1	16	28	13	62	
Ottawa Point .....	10	5	4	5	13	16	7	20	0	80	1	14	10	8	7	2	0	1	45	
Port Huron .....	13	2	0	0	20	31	2	7	8	83	7	1	0	0	2	11	5	3	29	
Thunder Bay Island .....	7	9	0	23	21	25	6	28	1	120	5	18	21	8	4	5	6	7	74	
INDIANA—																				
Cannelton .....	8	10	10	17	15	9	13	8	0	90	3	2	0	0	4	3	12	2	26	
Evansville .....	14	7	5	3	44	6	0	2	0	87	1	0	0	0	6	5	14	5	31	
Logansport .....	3	6	3	3	8	36	20	11	0	90	0	4	1	2	0	19	27	12	65	
Madison .....	5	9	2	13	10	21	18	12	0	90	2	0	1	7	8	12	4	2	36	
Michigan City .....	20	2	0	9	35	13	1	5	5	90	11	1	0	0	0	8	3	9	38	
New Harmony .....	2	0	4	5	23	14	8	10	0	66										
Notre Dame .....	3	25	31	2	1	3	7	2	16	90	1	1	1	1	2	9	9	5	29	
Richmond, [Austin] .....	1	14	0	1	10	11	1	8	4	50	1	1	0	0	2	10	7	5	26	
ILLINOIS—																				
Athens .....	1	7	0	26	4	29	0	15	0	82	0	1	1	0	0	6	38	18	64	
Augusta .....	1	5	8	15	15	17	17	9	0	90	0	2	0	1	4	5	17	7	36	
Aurora .....	2	7	2	9	21	29	11	9	0	90	2	4	0	0	2	12	33	12	65	
Batavia, [Capon] .....	3	13	0	6	29	19	7	13	0	90										
Batavia, [Mead] .....	0	11	0	5	0	61	1	12	0	90	0	9	0	0	0	35	1	17	62	
Brighton .....	4	11	5	15	10	32	4	0	0	90	1	1	0	3	1	12	0	0	18	
Edgington .....	1	8	0	10	17	31	2	21	0	90	1	8	0	3	16	23	8	18	77	
Elgin .....	0	6	1	24	13	16	8	14	6	88	0	0	0	0	0	0	0	4	4	
Jacksonville .....	2	0	1	3	7	4	8	5	0	30										
Manchester .....	7	0	2	8	38	10	15	4	0	90	4	5	1	1	16	7	8	8	50	
Marengo .....	0	2	0	30	14	36	2	0	0	90										
Ottawa .....	0	8	0	10	17	22	4	11	1	79	1	3	0	0	5	4	4	7	24	
Pekin .....	6	0	2	7	33	9	5	14	5	90	6	3	1	1	0	6	15	13	51	
Peoria .....	0	5	5	15	41	11	12	1	0	90	1	0	0	0	1	1	3	1	7	
Riley .....	2	5	1	2	14	18	21	12	14	89										
Upper Alton .....	0	0	0	0	5	36	4	45	0	90	0	1	0	0	4	37	4	45	91	
Waynesville .....	9	0	2	0	0	3	49	2	18	89	2	1	0	0	0	7	20	1	31	
West Salem .....	2	7	2	3	37	7	5	8	19	90	0	0	0	0	0	6	32	4	42	
West Urbana .....	1	15	4	25	11	19	5	10	0	90										
Wheaton .....	6	6	2	5	11	34	12	9	4	89	2	0	0	0	0	3	8	8	21	
Winnebago .....	2	12	1	13	14	26	11	11	0	90	0	0	0	0	0	1	22	10	33	
MISSOURI—																				
St. Louis .....	0	4	4	29	12	16	12	4	0	90										
WISCONSIN—																				
Appleton .....	6	20	1	7	0	48	2	0	0	90	5	17	0	5	0	45	2	7	81	
Bay City .....	0	17	3	0	14	43	4	8	0	89	2	5	1	0	0	23	3	2	36	
Bayfield .....	0	10	0	0	6	21	4	19	0	60	1	8	0	0	1	26	5	17	58	
Beloit .....	11	8	6	2	31	12	15	5	0	90	0	1	0	0	1	0	5	0	7	
Green Bay .....	6	2	0	1	15	9	7	0	49	89	5	3	0	0	5	7	2	0	22	
Janesville .....	3	8	2	10	20	22	10	7	8	90										
Kenosha .....	4	5	10	7	18	18	12	8	1	83										
Lind .....	3	8	3	7	23	12	23	4	4	87	4	0	0	0	4	8	27	2	45	
Manitowoc .....	8	4	2	9	11	22	13	21	0	90	0	0	0	0	1	4	13	12	30	
Milwaukee, [Pomeroy] .....	1	16	2	19	7	30	6	8	1	90										
Milwaukee, [Winkler] .....	6	10	7	12	0	17	23	9	0	90										
Platteville .....	2	7	3	32	0	7	7	32	0	90	1	2	1	0	0	10	13	33	59	
Waukesha .....	0	3	4	4	8	13	7	3	45	87	0	3	1	0	0	1	3	1	9	
IOWA—																				
Bellevue .....	6	6	2	12	16	20	12	16	0	90										
Border Plains .....	10	1	5	10	23	7	6	21	7	90	2	0	0	0	4	8	9	11	34	
Dubuque .....	5	7	1	6	11	18	0	18	18	90	2	4	1	1	1	10	11	23	53	
Fairfield .....	1	1	0	16	3	24	2	18	25	90	0	0	1	0	0	0	0	0	1	
Fort Madison .....	1	6	2	12	0	35	8	24	2	90	0	3	2	0	1	13	17	2	38	



## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
IOWA—Continued.																				
Franklin .....	13	3	1	10	20	2	13	10	14	90	0	1	0	0	0	0	0	0	1	
Iowa City .....	6	4	3	27	11	10	5	24	0	90	1	0	0	0	0	0	0	0	1	
Muscatine .....	0	8	1	9	17	27	10	18	0	90	0	2	0	0	0	8	0	2	12	
Pleasant Plain .....	0	11	0	10	17	23	9	18	1	89	0	0	0	0	0	10	13	7	30	
Rossville .....	5	8	5	9	15	13	14	12	7	88										
Sioux City .....	9	2	0	29	4	1	3	41	0	89	3	0	0	1	3	1	1	6	15	
MINNESOTA—																				
Burlington .....	1	2	8	2	8	3	4	1	0	29										
Forest City .....	0	0	0	0	3	14	3	9	61	90										
Hazlewood .....	10	1	2	22	13	2	6	30	2	88	5	0	1	0	0	2	3	9	20	
Lapham .....	5	1	11	7	4	3	0	1	0	32	2	0	5	2	0	0	1	0	10	
Princeton .....	19	7	12	11	8	6	18	7	2	90	7	2	17	3	2	0	8	1	40	
NEBRASKA—																				
Bellevue .....	41	3	1	9	27	2	2	1	0	86	8	1	0	1	4	2	4	0	20	
Brownville .....	0	6	0	15	1	39	1	28	0	90	0	2	0	6	0	11	1	10	30	
Elkham .....	6	12	10	27	8	6	7	12	2	90										
Omaha .....	9	6	0	10	23	2	8	11	21	90	13	1	0	4	7	8	4	7	44	
KANSAS—																				
Burlingame .....	11	5	5	4	32	5	2	11	15	90										
Lawrence .....	24	1	2	0	52	1	3	0	0	83										
Leavenw'h C'y, [Berthoud]	1	6	0	6	6	44	11	2	14	90	0	8	0	10	4	36	1	3	62	
Leavenw'h C'y, [McCarty]	10	1	2	7	41	8	5	4	2	80	3	0	0	0	2	1	11	5	22	
Manhattan .....	7	2	1	6	34	5	0	2	33	90	2	0	0	2	4	4	0	0	12	
Mapleton .....	12	3	5	0	30	18	12	1	9	90	0	0	0	0	0	6	27	1	34	
MEXICO—																				
Cordova .....	22	16	2	3	5	2	3	7	0	60										
Minatitlan .....	1	25	1	1	2	17	1	1	12	60										
CALIFORNIA—																				
Sacramento .....	15	2	2	22	17	14	8	9	0	90	0	0	0	8	1	12	0	0	21	
San Francisco .....	0	0	0	0	1	2	42	0	45	90	0	0	0	1	10	4	21	0	36	
Marysville .....	5	1	0	23	4	42	1	14	0	90										
WEST INDIES—																				
Nassau, Bahamas .....	2	22	4	24	0	0	0	0	0	52										
SOUTH AMERICA—																				
Catharina Sophia, Surinam	5	33	10	26	6	1	0	3	0	84	1	15	18	19	0	0	0	0	53	
EASTERN CONTINENT—																				
Jerusalem, Palestine .....	9	0	0	8	2	0	6	48	17	90	2	0	0	3	0	0	3	23	31	





## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW JERSEY—Continued.																			
Newark .....	8	13	2	4	1	16	5	14	0	63	---	---	---	---	---	---	---	---	---
PENNSYLVANIA—																			
Bedford .....	0	0	3	18	3	19	2	36	0	81	3	10	3	19	0	0	0	17	52
Berwick .....	5	2	31	3	5	3	31	4	0	84	---	---	---	---	---	---	---	---	---
Cannonsburg .....	0	0	24	16	0	5	39	7	2	93	---	---	---	---	---	---	---	---	---
Carlisle .....	0	3	3	20	0	14	17	8	28	93	0	3	2	11	0	10	8	3	37
Chambersburg .....	3	3	26	7	9	1	6	1	37	93	2	0	5	4	5	7	22	14	59
Chromedale .....	0	5	0	12	4	39	1	32	0	93	---	---	---	---	---	---	---	---	---
Easton .....	10	13	3	14	9	6	5	27	2	89	---	---	---	---	---	---	---	---	---
Fleming .....	0	2	18	13	0	14	20	25	1	93	0	1	1	7	3	7	18	12	49
Gettysburg .....	9	2	2	5	16	10	11	12	26	93	5	1	1	4	12	4	25	7	59
Harrisburg, [Heisely] .....	5	0	3	11	30	0	16	26	0	91	3	0	0	2	11	0	7	13	36
Harrisburg, [Hickok] .....	12	7	18	5	8	12	22	9	0	93	1	0	3	0	1	3	6	1	15
Lewisburg .....	8	2	1	9	6	5	10	15	37	93	2	1	0	0	1	2	1	2	9
Morrisville .....	3	13	8	4	4	24	11	9	17	93	2	6	5	3	2	23	10	4	55
Mount Joy .....	2	1	1	26	5	1	1	12	44	93	---	---	---	---	---	---	---	---	---
Murrysville .....	2	10	15	8	1	34	4	2	17	93	0	2	2	0	1	29	7	6	47
Norristown .....	0	1	18	9	1	7	41	1	0	78	0	4	8	3	4	4	21	3	45
North Whitehall .....	2	8	9	0	5	12	9	3	45	93	1	6	3	0	2	5	22	2	41
Philadelphia .....	6	21	1	3	4	35	12	11	0	93	0	6	1	0	0	8	3	0	18
Pittsburg, [Marine Hosp'l] .....	3	1	14	8	10	13	11	3	30	93	1	0	3	0	4	17	5	0	30
Pocopson .....	9	8	3	5	3	22	23	11	0	84	6	3	1	0	1	11	8	1	31
Shamokin .....	1	2	19	2	12	2	54	1	0	93	2	0	0	0	0	3	47	0	52
Somerset .....	2	1	2	10	8	12	18	5	35	93	3	3	1	7	8	9	28	6	65
Tarentum .....	5	6	3	1	4	21	7	6	40	93	3	2	0	2	3	19	24	5	58
West Haverford .....	0	9	1	6	3	13	0	15	6	62	1	2	0	0	0	7	8	14	32
Westtown .....	7	7	5	14	12	11	6	30	0	92	1	2	2	3	1	6	1	21	37
MARYLAND—																			
Annapolis .....	9	13	4	11	10	18	7	10	11	93	8	0	0	0	0	19	3	1	31
Baltimore .....	28	3	9	11	9	9	12	11	1	93	---	---	---	---	---	---	---	---	---
Bladensburg .....	1	6	5	6	1	8	0	8	0	35	---	---	---	---	---	---	---	---	---
Chestertown .....	6	7	22	4	5	15	24	5	2	90	1	0	1	1	0	0	0	0	3
Frederick .....	1	17	0	4	5	11	19	8	28	93	0	0	1	4	2	22	5	3	36
Leitersburg .....	5	2	1	7	13	19	21	7	18	93	6	0	0	4	9	8	16	10	53
Sykesville .....	9	16	8	6	9	10	33	2	0	93	0	2	15	5	0	4	45	1	72
DISTRICT OF COLUMBIA—																			
Washington .....	11	6	5	3	13	2	6	12	32	90	---	---	---	---	---	---	---	---	---
VIRGINIA—																			
Crichton's Store .....	33	9	7	2	11	23	2	3	3	93	0	0	0	0	0	1	5	0	0
Holliday's Cove .....	---	---	---	---	---	---	---	---	---	---	1	0	0	1	11	16	32	4	65
Kanawha .....	12	0	0	0	32	0	2	1	4	51	0	0	0	0	1	5	14	0	20
Lewinsville .....	7	4	12	14	19	3	17	17	0	93	---	---	---	---	---	---	---	---	---
Lewisburg .....	8	2	0	0	19	43	12	7	2	93	9	2	0	0	18	47	10	7	93
Montross .....	5	6	10	6	5	8	9	4	39	90	5	3	0	0	3	3	5	1	20
Point Pleasant .....	8	0	27	3	4	2	46	0	0	90	5	2	13	0	0	0	27	0	47
Poplar Grove .....	0	0	29	2	0	4	22	5	31	93	1	2	0	2	3	18	20	3	49
Portsmouth .....	4	18	14	14	0	14	9	18	0	91	---	---	---	---	---	---	---	---	---
Rougemont .....	4	8	8	2	18	4	17	6	2	69	1	3	2	0	6	4	10	2	28
Smithfield .....	13	18	9	7	9	17	6	14	0	93	0	10	2	1	5	7	10	6	41
Stribling Springs .....	2	28	0	3	3	43	0	14	0	93	0	9	0	3	0	23	0	1	36
Winchester .....	0	0	1	4	2	9	11	0	66	93	---	---	---	---	---	---	---	---	---
Wirt Court House .....	0	3	1	4	1	24	1	28	31	93	0	0	0	4	1	37	1	21	64
NORTH CAROLINA—																			
Chapel Hill .....	11	29	4	2	10	10	18	4	0	88	2	5	5	2	6	15	2	0	37
Davidson College .....	3	39	2	0	0	30	2	8	10	88	0	10	6	5	1	27	2	0	51
Goldsborough .....	15	23	3	6	13	11	1	8	11	91	4	7	0	1	2	7	0	2	23
Murfreesborough .....	0	13	6	7	2	4	7	9	27	75	0	8	0	6	3	4	11	4	36
SOUTH CAROLINA—																			
All Saints .....	19	32	4	7	7	12	7	5	0	93	3	12	4	3	3	21	23	2	71
Charleston, [Dawson] .....	1	30	5	8	2	14	0	2	0	62	---	---	---	---	---	---	---	---	---
Charleston, [Johnson] .....	3	12	1	2	0	8	2	3	0	31	---	---	---	---	---	---	---	---	---
Columbia .....	10	3	17	3	13	1	11	4	0	62	5	3	12	3	0	1	5	2	40

## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
SOUTH CAROLINA—Contin'd.																				
St. John's .....	4	19	2	24	2	11	2	23	0	87	3	0	10	0	3	4	10	0	30	
GEORGIA—																				
Athens .....	4	1	4	7	4	0	1	5	23	49	0	0	3	0	0	0	0	0	3	
Augusta .....	2	37	5	9	0	27	8	5	0	93	2	11	11	8	0	30	2	1	65	
Savannah .....	6	31	3	5	11	18	2	17	0	93	0	0	1	1	3	1	0	0	6	
Sparta .....	4	25	10	16	2	14	5	15	0	91	1	3	4	7	4	4	9	7	39	
Whitemarsh Island .....	4	28	3	7	■	7	9	6	20	93	3	11	5	4	10	3	8	1	45	
FLORIDA—																				
Alachua County .....	14	20	5	13	3	9	■	24	0	88	—	—	—	—	—	—	—	—	—	
Alligator .....	0	34	8	7	2	6	2	6	28	93	1	11	6	5	2	6	1	1	33	
Atsena .....	28	10	11	11	4	7	8	7	7	93	5	8	6	9	4	7	1	2	42	
Belair .....	2	12	31	7	5	3	1	3	25	89	0	2	17	8	1	5	6	6	45	
Jacksonville .....	10	30	9	11	2	20	5	5	1	93	3	8	3	2	3	13	4	4	40	
Micanopy .....	10	12	6	16	5	0	1	2	23	75	1	1	2	0	1	0	1	0	6	
St. Augustine .....	3	72	4	10	0	1	0	1	0	91	■	57	5	13	0	1	0	1	77	
Salt Ponds .....	14	19	16	12	0	■	0	1	0	62	—	—	—	—	—	—	—	—	—	
ALABAMA—																				
Carlowville .....	16	12	19	11	15	6	■	5	0	93	■	0	0	0	4	2	2	0	■	
Greene Springs .....	2	6	15	26	0	6	12	4	21	92	2	0	2	12	8	11	7	7	49	
Greensborough .....	7	1	10	22	2	0	5	8	■	55	1	1	2	13	1	1	15	0	34	
Montgomery .....	0	0	0	9	0	2	0	0	10	21	■	3	0	20	5	11	3	0	42	
Selma .....	14	5	30	5	4	7	12	16	■	93	12	3	8	■	21	5	10	12	79	
MISSISSIPPI—																				
Columbus .....	13	2	18	24	13	■	7	10	0	93	2	0	1	11	12	12	11	5	54	
Natchez .....	13	11	3	22	14	22	5	3	0	93	■	3	2	12	4	5	0	4	32	
Paulding .....	0	7	7	28	1	27	3	11	■	84	0	3	5	22	■	26	3	10	69	
LOUISIANA—																				
Black River .....	27	5	9	16	19	7	3	7	0	93	4	1	■	9	■	10	7	4	44	
New Orleans .....	0	16	■	12	0	26	■	39	■	93	—	—	—	—	—	—	—	—	—	
TEXAS—																				
Austin, [Palm] .....	15	11	2	13	34	18	0	■	0	93	2	0	1	1	8	7	1	1	21	
Austin, [Van Nostrand] .....	17	0	12	0	39	1	17	0	4	90	1	■	1	1	19	2	5	■	29	
Goliad .....	28	1	10	30	9	0	1	2	0	81	4	1	8	15	5	1	24	0	58	
Larissa .....	11	10	11	22	11	12	2	■	2	87	1	0	0	2	4	4	2	■	13	
New Braunfels .....	27	3	28	■	3	3	9	14	■	93	—	—	—	—	—	—	—	—	—	
Union Hill .....	21	0	■	11	47	2	5	4	3	93	22	0	0	7	29	1	0	2	61	
Washington .....	31	0	0	0	11	0	2	1	14	59	1	0	0	■	■	0	0	1	2	
TENNESSEE—																				
Glenwood .....	8	8	3	22	16	12	4	6	14	93	1	■	0	7	10	24	26	5	73	
Memphis .....	5	2	10	22	17	16	5	16	0	93	—	—	—	—	—	—	—	—	—	
KENTUCKY—																				
Bardstown .....	5	16	10	2	7	20	29	2	0	91	10	6	10	1	4	5	10	■	55	
Louisville .....	3	12	7	15	9	27	8	12	0	93	0	3	0	5	3	18	5	4	38	
Paris .....	9	9	2	14	10	32	8	7	0	91	0	■	1	0	20	3	13	0	37	
Springdale .....	1	19	7	1	14	23	9	0	19	93	—	—	—	—	—	—	—	—	—	
OHIO—																				
Avon .....	0	3	8	4	6	14	8	4	1	48	3	4	3	2	1	9	20	6	48	
Bellefontaine .....	3	7	3	13	2	34	12	11	0	85	0	6	0	12	1	43	6	6	74	
Bowling Green .....	1	16	4	0	0	32	2	3	34	92	1	5	■	6	2	12	12	8	46	
Cincinnati, [Harper] .....	4	0	17	5	29	4	22	12	■	93	■	0	0	0	0	■	1	■	1	
Cleveland .....	8	8	6	14	19	10	8	9	2	84	2	3	■	0	5	12	12	8	42	
Dayton .....	4	■	1	20	4	25	1	18	0	81	0	3	0	13	3	20	1	12	52	
Edinburg .....	0	50	9	15	0	3	1	11	4	93	0	0	0	3	0	29	34	10	76	
Hillsborough .....	1	20	0	26	0	33	5	7	0	92	0	■	0	3	■	10	0	2	15	
Hiram .....	10	2	3	4	■	24	9	7	0	68	3	0	0	0	0	4	15	4	26	
Hudson .....	7	8	11	14	13	20	■	10	1	93	—	—	—	—	—	—	—	—	—	
Jackson, (Monroe county) .....	9	4	5	3	11	1	0	1	40	74	0	0	0	0	0	2	3	0	5	
Jefferson .....	0	10	■	36	9	34	0	4	0	93	9	34	0	4	0	10	0	36	93	
Lancaster .....	3	12	7	11	15	24	16	5	0	93	■	2	2	3	7	15	17	6	52	
Madison, [Atkins] .....	3	3	4	7	10	13	2	8	27	77	2	0	6	0	1	0	0	0	9	
Madison, [King] .....	1	10	2	14	10	26	5	15	9	92	2	5	2	4	7	28	16	14	78	
Medina .....	8	2	■	3	11	13	1	2	0	40	2	0	5	0	1	10	13	6	37	



## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Montville.....	13	12	0	12	28	22	1	4	0	92	2	21	16	6	4	3	0	1	53	
New Lisbon.....	4	5	1	19	19	18	13	13	0	93	1	2	1	18	5	11	20	17	75	
Northwood.....	1	27	4	3	8	24	16	8	0	91	5	1	15	6	0	11	3	4	45	
Ripley.....	0	1	2	19	0	4	0	17	23	66	0	1	0	0	0	0	3	3	7	
Savannah.....	1	9	0	17	0	34	10	22	0	93	1	9	0	5	0	30	8	22	75	
Urbana.....	0	10	6	12	5	13	2	7	31	86	0	3	1	5	4	10	18	9	50	
Welchfield.....	3	7	8	18	10	26	11	10	0	93	0	0	0	0	0	2	1	0	3	
Westerville.....	4	6	2	9	8	19	31	9	3	91	3	4	0	8	7	12	25	8	67	
MICHIGAN—																				
Battle Creek.....	4	5	12	7	14	16	20	4	11	93	2	0	5	1	11	4	43	4	70	
Cooper.....	0	0	0	0	0	0	7	0	85	92	4	0	1	3	0	13	5	32		
Detroit.....	0	4	14	17	16	26	15	1	0	93	1	1	13	22	5	36	9	6	93	
Fort Gratiot.....	4	12	0	12	7	20	0	6	0	61	9	5	5	0	7	4	5	0	35	
Grand Rapids, [Streng].....	4	10	19	8	8	22	12	10	0	93	1	8	12	3	0	11	41	0	88	
Marquette.....	0	3	21	23	0	6	25	15	0	93										
Monroe.....	0	12	0	25	0	12	0	44	0	93	0	12	0	25	0	7	0	39	83	
New Buffalo.....											0	5	10	7	1	16	28	11	78	
Ottawa Point.....	8	21	14	11	13	33	14	10	0	124	12	18	21	7	5	13	3	2	81	
Port Huron.....	11	9	1	5	15	14	12	12	7	86	5	4	0	4	0	5	16	2	36	
Thunder Bay Island.....	11	14	8	35	10	17	6	19	4	124	3	1	1	5	0	5	8	9	32	
INDIANA—																				
Cannelton.....	0	5	8	28	17	15	6	13	1	93	1	1	1	11	12	5	3	5	39	
Logansport.....	5	4	10	14	8	15	23	14	0	93	3	2	4	13	3	22	22	11	80	
Madison.....	3	13	4	16	0	29	9	13	0	93	0	10	3	13	4	13	5	4	52	
Michigan City.....	5	4	2	5	14	6	5	5	4	50	4	1	0	1	2	7	1	6	22	
New Harmony.....	0	2	5	15	17	15	7	6	0	67										
Notre Dame.....	3	4	16	5	4	28	13	5	10	88	3	0	4	1	3	13	13	4	41	
Richmond, [Austin].....	4	11	5	5	5	15	2	7	5	59	0	1	4	3	4	11	8	9	40	
Richmond, [Moore].....	1	2	9	10	3	14	10	2	26	77										
ILLINOIS—																				
Athens.....	0	16	4	21	12	21	1	13	0	88	0	3	0	1	0	11	22	4	41	
Augusta.....	3	9	17	12	12	18	10	6	6	93	2	2	6	2	4	7	13	2	38	
Aurora.....	6	8	19	11	9	21	12	7	0	93	2	3	7	8	5	13	30	3	71	
Batavia, [Capon].....	10	13	18	0	17	15	7	11	0	93										
Batavia, [Mead].....	0	29	0	8	0	37	4	15	0	93	0	16	0	5	0	46	6	9	82	
Brighton.....	6	13	3	14	15	18	9	15	0	93	0	6	2	13	6	19	4	4	54	
Edgington.....	0	35	1	4	8	16	5	24	0	93	0	34	2	4	4	19	5	22	90	
Elgin.....	2	19	11	6	13	11	16	6	4	88	0	0	0	0	0	0	1	1	2	
Jacksonville.....	2	1	1	8	4	7	6	2	0	31										
Manchester.....	10	5	12	7	35	5	15	4	0	93	8	2	8	5	18	8	15	2	66	
Marengo.....	0	8	13	23	9	34	6	0	0	93										
Ottawa.....	1	29	2	8	5	23	7	10	3	88	0	8	3	4	2	0	1	1	19	
Pekin.....	7	6	15	10	24	5	12	7	7	93	2	3	3	9	2	11	12	8	50	
Peoria.....	5	18	14	5	13	12	24	2	0	93										
Riley.....	5	12	5	4	13	12	15	13	13	92										
Upper Alton.....	4	4	0	10	4	32	9	30	0	93	5	4	0	9	4	34	9	29	94	
Waynesville.....	11	0	23	0	6	5	32	0	9	86	7	0	7	1	4	3	21	0	43	
West Salem.....	7	7	9	10	29	10	5	4	12	93	0	0	0	0	1	14	28	3	46	
West Urbana.....	6	1	10	23	20	23	5	5	0	93	0	0	0	0	0	0	2	0	2	
Wheaton.....	6	17	14	2	8	24	8	6	4	89	2	1	1	1	0	3	3	2	13	
Winnebago.....	7	22	5	11	5	28	9	6	0	93	0	0	1	0	0	2	19	0	28	
MISSOURI—																				
St. Louis.....	5	2	17	24	12	9	17	7	0	93										
WISCONSIN—																				
Appleton.....	5	32	0	3	2	36	5	10	0	93	5	37	0	3	2	27	3	12	89	
Bay City.....	0	32	8	1	12	18	17	5	0	93	0	5	4	0	4	12	15	0	42	
Bayfield.....	0	22	0	3	4	10	2	20	1	62	1	22	0	3	0	15	3	17	61	
Beloit.....	10	9	14	17	15	17	5	6	0	93	1	0	0	0	1	4	1	0	7	
Green Bay.....	12	2	16	0	10	5	17	0	31	93	5	0	12	3	12	3	14	0	48	
Janesville.....	2	7	22	12	9	20	17	1	3	93										
Kenosha.....	2	2	21	10	8	22	18	6	0	89										
Lind.....	2	15	12	6	17	3	21	2	4	82	1	2	9	0	10	4	21	5	52	

## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
WISCONSIN—Continued.																				
Madison .....	5	11	10	8	0	16	5	10	0	75	0	0	1	0	0	0	4	0	5	
Manitowoc .....	4	14	11	8	10	12	21	13	0	93	1	2	2	3	0	8	13	3	32	
Milwaukee, [Pomeroy] .....	0	19	11	9	3	21	19	11	0	93	—	—	—	—	—	—	—	—	—	
Milwaukee, [Winkler] .....	1	13	22	7	3	11	23	13	0	93	—	—	—	—	—	—	—	—	—	
Platteville .....	0	5	22	22	1	12	9	22	0	93	0	4	19	7	1	27	14	0	78	
Waukesha .....	3	15	2	2	9	6	20	5	31	93	2	0	4	0	0	1	7	1	15	
IOWA—																				
Bellevue .....	0	19	11	9	8	15	19	12	0	93	—	—	—	—	—	—	—	—	—	
Border Plains .....	8	6	13	12	15	8	4	24	3	93	0	1	0	0	0	9	5	5	22	
Dubuque .....	5	7	5	12	8	18	5	15	18	93	0	8	3	10	3	11	8	19	62	
Fairfield .....	0	9	1	21	0	10	3	13	36	93	0	2	4	2	0	0	2	1	11	
Fort Madison .....	3	18	3	10	0	30	9	19	1	93	2	10	6	1	3	9	20	5	56	
Iowa City .....	5	7	13	19	6	11	16	14	0	91	0	0	0	2	0	1	4	1	8	
Muscatine .....	0	7	14	7	13	21	23	8	0	93	0	4	0	1	0	7	0	1	13	
Pleasant Plain .....	4	20	12	8	14	15	7	11	2	93	0	1	0	1	0	6	7	2	17	
Rossville .....	5	9	21	4	10	7	17	13	7	93	—	—	—	—	—	—	—	—	—	
Sioux City .....	1	2	0	14	0	0	2	16	0	35	0	0	0	0	0	0	0	2	2	
MINNESOTA—																				
Burlington .....	6	20	20	7	11	6	0	14	0	93	3	18	17	7	9	4	11	14	83	
Forest City .....	3	0	14	4	4	2	11	0	46	93	—	—	—	—	—	—	—	—	—	
Hazlewood .....	1	7	2	12	22	3	7	39	0	93	1	6	7	3	10	1	5	5	38	
Princeton .....	13	7	24	10	10	3	23	3	0	93	12	0	18	1	4	1	22	3	61	
NEBRASKA—																				
Bellevue .....	40	8	8	6	16	1	4	0	8	93	0	4	3	2	0	2	1	3	21	
Brownville .....	0	29	0	9	1	24	2	28	0	93	0	19	0	8	1	13	1	11	53	
Elkham .....	2	25	14	14	6	9	8	14	1	93	—	—	—	—	—	—	—	—	—	
Omaha .....	2	6	1	5	3	1	6	7	0	37	0	3	4	3	0	4	5	5	24	
KANSAS—																				
Burlingame .....	23	10	8	3	20	4	5	5	15	93	—	—	—	—	—	—	—	—	—	
Lawrence .....	30	3	1	2	22	1	4	4	2	69	1	0	0	0	0	0	0	0	1	
Leavenworth C'y, [Berthoud] .....	1	5	0	24	2	37	4	8	3	84	0	8	2	24	6	28	1	3	72	
Leavenworth C'y, [McCarty] .....	2	7	3	7	7	0	0	7	2	35	1	2	2	2	1	0	1	6	15	
Manhattan .....	13	16	1	8	10	8	1	3	33	93	6	6	1	4	6	8	2	1	34	
MEXICO—																				
Cordova .....	21	17	2	3	5	4	2	6	2	62	—	—	—	—	—	—	—	—	—	
Minatitlan .....	1	31	0	1	6	11	3	0	7	60	—	—	—	—	—	—	—	—	—	
CALIFORNIA—																				
Marysville .....	0	0	0	13	65	3	0	6	0	93	—	—	—	—	—	—	—	—	—	
Sacramento .....	25	4	2	11	15	7	7	22	0	93	0	0	0	8	3	23	12	4	50	
San Francisco .....	9	1	0	0	3	9	21	7	43	93	3	1	2	2	10	9	36	3	66	
WEST INDIES—																				
Nassau, Bahamas .....	13	32	6	0	0	0	0	1	0	52	—	—	—	—	—	—	—	—	—	
SOUTH AMERICA—																				
Catharina Sophia, Surinam .....	1	49	12	21	6	2	1	1	0	93	0	11	20	20	0	0	0	0	51	
EASTERN CONTINENT—																				
Jerusalem, Palestine .....	6	3	2	11	0	1	6	27	37	93	0	0	0	2	1	1	2	11	17	



## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal.....	2	22	4	3	0	10	9	30	10	90	3	25	5	3	0	9	11	30	86	
Red River Settlement.....	6	1	1	2	19	10	1	13	5	58	10	6	0	5	2	0	3	8	34	
Rigolet.....	19	4	3	0	1	1	0	25	7	60	---	---	---	---	---	---	---	---	---	
St. John's.....	22	34	0	3	6	9	10	6	0	90	9	16	0	1	3	0	0	0	29	
St. Martin.....	1	26	2	13	2	14	12	20	0	90	---	---	---	---	---	---	---	---	---	
Stanbridge.....	1	15	10	11	9	4	30	2	8	90	---	---	---	---	---	---	---	---	---	
Toronto.....	1	23	5	6	0	13	1	34	7	90	---	---	---	---	---	---	---	---	---	
Windsor.....	24	9	0	3	4	9	15	14	12	90	---	---	---	---	---	---	---	---	---	
Wolfville.....	4	22	4	0	1	1	31	11	0	74	2	21	2	0	1	2	20	12	60	
MAINE—																				
Cornish, [Guptill].....	12	7	4	2	8	2	4	51	0	90	---	---	---	---	---	---	---	---	---	
Cornish, [West].....	8	20	4	3	1	11	21	22	0	90	0	0	0	0	0	0	1	0	1	
Dexter.....	6	19	7	1	2	0	3	48	4	90	---	---	---	---	---	---	---	---	---	
Gardiner.....	6	23	2	4	0	7	2	35	11	90	6	5	1	0	1	10	1	23	47	
Perry.....	4	18	5	0	0	4	2	57	0	90	3	13	4	0	1	3	1	23	48	
Portland.....	23	17	1	1	2	4	19	23	0	90	3	1	4	0	1	7	13	11	40	
Steuben.....	4	45	0	0	0	6	12	20	3	90	3	12	0	0	1	10	10	12	48	
NEW HAMPSHIRE—																				
Shelburne.....	0	0	15	0	0	0	61	0	14	90	6	0	2	4	0	0	30	18	66	
Stratford.....	2	10	16	3	8	11	14	26	0	90	2	3	6	5	2	9	28	28	83	
West Enfield.....	0	4	3	10	1	10	11	48	3	90	2	4	1	9	1	6	5	41	70	
VERMONT—																				
Brandon.....	27	1	4	11	9	4	0	22	6	90	0	0	0	1	1	1	4	32	39	
Burlington.....	5	7	0	15	4	13	2	30	0	76	---	---	---	---	---	---	---	---	---	
Craftsbury.....	3	20	2	2	17	6	3	33	4	90	2	3	0	1	0	0	9	19	34	
Rupert.....	---	---	---	---	---	---	---	---	---	---	0	0	1	4	0	76	1	0	82	
St. Johnsbury.....	18	5	2	5	7	8	12	33	0	90	1	0	0	0	0	1	8	4	14	
MASSACHUSETTS—																				
Amherst.....	5	9	3	9	0	8	5	46	1	86	1	1	4	1	0	3	6	22	38	
Bridgewater.....	23	14	5	2	1	1	21	23	0	90	10	4	5	0	2	1	9	7	38	
Cambridge.....	6	11	6	1	0	18	8	25	15	90	---	---	---	---	---	---	---	---	---	
Florida.....	0	17	0	0	0	7	33	33	0	90	0	16	1	1	0	10	31	23	82	
Lawrence.....	0	11	0	6	0	8	4	55	0	90	---	---	---	---	---	---	---	---	---	
Mendon.....	1	21	10	2	0	16	6	34	0	90	1	16	10	5	1	19	5	21	78	
Nantucket.....	5	16	5	3	0	4	6	46	5	90	---	---	---	---	---	---	---	---	---	
New Bedford.....	10	15	2	5	0	5	7	45	1	90	2	5	0	1	0	0	7	10	25	
Newburyport.....	6	4	7	0	4	1	9	12	0	43	0	0	1	0	0	0	0	0	1	
Richmond.....	0	17	0	9	1	4	0	59	0	90	0	16	0	10	2	6	0	27	61	
Westfield.....	10	11	3	5	2	5	21	33	0	90	---	---	---	---	---	---	---	---	---	
Williamstown.....	7	2	5	1	0	6	13	32	6	72	---	---	---	---	---	---	---	---	---	
Worcester.....	10	17	1	2	0	5	8	37	0	80	---	---	---	---	---	---	---	---	---	
RHODE ISLAND—																				
Providence.....	5	23	1	0	0	12	3	45	0	89	---	---	---	---	---	---	---	---	---	
CONNECTICUT—																				
Columbia.....	3	24	1	0	0	3	0	48	11	90	3	14	1	1	0	3	0	34	56	
Middletown.....	13	14	1	0	0	6	12	28	16	90	2	0	0	0	0	13	19	13	47	
New London.....	7	24	1	0	0	13	4	41	0	90	---	---	---	---	---	---	---	---	---	
Pomfret.....	6	23	0	1	2	10	1	47	0	90	3	16	0	0	1	3	6	23	52	
Saybrook.....	7	19	7	1	1	1	11	35	8	90	0	5	3	2	0	2	16	14	42	
Wallingford.....	17	19	0	1	9	8	35	1	0	90	3	6	5	1	1	8	15	8	47	
NEW YORK—																				
Baldwinsville.....	1	4	14	8	0	5	26	32	0	90	0	0	5	2	1	3	39	27	77	
Beverly.....	3	24	0	0	0	31	0	26	0	84	0	19	1	3	0	23	7	16	69	
Cazenovia.....	0	7	10	13	1	8	13	35	1	88	0	0	4	15	2	4	19	34	78	
Eden.....	1	4	12	11	26	10	15	4	0	83	0	0	0	0	1	4	18	1	24	
Fort Edward.....	10	26	7	9	3	10	4	21	0	90	0	3	10	17	2	1	3	0	36	
Houseville.....	11	4	0	4	12	13	17	25	0	86	0	0	0	0	0	13	20	9	42	
Morrisania.....	8	15	1	1	1	12	26	26	0	90	---	---	---	---	---	---	---	---	---	
Nichols.....	4	1	4	23	11	5	7	35	0	90	5	0	0	3	7	6	6	35	62	
Ogdensburg.....	2	9	0	1	1	7	2	9	0	31	---	---	---	---	---	---	---	---	---	
Rochester.....	0	5	12	2	0	4	31	0	0	60	5	4	16	2	0	3	38	8	76	
Sag Harbor.....	10	14	5	0	1	6	9	24	3	72	1	1	1	0	2	10	8	7	30	

## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLCUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued																			
Saratoga.....	0	30	2	1	0	28	2	27	0	90	0	34	2	1	0	22	2	28	89
Wampsville.....	0	1	23	2	5	6	53	0	0	90	0	1	24	1	6	5	51	0	88
NEW JERSEY—																			
Lambertville.....	4	22	3	1	0	7	8	37	0	82									
Newark.....	3	21	0	1	0	13	4	18	0	60									
PENNSYLVANIA—																			
Bellefonte.....	18	2	3	1	4	6	18	19	0	71	16	0	0	2	4	0	3	0	34
Berwick.....	0	0	32	1	3	1	41	12	0	90									
Cannonsburg.....	0	4	13	7	0	18	24	22	2	90									
Carlisle.....	0	4	9	5	0	4	6	38	24	90	0	1	8	4	0	4	4	34	55
Chambersburg.....	2	1	20	22	12	1	12	0	20	90	8	2	2	3	7	4	28	20	74
Chromedale.....	0	7	6	10	0	20	2	45	0	90									
Easton.....	10	18	0	5	2	4	12	37	2	90									
Fleming.....	1	4	10	14	0	1	16	44	0	90	1	0	2	11	2	5	14	40	75
Gettysburg.....	6	25	3	0	3	11	11	28	3	90	2	8	7	0	1	10	23	25	76
Harrisburg, [Heisely].....	4	8	10	11	0	0	7	45	0	87	1	1	0	0	0	0	2	26	30
Harrisburg, [Hickok].....	7	17	10	2	4	5	40	5	0	90	0	0	2	0	1	1	10	1	15
Lewisburg.....	13	6	2	5	5	5	12	15	27	90	1	0	1	0	0	2	7	8	79
Linden.....	0	8	13	0	2	4	44	4	1	76									
Morrisville.....	3	16	16	1	0	10	12	32	0	90	3	10	13	1	0	11	13	27	78
Mount Joy.....	0	2	0	31	3	0	0	14	40	90	0	0	0	0	0	0	0	2	0
Murrysville.....	2	9	13	0	0	39	10	5	5	89	1	1	2	2	1	24	7	14	52
Norristown.....	0	8	11	0	0	5	47	7	0	78	0	5	10	0	0	2	50	2	69
North Whitehall.....	0	15	4	1	1	0	0	26	28	90	0	7	5	0	0	0	0	18	48
Philadelphia.....	4	22	1	3	0	18	8	34	0	90	0	1	1	0	0	5	10	9	26
Pittsburg, [Marine Hosp't'l].....	1	3	14	2	4	17	28	3	18	90	0	1	0	3	2	16	19	0	41
Pocopson.....	8	9	14	2	1	6	25	24	0	89	10	0	1	1	0	2	18	10	42
Shamokin.....	0	0	50	0	3	0	37	0	0	90	0	0	0	0	0	0	79	0	79
Somerset.....	0	0	6	0	1	4	41	5	24	90	0	0	4	7	0	2	35	10	58
Tarentum.....	0	0	5	0	1	26	19	5	25	90	0	2	1	2	2	22	28	11	68
West Haverford.....	0	13	9	1	1	1	17	17	1	60	2	0	3	1	1	4	11	13	55
Westtown.....	7	8	9	11	1	3	5	46	0	90	5	1	0	2	0	2	2	26	38
MARYLAND—																			
Annapolis.....	6	20	0	1	0	20	6	21	4	90	1	0	0	0	0	21	0	6	28
Baltimore.....	23	0	8	4	3	5	20	15	2	86									
Bladensburg.....	1	3	1	0	0	4	3	17	0	29									
Chestertown.....	8	13	17	3	5	2	29	13	0	90	0	2	1	1	0	0	1	0	5
Frederick.....	0	23	0	0	4	10	14	21	12	90	0	3	3	1	0	2	25	10	44
Leitersburg.....	3	5	4	3	3	13	24	22	13	90	2	1	5	2	1	10	20	32	73
Leonardtown.....	8	8	1	1	2	15	13	19	2	69	5	0	0	0	1	0	5	23	34
Sykesville.....	3	15	10	7	2	2	38	13	0	90	1	2	14	1	0	3	56	5	82
DISTRICT OF COLUMBIA—																			
Washington.....	13	8	7	3	5	5	0	30	11	88	0	0	0	0	0	0	1	0	1
VIRGINIA—																			
Crichton's Store.....	26	4	3	2	10	20	14	5	4	88	0	0	0	0	3	4	5	0	12
Cross Creek.....											4	0	4	0	17	8	44	4	81
Kanawha.....	16	0	1	1	25	0	6	7	10	66	0	0	1	0	3	13	7	2	26
Lewinsville.....	3	16	3	13	2	5	8	39	0	89									
Lewisburg.....	5	22	0	0	1	30	0	32	0	90									
Montross.....	4	0	12	4	0	5	18	15	32	90	4	0	1	0	2	5	12	7	31
Point Pleasant.....	42	3	35	0	0	0	1	0	0	90	33	2	22	0	9	0	2	0	68
Poplar Grove.....	0	0	10	2	0	2	42	14	20	90	0	0	0	0	2	20	24	14	60
Portsmouth.....	9	16	6	0	1	4	18	36	0	90									
Rougemont.....	4	3	2	0	4	0	10	17	1	50	2	1	1	0	2	7	11	1	25
Smithfield.....	12	9	1	1	7	8	10	15	0	63	3	0	1	0	1	0	16	11	34
Stribling Springs.....	8	12	0	0	9	33	0	28	0	90	1	0	0	1	1	30	1	11	45
Winchester.....	0	0	3	0	0	0	11	12	63	89									
Wirt Court-House.....	1	4	0	1	0	10	3	67	4	90	0	0	0	0	0	35	2	48	85
NORTH CAROLINA—																			
Chapel Hill.....	21	11	0	0	4	12	16	21	0	85	2	2	1	0	3	21	9	9	47
Davidson College.....	1	23	1	4	0	25	9	23	2	88	1	6	1	1	4	35	3	9	60
Goldsborough.....	16	11	3	7	3	18	11	4	15	88	0	4	0	0	0	3	4	0	11



## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NORTH CAROLINA—Contin'd.																				
Murfreesborough.....	0	0	9	3	3	6	26	8	24	88	2	5	8	3	1	15	21	0	55	
SOUTH CAROLINA—																				
All Saints.....	16	6	5	3	11	21	20	7	1	90	6	2	0	0	0	43	10	0	64	
Charleston, [Dawson].....	1	20	1	1	0	12	8	17	0	60										
Charleston, [Johnson].....	1	8	0	3	1	0	3	14	0	30										
Columbia.....	14	3	10	1	7	3	20	2	0	60	7	1	9	1	6	1	5	1	31	
St. John's.....	4	15	4	14	0	15	3	31	0	86	0	2	1	1	0	5	10	16	35	
GEORGIA—																				
Savannah.....	4	20	4	4	1	19	10	28	0	90	0	0	0	0	0	8	0	0	6	
Sparta.....	1	17	2	6	1	23	16	24	0	90	1	6	0	1	2	14	14	12	50	
Whitemarsh Island.....	7	11	2	4	5	8	7	26	19	89	2	3	0	2	3	7	10	10	37	
FLORIDA—																				
Alachua County.....	11	6	3	3	0	15	13	31	0	82										
Alligator.....	4	21	5	8	2	9	2	26	13	90	2	6	0	3	4	10	7	7	39	
Atsena.....	26	11	11	12	4	3	3	16	4	90	13	8	7	6	5	5	2	8	55	
Belair.....	10	21	7	9	2	1	0	21	15	86										
Jacksonville.....	2	13	0	5	1	27	2	40	0	90	0	6	2	4	0	23	1	8	44	
Micanopy.....	4	13	3	5	2	3	9	17	22	78	0	0	0	0	0	1	1	0	2	
Salt Ponds.....	18	17	3	4	10	2	1	4	1	60										
ALABAMA—																				
Carlowville.....	25	9	11	3	3	1	24	13	0	89	0	0	0	2	4	3	4	0	13	
Greene Springs.....	8	2	3	16	0	6	25	5	18	83	3	1	0	0	1	4	11	16	36	
Greensborough.....	11	5	4	9	6	4	12	33	0	84	4	0	0	3	0	3	23	11	44	
Montgomery.....											7	0	0	3	1	11	28	12	62	
Selma.....	35	5	4	4	14	4	3	21	0	90	16	1	2	2	8	3	16	17	65	
MISSISSIPPI—																				
Columbus.....	20	2	8	6	9	1	30	14	0	90	3	0	0	2	1	7	37	6	56	
Natchez.....	25	4	2	9	16	4	1	29	0	90	1	1	1	2	0	9	2	18	34	
Paulding.....	0	9	0	11	0	13	9	43	0	85	0	4	0	6	0	19	12	27	68	
LOUISIANA—																				
Black River.....	31	6	0	7	19	9	5	13	0	90	4	0	0	0	1	23	6	11	45	
New Orleans.....	0	19	0	13	0	18	0	40	0	90										
TEXAS—																				
Austin, [Palm].....	34	2	8	0	10	18	14	6	0	90	0	0	0	0	0	0	1	0	1	
Austin, [Van Nostrand].....	29	1	2	0	24	3	27	2	2	90	4	0	0	0	7	0	6	1	18	
Goliad.....	33	10	2	13	4	0	0	0	0	62	4	4	0	0	4	18	22	1	53	
Larissa.....	3	4	6	21	5	4	14	24	6	87	2	0	0	0	1	7	4	4	18	
New Braunfels.....	41	0	2	6	6	1	12	22	0	90										
Union Hill.....	37	4	2	12	21	3	3	5	90		17	0	0	13	14	3	6	3	56	
Washington.....	14	0	1	4	10	0	0	0	5	34	2	1	1	2	1	0	0	0	7	
TENNESSEE—																				
Glenwood.....	5	8	6	12	12	18	5	17	7	90	0	1	0	2	6	13	34	17	73	
Memphis.....	6	4	8	3	13	17	24	15	0	90										
KENTUCKY—																				
Bardstown.....	11	3	8	3	1	23	33	5	0	87	4	1	11	1	0	19	39	2	77	
Danville.....	7	8	8	2	1	30	28	6	0	90	2	1	0	1	0	53	11	3	71	
Louisville.....	3	12	2	13	11	22	11	15	0	89	0	3	0	3	2	28	9	5	51	
Paris.....	4	6	0	5	3	36	15	20	0	89	3	0	3	0	13	2	36	0	57	
Springdale.....	3	14	1	0	2	32	9	11	18	90										
OHIO—																				
Avon.....	2	5	0	15	6	17	12	33	0	90	0	3	0	10	4	11	17	43	88	
Bellefontaine.....	3	7	4	8	1	24	23	16	0	86	0	5	1	11	0	35	18	12	82	
Bowling Green.....	4	8	3	3	2	28	13	7	21	89	1	0	3	0	1	14	9	19	47	
Cincinnati, [Harper].....	1	3	4	2	16	4	44	16	0	90	0	0	0	0	0	0	0	1	1	
Cleveland.....	5	3	7	12	17	14	11	15	3	87	1	1	1	2	3	10	14	11	43	
College Hill.....	17	13	4	4	9	7	18	14	4	90	11	10	14	11	16	7	2	6	77	
Dayton.....	1	5	1	6	0	14	1	33	0	61	1	3	1	7	0	16	1	28	57	
Edinburg.....	2	37	8	20	0	2	3	15	3	90	0	3	1	9	0	41	26	10	90	
Hillsborough.....	0	17	0	0	0	23	2	38	0	88	0	0	0	0	0	3	1	3	7	
Hiram.....	6	4	4	14	17	25	13	0	1	90	0	2	2	2	2	6	12	6	32	
Hudson.....	0	3	14	6	4	23	24	15	0	89										
Jackson, (Monroe Co).....	8	0	9	4	14	0	0	0	41	76	2	0	0	0	1	2	0	0	5	





## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
WISCONSIN—Continued.																				
Green Bay .....	22	20	14	0	2	7	1	2	22	90	5	5	9	0	1	4	1	0	25	
Janesville .....	12	16	12	9	8	8	11	14	0	90	—	—	—	—	—	—	—	—	—	
Kenosha .....	6	0	13	11	13	17	10	15	1	86	—	—	—	—	—	—	—	—	—	
Madison .....	6	22	2	5	3	9	10	30	0	87	—	—	—	—	—	—	—	—	—	
Manitowoc .....	16	12	4	4	2	6	13	33	0	90	1	2	3	1	0	2	7	5	21	
Milwaukee, [Pomeroy] ..	0	34	3	13	2	10	5	23	0	90	—	—	—	—	—	—	—	—	—	
Milwaukee, [Winkler] ..	8	13	3	14	1	2	10	39	0	90	—	—	—	—	—	—	—	—	—	
Platteville .....	26	10	17	9	2	8	0	18	0	90	21	7	17	7	1	7	1	17	78	
Warsaw .....	10	6	6	9	13	13	18	15	0	90	—	—	—	—	—	—	—	—	—	
Waukesha .....	10	25	2	0	9	2	15	7	20	90	2	1	0	0	0	0	2	1	6	
IOWA—																				
Bellevue .....	11	11	6	5	6	6	10	35	0	90	—	—	—	—	—	—	—	—	—	
Border Plains .....	15	7	4	12	11	4	1	26	10	90	0	0	0	0	0	0	2	4	6	
Dubuque .....	21	13	7	6	13	3	2	9	16	90	2	3	0	14	3	8	2	2	34	
Fairfield .....	2	9	0	11	0	9	1	37	21	90	1	0	0	0	0	1	1	0	3	
Fort Madison .....	4	15	3	13	0	17	0	38	0	90	6	8	8	6	1	7	12	18	66	
Iowa City .....	13	4	2	15	4	6	2	29	0	75	—	—	—	—	—	—	—	—	—	
Muscatine .....	21	12	6	3	6	4	22	16	0	90	0	2	0	0	0	4	2	0	8	
Pleasant Plain .....	3	17	4	7	6	13	8	28	1	87	0	0	0	0	4	4	1	1	10	
Rossville .....	19	10	12	2	4	5	8	20	8	88	—	—	—	—	—	—	—	—	—	
Sioux City .....	31	2	0	0	23	2	2	21	0	81	3	1	0	1	4	0	0	3	12	
MINNESOTA—																				
Beaver Bay .....	34	24	0	5	8	19	0	2	0	90	9	6	3	2	5	19	2	2	48	
Burlington .....	11	17	7	2	13	5	3	32	0	90	7	14	12	8	16	4	4	16	81	
Forest City .....	15	1	2	4	11	1	7	7	40	88	—	—	—	—	—	—	—	—	—	
Hazlewood .....	19	12	7	12	13	7	6	14	0	90	10	16	12	10	2	1	0	0	51	
Lapham .....	14	1	3	1	6	0	3	2	0	30	—	—	—	—	—	—	—	—	—	
Princeton .....	16	26	1	11	5	7	3	11	3	83	12	0	0	3	30	1	15	1	62	
Stillwater .....	28	11	1	4	1	6	3	9	27	90	12	13	1	4	1	1	2	32	65	
NEBRASKA—																				
Bellevue .....	44	8	0	6	22	0	0	8	0	88	20	4	0	0	6	3	0	0	42	
Brownville .....	6	8	0	1	5	11	2	57	0	90	2	8	0	1	4	0	1	50	72	
Elkham .....	23	9	2	12	16	3	2	21	2	90	0	0	0	1	0	0	1	1	3	
KANSAS—																				
Burlingame .....	33	2	1	9	5	2	2	14	22	90	—	—	—	—	—	—	—	—	—	
Lawrence .....	29	0	2	3	19	2	6	26	3	90	—	—	—	—	—	—	—	—	—	
Leavenw'h C'y, [Berthoud]	23	21	1	8	0	8	4	25	0	90	16	15	5	14	0	3	3	28	84	
Leavenw'h C'y, [McCarty]	24	13	1	3	19	3	2	22	3	90	20	5	0	0	3	1	8	19	56	
Manhattan .....	26	2	3	4	5	6	1	23	20	90	19	3	1	4	2	7	2	22	60	
MEXICO—																				
Cordova .....	14	10	4	1	6	5	2	16	2	60	—	—	—	—	—	—	—	—	—	
Minatitlan .....	6	26	1	4	5	7	0	2	9	60	—	—	—	—	—	—	—	—	—	
CALIFORNIA—																				
Marysville .....	12	0	0	0	54	18	0	5	0	89	—	—	—	—	—	—	—	—	—	
Sacramento .....	35	8	12	17	2	3	1	12	0	90	0	0	0	6	0	14	2	5	27	
San Francisco .....	11	3	0	0	3	3	10	5	55	90	7	3	1	0	3	6	20	6	46	
WEST INDIES—																				
Nassau, Bahamas .....	6	16	6	7	0	3	0	14	0	52	—	—	—	—	—	—	—	—	—	
SOUTH AMERICA—																				
Catharina Sophia, Surinam	3	31	22	22	7	5	0	0	0	90	0	11	35	12	1	0	0	0	59	
Chanarcillo, Chili .....	4	3	7	7	14	17	8	3	0	63	—	—	—	—	—	—	—	—	—	
EASTERN CONTINENT—																				
Jerusalem, Palestine .....	1	2	1	13	4	1	7	12	49	90	1	0	0	4	3	0	1	7	18	

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	11	18	0	5	8	2	15	24	10	93	6	14	0	5	8	3	9	13	58	
Red River Settlement .....	4	1	5	5	14	11	5	7	26	78	4	3	2	2	2	2	2	5	22	
Rigolet .....	0	0	3	0	0	0	1	41	11	62	—	—	—	—	—	—	—	—	—	
St. John's .....	29	6	0	0	2	13	9	34	0	93	40	6	0	0	5	9	5	27	92	
St. Martin .....	0	26	2	15	2	19	15	14	0	93	—	—	—	—	—	—	—	—	—	
Stanbridge .....	2	6	8	25	18	3	16	6	9	93	—	—	—	—	—	—	—	—	—	
Toronto .....	2	25	4	10	0	21	4	20	7	93	—	—	—	—	—	—	—	—	—	
Windsor .....	16	5	2	1	3	10	11	28	13	89	0	1	0	0	0	0	0	0	1	
Wolfville .....	1	3	5	1	3	1	19	44	16	93	5	4	3	0	0	2	14	34	62	
MAINE—																				
Cornish, [Guptill] .....	3	4	0	5	12	2	2	65	0	93	—	—	—	—	—	—	—	—	—	
Cornish, [West] .....	9	13	11	0	2	28	20	10	0	93	0	0	0	0	0	0	4	1	5	
Dexter .....	5	13	5	2	4	2	11	37	14	93	—	—	—	—	—	—	—	—	—	
Gardiner .....	3	26	1	15	0	11	4	21	12	93	1	1	0	0	0	5	2	—	17	
Perry .....	10	7	1	2	3	8	12	48	0	91	2	1	1	1	0	4	8	22	39	
Portland .....	27	13	0	1	4	11	17	19	0	92	0	0	0	0	0	4	10	3	17	
Steuben .....	1	29	0	1	0	14	4	42	2	93	0	2	0	1	0	6	9	11	29	
NEW HAMPSHIRE—																				
Shelburne .....	0	0	15	0	0	0	57	0	9	81	0	0	1	2	0	4	23	18	48	
Stratford .....	1	9	19	2	12	11	22	10	7	93	0	4	10	3	3	7	25	9	61	
West Enfield .....	0	0	0	13	18	15	4	39	1	90	0	0	0	12	—	15	5	26	66	
VERMONT—																				
Brandon .....	28	0	6	4	30	5	5	12	3	93	1	0	0	0	0	2	4	23	30	
Burlington .....	4	4	1	2	13	8	0	16	0	48	—	—	—	—	—	—	—	—	—	
Craftsbury .....	2	12	3	16	27	7	4	21	1	93	1	0	0	0	0	4	14	6	25	
Rupert .....	—	—	—	—	—	—	—	—	—	—	6	2	1	12	2	39	4	2	68	
St. Johnsbury .....	36	0	0	1	19	1	13	22	1	93	1	0	0	0	0	0	0	0	10	
MASSACHUSETTS—																				
Amherst .....	4	4	0	18	5	4	3	49	0	87	0	0	0	0	0	1	10	11	22	
Bridgewater .....	9	8	7	7	6	7	38	11	0	93	0	2	2	3	2	3	8	3	23	
Cambridge .....	8	11	1	5	2	26	15	14	11	93	—	—	—	—	—	—	—	—	—	
Danvers .....	11	8	2	7	5	8	5	29	10	85	—	—	—	—	—	—	—	—	—	
Florida .....	0	6	3	15	0	14	37	18	0	93	0	2	4	12	0	19	30	17	84	
Lawrence .....	1	14	3	4	1	15	4	51	0	93	—	—	—	—	—	—	—	—	—	
Mendon .....	0	20	1	2	2	37	1	30	0	93	0	19	2	3	0	32	3	18	77	
Nantucket .....	7	9	—	9	10	8	13	31	4	93	—	—	—	—	—	—	—	—	—	
New Bedford .....	6	11	3	8	1	20	7	37	0	93	0	3	0	0	0	1	4	6	14	
Newburyport .....	1	1	4	1	3	4	5	3	0	22	0	0	0	0	0	1	0	1	2	
Richmond .....	0	18	0	15	0	19	0	41	0	93	1	16	0	17	1	22	1	18	76	
Westfield .....	15	20	2	10	2	7	17	19	0	92	—	—	—	—	—	—	—	—	—	
Williamstown .....	2	1	25	6	4	4	23	26	2	93	—	—	—	—	—	—	—	—	—	
Worcester .....	15	20	3	3	3	10	14	23	2	93	1	0	1	1	0	8	11	9	31	
RHODE ISLAND—																				
Providence .....	1	15	5	5	1	20	3	43	0	93	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Columbia .....	1	25	0	1	5	11	2	35	13	93	0	5	0	2	3	7	0	19	36	
Middletown .....	16	11	0	3	0	16	5	26	16	93	0	1	1	0	0	11	20	6	39	
Pomfret .....	4	21	1	4	4	19	2	38	0	93	1	18	1	2	2	8	6	22	60	
Saybrook .....	10	17	6	3	0	4	15	30	8	93	1	4	4	3	2	4	13	8	39	
Wallingford .....	27	15	1	3	10	15	3	19	0	93	0	1	2	1	0	4	10	0	24	
NEW YORK—																				
Baldwinsville .....	0	4	24	5	—	13	20	25	0	93	0	0	—	5	1	0	48	21	77	
Beverly .....	4	18	0	9	1	36	0	24	0	92	1	7	2	6	6	30	13	8	73	
Cazenovia .....	4	2	0	13	11	13	9	38	2	92	0	0	0	12	9	8	12	30	77	
Covert .....	2	1	0	39	2	3	12	26	8	93	0	0	0	5	5	2	13	1—	37	
Eden .....	1	2	4	15	56	6	8	0	1	93	0	0	0	0	0	7	26	0	33	
Morrisania .....	11	18	1	5	9	19	18	12	0	93	—	—	—	—	—	—	—	—	—	
Nichols .....	13	1	2	26	27	2	3	19	0	93	9	0	0	7	12	11	5	21	65	
Ogdensburg .....	6	7	1	0	6	3	7	1	0	31	—	—	—	—	—	—	—	—	—	
Oswego .....	8	4	17	18	17	6	20	3	0	93	—	—	—	—	—	—	—	—	—	
Rochester .....	3	5	14	5	7	6	21	1	0	62	3	1	10	3	3	1	37	—	67	
Sag Harbor .....	10	15	8	—	6	19	16	17	0	93	1	1	1	1	1	2	18	5	30	





## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
SOUTH CAROLINA—Continued																			
All Saints.....	12	11	11	7	10	32	7	3	0	93	1	2	4	1	2	48	8	1	67
Charleston, [Dawson].....	0	20	5	13	1	18	2	3	0	62									
Charleston, [Johnson].....	7	13	0	2	1	8	1	4	0	31									
Columbia.....	7	11	6	3	10	13	5	7	0	62	1	0	0	0	2	2	5	0	10
St. John's.....	11	21	2	12	2	29	4	7	0	83	5	0	0	0	0	7	13	7	32
GEORGIA—																			
Savannah.....	3	30	2	6	16	15	4	7	0	83	0	0	0	0	1	0	0	0	1
Sparta.....	5	27	4	9	5	26	6	11	0	93	0	8	1	1	1	21	13	4	49
Thomson.....	2	34	0	14	1	18	1	12	0	82									
Whitemarsh Island.....	5	29	1	2	15	11	1	5	23	92	1	4	1	1	5	12	6	5	35
FLORIDA—																			
Alachua County.....	2	22	1	13	3	19	0	12	0	72									
Alligator.....	11	31	0	9	5	13	1	5	18	93	1	7	2	2	2	14	3	0	31
Atsena.....	10	37	5	17	5	7	3	4	5	93	7	30	2	11	5	10	3	1	70
Belair.....	2	20	28	17	1	0	0	2	13	83	1	2	2	3	1	32	16	11	68
Jacksonville.....	14	26	1	6	14	14	4	14	0	93	8	15	3	3	9	22	3	14	77
Micanopy.....	5	16	5	4	4	3	1	5	18	61	0	1	0	0	0	2	0	0	3
St. Augustine.....	5	43	12	14	1	15	0	2	0	93	4	41	7	12	1	12	0	2	79
Salt Ponds.....	6	16	23	6	8	1	0	2	0	62									
ALABAMA—																			
Carlownville.....	8	8	8	15	19	11	12	6	0	87	0	0	8	6	4	12	0	0	36
Greene Springs.....	6	3	5	28	3	4	7	8	18	82	2	0	0	1	1	10	28	4	46
Greensborough.....	12	6	6	32	14	4	2	8	0	84	0	1	5	3	4	10	24	4	51
Montgomery.....	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	60	18	4	82
Selma.....	36	2	3	19	18	14	1	0	0	93	3	1	1	14	8	20	13	22	82
MISSISSIPPI—																			
Columbus.....	11	9	12	17	20	6	7	11	0	93	1	0	3	1	7	16	20	0	48
Natchez.....	26	11	1	22	17	8	1	7	0	93	1	0	0	0	0	18	7	3	29
Paulding.....	1	21	3	17	3	23	2	22	0	92	0	12	0	0	3	37	11	17	86
LOUISIANA—																			
New Orleans.....	0	50	0	17	0	8	0	18	0	93									
TEXAS—																			
Austin, [Palm].....	13	15	15	11	13	10	15	1	0	93	0	0	0	1	0	0	0	0	1
Austin, [Van Nostrand].....	32	3	3	0	27	2	18	5	3	93	1	2	0	0	15	23	9	0	55
Goliad.....	54	8	1	25	0	0	2	3	0	93	21	2	1	6	7	21	23	4	85
Larissa.....	6	7	11	24	4	8	7	19	5	91	0	0	0	0	1	10	3	0	14
New Braunfels.....	52	1	2	2	10	4	15	7	0	93									
Union Hill.....	28	17	6	14	21	1	0	3	3	93	18	18	4	8	29	2	1	3	83
Washington.....	25	0	0	1	38	0	0	2	24	90	3	3	1	2	1	1	0	0	11
TENNESSEE—																			
Glenwood.....	8	4	3	28	17	12	5	9	7	93	0	0	0	4	6	22	21	7	60
Memphis.....	11	7	7	26	12	6	10	12	1	92									
KENTUCKY—																			
Bardstown.....	7	0	1	5	15	30	18	16	0	92	2	0	3	1	0	30	12	11	68
Danville.....	0	3	3	4	19	37	19	8	0	93	0	0	0	0	1	47	7	4	59
Louisville.....	3	10	7	18	16	15	14	10	0	93	0	0	0	0	1	26	8	1	36
Paris.....	0	9	0	3	29	29	0	12	0	91	1	0	1	0	10	10	21	0	43
Springdale.....	1	8	2	2	15	24	12	6	23	93									
OHIO—																			
Avon.....	0	4	2	16	16	21	18	15	1	93	0	2	0	7	5	25	31	11	81
Bellefontaine.....	1	8	6	18	1	20	24	14	0	92	0	1	2	13	0	47	15	7	85
Bowling Green.....	3	9	4	11	5	27	5	7	21	92	1	1	1	4	0	25	9	11	52
Cincinnati, [Harper].....	3	3	3	4	22	24	17	17	0	93									
Cleveland.....	4	5	4	28	22	4	13	13	0	93	2	1	0	2	1	13	18	6	43
Edinburg.....	1	58	10	17	0	0	0	7	0	93	0	0	0	4	0	44	25	5	78
Hillsborough.....	0	11	0	25	0	38	0	19	0	93	0	0	0	0	0	2	0	1	3
Hiram.....	2	0	2	15	17	15	11	12	0	74	1	2	0	0	0	7	8	0	24
Hudson.....	1	4	10	14	7	17	10	9	0	72									
Jackson, (Monroe county).....	4	8	3	6	8	2	0	2	42	75									
Jefferson.....	0	15	0	0	0	19	20	39	0	93	0	16	22	40	0	15	0	0	93
Lancaster.....	3	2	7	17	23	18	20	3	0	93	0	3	3	0	1	25	22	5	59
Madison, [Atkins].....	4	3	0	10	16	12	9	2	28	84	0	0	0	0	0	1	6	0	7



## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Madison, [King].....	1	9	2	22	8	25	8	18	0	93	0	1	0	2	2	34	23	22	84	
Montville.....	10	4	0	24	17	24	2	12	0	93	0	0	0	2	1	16	15	10	45	
New Lisbon.....	0	3	7	21	8	24	21	9	0	93	0	2	3	18	8	19	18	7	75	
Northwood.....	0	1	2	23	4	32	10	21	0	93	0	0	0	1	1	19	8	12	41	
Ripley.....	0	7	3	18	0	4	3	12	26	73	0	0	0	0	0	0	2	8	10	
Savannah.....	0	1	0	20	0	30	22	20	0	93	0	0	0	12	0	34	18	17	81	
Urbana.....	0	2	2	5	16	17	16	4	26	88	1	1	0	0	12	13	27	3	57	
Welchfield.....	5	5	5	25	2	28	13	10	0	93	0	0	0	0	0	2	0	0	2	
Westerville.....	2	1	0	8	14	32	16	16	1	90	1	0	1	3	14	28	22	6	75	
MICHIGAN—																				
Battle Creek.....	1	6	11	13	9	12	33	7	1	93	1	3	1	1	1	30	37	7	86	
Cooper.....	0	0	8	0	6	4	51	1	23	93	1	5	19	22	0	3	8	1	59	
Detroit.....	0	1	5	27	10	36	14	0	0	93	0	0	0	23	12	35	21	2	93	
Grand Rapids.....	3	14	16	17	6	16	17	4	0	93	1	9	10	7	3	14	47	8	99	
Lansing.....	1	9	12	7	5	23	26	7	0	90	2	7	7	6	5	24	21	4	76	
Marquette.....	3	6	4	27	2	5	31	15	0	93	0	0	3	18	0	57	8	4	90	
Monroe.....	0	0	3	18	0	59	9	4	0	93	0	0	3	18	0	57	8	4	90	
New Buffalo.....	7	12	4	27	9	34	8	23	0	124	3	16	14	4	0	0	3	3	43	
Ottawa Point.....	4	4	3	16	11	25	12	12	2	89	0	1	0	2	4	24	11	8	50	
Port Huron.....	13	6	5	28	17	11	11	28	5	124	5	1	1	3	1	3	3	2	20	
Thunder Bay Island.....	13	6	5	28	17	11	11	28	5	124	5	1	1	3	1	3	3	2	20	
INDIANA—																				
Cannelton.....	7	1	0	33	21	8	15	7	1	93	1	1	0	4	12	15	5	1	39	
Logansport.....	2	15	10	16	0	18	16	16	0	93	0	9	19	19	2	8	10	6	73	
Madison.....	3	7	7	27	13	10	14	12	0	93	0	5	1	20	13	8	12	2	61	
New Harmony.....	7	0	1	10	25	16	7	5	0	71	---	---	---	---	---	---	---	---	---	
Richmond, [Moore].....	0	0	10	6	5	25	12	6	25	89	---	---	---	---	---	---	---	---	---	
ILLINOIS—																				
Athens.....	1	17	0	23	2	27	3	17	0	90	0	0	0	0	0	12	7	10	29	
Augusta.....	1	16	4	21	6	20	12	12	1	93	2	4	2	5	2	7	10	7	39	
Aurora.....	10	9	1	18	20	13	20	2	0	93	1	1	0	1	7	9	39	0	58	
Batavia, [Capon].....	3	22	2	15	9	20	17	5	0	93	---	---	---	---	---	---	---	---	---	
Batavia, [Mead].....	0	24	0	18	0	34	8	9	0	93	0	18	0	9	0	35	11	79		
Brighton.....	2	4	3	31	10	7	11	25	0	93	1	5	4	28	5	7	2	10	62	
Edgington.....	2	22	3	17	9	15	4	21	0	93	2	20	0	12	5	12	2	13	66	
Elgin.....	6	5	8	22	8	14	10	17	3	93	---	---	---	---	---	---	---	---	---	
Jacksonville.....	1	1	1	7	3	7	6	5	0	31	---	---	---	---	---	---	---	---	---	
Manchester.....	5	6	3	1	36	11	24	7	0	93	3	4	2	0	28	3	14	2	56	
Marengo.....	0	5	4	27	8	40	8	1	0	93	---	---	---	---	---	---	---	---	---	
Ottawa.....	0	16	1	14	4	18	11	15	2	81	1	0	0	0	0	4	6	4	15	
Pekin.....	8	11	5	12	28	6	3	18	1	92	1	2	1	4	3	12	15	8	46	
Peoria.....	4	12	10	3	3	12	45	4	0	93	0	0	0	0	0	2	0	0	1	
Riley.....	1	10	6	18	5	4	29	16	3	92	---	---	---	---	---	---	---	---	---	
Sandwich.....	5	12	5	15	16	26	6	8	0	93	---	---	---	---	---	---	---	---	---	
South Pass.....	3	6	5	6	31	12	2	1	25	91	0	0	0	1	2	4	9	5	21	
Waynesville.....	6	0	17	6	24	12	25	2	1	93	0	0	0	0	3	2	7	0	12	
West Salem.....	4	5	3	13	35	2	4	11	16	93	0	0	0	0	1	26	14	0	41	
West Urbana.....	0	12	3	24	19	17	3	15	0	93	0	0	0	0	0	4	0	1	5	
Wheaton.....	6	6	8	14	8	13	17	13	5	90	0	0	0	1	0	4	5	1	11	
Winnebago.....	4	15	7	19	5	26	7	10	0	93	0	0	0	0	0	8	10	5	23	
Upper Alton.....	1	7	0	3	4	46	1	23	0	93	0	8	0	4	4	45	10	23	94	
MISSOURI—																				
St Louis.....	3	3	4	34	11	13	18	7	0	93	---	---	---	---	---	---	---	---	---	
WISCONSIN—																				
Appleton.....	8	26	0	4	6	35	5	9	0	93	8	23	0	7	6	30	4	8	86	
Bay City.....	2	17	5	0	10	43	2	13	0	92	0	5	0	0	3	17	2	2	29	
Bayfield.....	0	11	0	10	0	19	0	21	1	62	0	15	0	10	0	21	1	14	61	
Beloit.....	9	4	10	9	17	14	28	2	0	93	---	---	---	---	---	---	---	---	---	
Janesville.....	5	9	7	9	25	7	27	1	3	93	---	---	---	---	---	---	---	---	---	
Kenosha.....	1	3	8	0	20	14	32	4	2	90	---	---	---	---	---	---	---	---	---	
Madison.....	5	8	3	9	10	18	12	13	0	78	0	0	0	0	0	0	1	0	1	
Manitowoc.....	6	1	3	13	11	19	14	26	0	93	0	0	0	0	0	3	14	4	21	

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1858.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or Variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
WISCONSIN—Continued.																				
Milwaukee, [Pomeroy]----	0	7	4	21	0	15	22	24	0	93	---	---	---	---	---	---	---	---	---	
Milwaukee, [Winkler]----	7	3	6	11	3	16	21	26	0	93	---	---	---	---	---	---	---	---	---	
Platteville-----	0	2	4	26	5	12	28	9	0	93	3	9	1	13	4	15	21	6	72	
Warsaw-----	3	5	3	14	30	28	1	1	0	93	---	---	---	---	---	---	---	---	---	
Waukesha-----	8	1	4	0	7	11	13	12	33	91	0	0	1	0	0	0	2	0	11	
IOWA—																				
Bellevue-----	7	6	6	14	6	11	27	15	0	92	---	---	---	---	---	---	---	---	---	
Border Plains-----	4	2	0	18	13	5	6	40	5	93	0	0	0	0	0	1	8	1	10	
Dubuque-----	10	10	0	11	20	5	2	16	19	93	3	0	0	0	1	10	7	5	26	
Fairfield-----	0	6	0	18	0	9	1	23	36	93	0	1	0	0	0	0	0	0	1	
Fort Madison-----	2	13	2	10	1	39	2	24	0	93	1	3	0	2	2	14	17	6	45	
Iowa City-----	5	7	2	29	4	14	4	27	0	92	---	---	---	---	---	---	---	---	---	
Muscatine-----	4	3	0	1	30	21	23	11	0	93	0	0	0	0	0	8	2	0	10	
Pleasant Plain-----	5	11	2	15	14	20	8	17	1	93	0	0	0	0	0	8	11	1	20	
Rossville-----	11	4	8	16	13	7	15	16	3	93	---	---	---	---	---	---	---	---	---	
Sioux City-----	8	0	1	0	5	0	0	28	0	42	0	0	0	0	0	0	0	3	3	
MINNESOTA—																				
Beaver Bay-----	14	13	4	2	2	32	11	12	3	93	2	17	3	3	5	0	1	0	40	
Burlington-----	12	2	13	3	15	5	5	34	0	93	8	2	13	3	17	3	12	29	87	
Forest City-----	3	4	5	6	5	5	2	12	51	93	---	---	---	---	---	---	---	---	---	
Hazlewood-----	4	5	1	6	25	12	37	0	0	93	2	2	4	0	1	0	3	4	22	
Lapham-----	13	0	11	0	0	0	7	0	0	31	---	---	---	---	---	---	---	---	---	
Princeton-----	12	3	21	12	10	3	24	5	3	93	12	0	10	0	3	0	19	0	44	
NEBRASKA—																				
Bellevue-----	36	1	2	1	28	10	8	6	1	93	5	0	0	0	2	1	5	3	16	
Brownville-----	3	0	1	1	3	25	5	55	0	93	1	0	0	1	1	15	1	25	44	
Elkhorn-----	9	7	3	14	15	13	8	22	2	93	0	0	0	1	0	0	0	0	1	
Gilbert's Trading Post-----	4	2	0	2	4	22	24	0	0	58	4	7	20	3	1	0	0	0	35	
Omaha-----	3	4	2	8	18	6	7	23	22	93	0	2	2	5	13	6	5	14	47	
KANSAS—																				
Burlingame-----	21	1	0	1	22	7	2	9	30	93	---	---	---	---	---	---	---	---	---	
Lawrence-----	29	4	5	3	26	6	4	7	5	89	---	---	---	---	---	---	---	---	---	
Leavenworth City, [Berthoud]-----	12	13	3	6	10	33	4	7	5	93	9	12	0	2	10	19	2	9	63	
Leavenworth City, [McCarty]-----	23	9	2	3	21	17	4	0	2	90	8	0	0	0	1	9	8	1	27	
Manhattan-----	9	7	1	2	17	13	1	0	37	93	0	3	0	0	14	10	0	0	42	
MEXICO—																				
Cordova-----	15	17	2	0	8	12	2	6	0	62	---	---	---	---	---	---	---	---	---	
Minatitlan-----	6	22	0	4	12	4	1	1	12	62	---	---	---	---	---	---	---	---	---	
CALIFORNIA—																				
Marysville-----	10	0	0	12	21	29	0	21	0	93	---	---	---	---	---	---	---	---	---	
Sacramento-----	29	4	5	23	9	6	0	17	0	93	0	0	0	14	0	19	4	7	44	
San Francisco-----	11	2	1	0	13	15	2	2	47	93	7	0	4	0	15	10	23	6	65	
WEST INDIES—																				
Nassau, Bahamas-----	0	13	14	8	8	6	0	3	0	52	---	---	---	---	---	---	---	---	---	
SOUTH AMERICA—																				
Catharina Sophia, Surinam-----	0	25	20	20	4	0	0	0	0	69	0	15	32	8	0	0	0	0	55	
Chanarcillo, Chili-----	1	5	2	7	8	76	2	2	0	103	---	---	---	---	---	---	---	---	---	
EASTERN CONTINENT—																				
Jerusalem, Palestine-----	2	7	19	10	5	8	15	1	0	67	0	4	6	4	5	9	15	0	43	



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1858.\*

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>BRITISH AMERICA—</b>													
King-ton .....	? 1.620	? 1.450	? 2.200	2.300	2.640	3.080	4.530	3.390	2.500	1.810	? 1.210	? 2.040	? 28.770
Montreal .....	3.180	2.590	2.641	2.090	3.400	3.730	6.090	3.420	4.200	3.800	1.660	1.670	38.471
St. John's .....	3.550	? 1.550	0.710	6.320	3.890	3.310	4.510	3.180	5.970	3.462	2.000	.....	.....
St. Martin .....	1.710	1.760	1.210	2.832	5.378	8.656	12.214	4.023	3.090	.....	1.176	.....	.....
Toronto .....	? 1.552	? 2.670	? 0.990	1.652	6.367	3.151	3.072	3.890	0.735	1.797	? 4.279	? 2.697	? 32.852
Windsor .....	.....	.....	.....	1.580	2.170	1.240	3.330	2.480	1.660	.....	.....	.....	.....
Wolfville .....	? 1.375	? 1.000	?	4.150	2.150	.....	.....	4.210	2.850	0.820	.....	3.885	.....
<b>MAINE—</b>													
Cornish, [Guptill] .....	4.250	2.100	1.820	3.970	3.250	2.600	8.230	3.440	5.150	2.150	2.700	2.450	42.110
Cornish, [West] .....	.....	.....	.....	.....	3.937	? 4.375	? 7.400	? 3.500	.....	? 5.625	? 2.362	.....	.....
Dexter .....	.....	.....	.....	.....	.....	? 0.750	? 6.125	.....	? 3.250	.....	.....	.....	.....
East Exeter .....	? 3.225	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gardiner .....	3.311	2.332	3.162	4.440	3.020	2.516	6.431	7.253	3.740	5.060	2.907	2.870	47.042
Perry .....	? 4.000	? 1.200	? 3.200	4.350	3.300	0.920	4.780	3.360	2.200	5.180	? 1.350	? 2.210	.....
Portland .....	4.020	2.513	1.665	3.830	3.679	2.150	5.583	4.693	3.815	5.606	1.975	4.919	.....
Steuben .....	? 4.080	.....	? 3.470	.....	4.030	1.375	7.235	2.515	2.520	4.580	? 1.150	? 3.050	.....
<b>NEW HAMPSHIRE—</b>													
Concord, [Colby] .....	.....	.....	? 0.412	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Concord, [Sawyer] .....	3.000	2.010	1.100	2.600	3.630	1.250	4.400	4.700	5.100	.....	.....	.....	.....
Lacosta .....	3.250	1.970	1.760	3.200	3.220	2.380	4.670	4.140	5.050	6.980	2.350	3.580	42.550
Lake Village .....	2.870	1.890	1.620	3.140	3.240	2.800	4.710	4.100	4.950	5.990	2.960	3.460	41.730
Shelburne .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	? 5.100	.....	.....	.....
Stratford .....	.....	.....	.....	3.210	3.670	2.950	4.360	4.200	4.930	5.720	? 2.840	? 2.600	.....
West Enfield .....	3.200	0.530	?	? 2.550	? 3.250	2.270	2.120	3.110	5.120	7.610	3.990	1.745	.....
<b>VERMONT—</b>													
Brandon .....	1.830	0.610	1.480	2.255	3.560	3.875	4.800	2.955	2.965	3.585	2.640	2.375	32.930
Burlington .....	? 1.640	.....	.....	1.800	2.680	2.270	4.650	2.120	2.620	? 2.400	.....	.....	.....
Craftsbury .....	.....	1.400	2.000	2.670	3.450	4.120	3.950	4.850	4.400	4.210	3.100	2.350	38.400
St. Johnsbury .....	.....	? 1.390	?	2.510	3.150	4.361	5.730	5.422	.....	5.780	.....	.....	.....
Woodstock .....	2.160	1.400	0.820	1.900	3.440	2.660	5.400	2.640	5.340	4.170	3.380	2.490	35.700
<b>MASSACHUSETTS—</b>													
Amherst .....	3.519	1.604	0.795	3.197	2.981	5.620	6.726	4.620	4.135	3.856	2.158	3.161	42.572
Bridgewater .....	? 2.750	? 2.180	2.436	3.395	2.524	3.488	3.519	.....	? 1.225	2.491	2.308	1.156	.....
Cambridge .....	3.439	1.862	1.767	3.009	3.714	7.552	4.360	5.566	4.940	2.871	2.373	3.040	45.293
Canton .....	3.437	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence .....	2.790	1.800	2.470	3.090	3.390	4.900	3.990	4.860	4.050	3.300	1.700	5.020	41.360
Mendon .....	.....	.....	.....	? 2.700	? 4.000	? 6.000	? 2.900	? 4.000	? 5.400	? 2.200	? 1.575	5.800	.....
Nantucket .....	4.421	1.631	2.805	4.325	2.431	1.982	4.565	4.261	2.455	3.580	3.705	5.783	41.944
New Bedford .....	2.190	1.140	2.030	3.310	2.270	5.130	6.845	4.960	3.130	3.140	3.600	4.600	42.425
Newburyport .....	.....	.....	.....	.....	2.870	? 4.570	3.510	? 6.500	.....	.....	.....	.....	.....
Springfield .....	.....	.....	.....	.....	.....	5.500	3.970	3.740	.....	.....	.....	.....	.....
Westfield .....	3.410	2.200	1.070	3.530	3.300	4.200	5.080	6.250	4.040	3.750	2.410	3.880	43.120
Williamstown .....	2.990	? 1.000	1.065	2.242	3.542	2.820	4.370	5.766	2.968	3.150	3.107	1.740	34.760
Worcester .....	? 3.100	.....	.....	.....	.....	.....	.....	5.700	3.100	.....	.....	? 4.215	.....
<b>RHODE ISLAND—</b>													
Providence .....	3.330	2.800	2.050	3.630	2.350	5.550	4.900	8.200	3.050	2.800	2.400	3.450	.....
<b>CONNECTICUT—</b>													
Middletown .....	.....	.....	.....	.....	.....	.....	.....	4.940	2.830	3.060	3.480	.....	.....
New London .....	3.020	? 2.360	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pomfret .....	2.950	1.510	3.000	4.120	2.580	4.920	5.370	6.230	5.050	2.755	1.420	2.630	41.835
Saybrook .....	3.010	2.850	? 2.040	3.250	3.140	6.400	1.800	3.470	4.470	?	4.900	4.220	.....
Wallingford .....	3.130	1.920	1.570	3.870	2.620	5.080	3.260	4.020	5.180	3.290	3.230	4.470	41.640
<b>NEW YORK—</b>													
Bellport .....	.....	.....	1.195	4.130	1.420	4.600	.....	2.350	6.640	.....	? 4.820	.....	.....
Beverly .....	1.906	0.893	0.915	4.420	5.430	4.806	5.070	4.490	2.180	3.250	4.440	4.660	42.460
Buffalo .....	.....	2.439	1.692	2.167	4.400	4.705	4.655	2.377	4.319	4.675	5.111	3.268	.....
Canton .....	.....	.....	1.730	2.380	3.607	5.600	? 3.480	2.928	.....	.....	.....	.....	.....
Cazenovia .....	2.580	2.480	1.490	.....	.....	.....	.....	3.190	3.610	2.110	3.320	3.110	.....
Clinton .....	2.420	2.070	1.410	4.370	4.730	4.200	4.180	3.340	3.310	4.250	3.500	3.630	41.820
Covert .....	? 0.940	1.500	0.750	1.692	2.625	3.250	.....	.....	.....	0.812	.....	1.812	.....
Fishkill Landing .....	1.860	0.890	0.900	2.400	4.100	3.800	3.000	3.600	1.400	2.300	4.300	1.600	30.060
Flushing .....	2.770	2.240	1.600	4.660	4.950	5.240	5.060	2.765	2.900	1.920	4.490	4.300	43.225
Fort Edward .....	3.140	1.900	0.870	4.220	8.700	7.850	4.920	4.710	4.270	8.570	8.300	4.300	61.750
Honseville .....	.....	.....	.....	3.040	3.270	? 3.480	4.720	3.870	2.710	4.080	3.080	3.050	.....
Lake .....	2.710	1.780	1.370	2.830	4.210	4.250	5.570	2.860	5.640	3.510	3.950	.....	.....
Lowville .....	2.256	2.212	0.796	2.730	3.715	2.975	3.776	4.348	3.336	4.581	2.528	2.115	34.368
New York city .....	3.800	3.300	1.470	4.830	6.000	6.420	4.320	3.150	3.500	4.190	5.990	4.900	51.870
Ogdensburg .....	.....	1.960	.....	2.555	2.400	3.370	6.365	5.085	4.030	2.140	1.220	2.610	.....
Oswego .....	2.980	3.940	1.760	4.354	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ovid .....	1.460	1.950	1.200	2.400	.....	.....	2.437	3.187	4.437	.....	.....	.....	.....
Penn Yan .....	0.670	0.910	0.970	2.600	3.660	2.810	3.730	2.970	2.810	1.490	2.490	1.670	.....
Pompey .....	2.210	2.080	1.090	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rochester .....	1.583	2.379	1.466	2.849	3.440	3.400	4.660	2.880	3.190	0.860	5.780	3.480	35.847
Sag Harbor .....	2.470	? 2.800	?	.....	.....	? 4.400	2.310	3.730	5.750	2.100	4.150	4.900	.....
Saratoga .....	.....	.....	.....	? 3.300	? 7.100	.....	.....	.....	.....	.....	.....	.....	.....
Spencertown .....	2.620	1.050	? 0.817	1.240	2.909	2.789	? 3.526	.....	.....	.....	.....	.....	.....
Wampsville .....	.....	.....	.....	? 8.610	? 7.940	.....	? 7.280	.....	.....	.....	.....	.....	.....
Watford .....	2.070	1.330	0.600	2.950	3.650	2.740	6.620	3.400	3.770	2.424	3.100	2.580	35.230
Wellsville .....	.....	.....	.....	? 2.250	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>NEW JERSEY—</b>													
Bloomfield .....	3.456	2.452	? 0.785	3.730	3.542	3.989	3.887	2.040	1.887	.....	.....	.....	.....
Burlington .....	3.220	2.150	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lambertville .....	3.220	2.927	0.992	4.260	5.530	4.119	3.170	4.760	1.335	1.980	3.892	4.130	40.315
Newark .....	3.405	2.495	2.135	3.532	4.995	4.650	2.995	4.210	1.410	1.235	4.785	4.260	40.427
Sergeantsville .....	? 4.590	.....	? 1.687	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

\* In cases where the observer recorded only the depth of snow as it fell, without melting, it is estimated in this table as equal to one-tenth of that depth in water; and whenever, from this cause or any other, there is reason to doubt the accuracy of the record, it is indicated by affixing a mark of interrogation.



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1858.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>PENNSYLVANIA—</b>													
Bedford				2.840	8.173	1.935	3.282	2.874	0.750	0.510			
Byberry				4.943									
Cannonsburg	3.720	1.760	0.300	2.925	7.580	4.581	2.315	1.271	1.340	2.150	2.819	4.100	
Carlisle							2.000	4.547	3.232	3.254	4.701	3.572	
Chronedale	3.000	1.650	0.831						1.910	1.110	6.010		
Easton	2.260	1.450	0.690	3.130	6.601	4.450	4.150	2.690	2.680	1.821	4.840	4.230	38.590
Gettysburg	1.643	1.913	0.605	2.870	10.600	4.390	3.910	4.265	2.665	4.572	3.743	4.855	45.641
Harrisburg, [Heisch]	1.747			3.559	5.512	3.268	2.049	4.088	2.047	4.157	2.842		
Harrisburg, [Hickok]	1.880	1.890	0.800	2.320	10.040	4.970	2.640	4.140	2.040	4.170	5.400	4.230	44.430
Lewisburg	2.227	1.640	0.447	3.377	6.571	4.037	4.545	4.440	2.082	2.292	3.720	4.470	
Linden											2.892		
Montville	1.447	2.1870	2.097	4.151	5.910	4.946	3.325	4.082	1.102				
Morrisville	2.000	2.200	2.100	3.900	5.500	5.200	3.200	3.200	2.100	2.100	2.100	2.100	40.100
Mount Joy	1.350	1.490	0.650	3.880	10.230	8.180	1.740	3.481	2.090	2.511	3.810	5.100	44.412
Murrysville	1.070	2.360	0.880	4.570	5.650	4.50	2.520	2.700	1.000	2.110	3.740	4.761	36.000
Northstown	2.850	2.780	1.170	4.110	6.620	4.610	2.800	2.040	1.321	1.800	4.701	4.460	39.330
Philadelphia	2.666	2.393	1.124	4.681	5.368	4.205	1.454	5.157	1.589	1.778	3.368	5.409	39.202
Pittsburg, [Martin and Speer]							3.253	2.791	1.459	2.563	2.955	4.727	
Pittsburg, [Wilson]		1.900	0.500	4.558	6.060	3.933	4.467	1.700	1.141				
Pococan	2.200	2.715	1.070	3.680	8.640	5.380	2.270	5.780	1.230	1.630	5.110	4.670	41.355
Reading		1.400	0.880	2.970									
Shamokin	1.802	0.855	0.917	3.055	7.297	2.914	5.677	3.759	1.574	2.695	3.791	4.115	38.484
Somers	0.543	2.218	1.131	3.939	8.368	4.030	3.069	1.324	1.344	2.056	3.914		
West Haverford	2.801	2.775	1.270	4.810	7.360	3.450				1.890	5.240	5.320	
Westtown	2.417	1.299		4.132	9.053	5.196	2.586	3.920	1.230	2.170	5.071	3.953	
<b>DELAWARE—</b>													
Georgetown	1.150	1.680	0.370	3.930	5.160	2.650	1.270	4.330	2.680	2.550	5.090	6.390	37.220
Milford	1.200				4.560	2.130							
<b>MARYLAND—</b>													
Annapolis	1.790	1.690	0.700	4.430	6.750	1.950	1.800	3.170	2.310	3.350	5.030	5.610	38.590
Baltimore	1.359	1.480		3.470	6.840	4.931	3.230	2.390	3.070	2.270	2.410	3.000	
Bladenburg	1.400				5.660	2.170	4.120	1.170	2.540	1.790	4.260		
Chester town	1.940	1.720	0.760	3.980	6.880	2.360	1.690		2.640	1.540	4.590	1.075	
Fredrick	1.885	1.663	1.005	3.409	7.345	5.759	4.442	4.882	5.260	4.098	3.379	4.144	47.252
Latersburg									3.839	3.520	2.990	4.032	
Sykesville			0.950			6.533	2.520	2.108	2.530	2.530	3.850		
<b>DISTRICT OF COLUMBIA—</b>													
Washington	1.650	0.435	1.750	3.969	7.480	1.810	5.600	2.640	2.900	2.540	4.190	5.790	40.754
Washington, (near)	1.583	2.910	0.310	3.330	7.093	1.080	4.350	7.050					
<b>VIRGINIA—</b>													
Alexandria	1.601	1.871	0.900	4.269	5.680	1.011							
Ashland	1.554												
Berryville	0.660	2.810	1.365	3.197	7.870	3.307	4.872	1.050	1.485	3.147	3.930	4.455	38.148
Buffalo					10.800		15.900	11.501					
Chester's Store	2.000	3.160	1.420	4.710	3.910	3.400	2.260	3.350	0.611	0.257	1.030	6.050	32.153
Cross Creek											3.200	0.840	
Hatwood			1.380						1.290	2.330	5.050	5.470	
Holliday's Cove									1.210	3.200			
Knapville	1.988	3.769	1.469	3.017	3.331	2.875	2.539	2.908		2.401	2.418	7.025	
Lewinsville						2.850	2.430	0.680	3.110	2.210	2.070	3.530	
Lewisburg	1.155	0.733		1.822	0.916	1.916	1.244	1.067					
Meadow Dale	1.530	1.660	3.010	5.900	2.800	5.170	3.780	2.201	1.400	4.720	4.500	4.200	40.870
Mossy Creek				6.090									
Poplar Grove				2.812		2.190	2.000	2.937	0.625	2.125	3.233	7.812	
Portsmouth	3.290	5.130	2.500	5.330	3.030	5.780	3.440	3.350	3.620	3.900	4.480	44.250	
Rose Hill	0.950	2.430	0.540	3.520	4.150	2.040	4.020	4.880					
Rougemont	1.913	2.025	1.341	4.217	5.658	4.833	5.022	1.550	2.310	1.640	3.170	6.070	39.752
Rutledge	1.560	2.470	1.450	5.350	4.640	1.640	5.190						
Salmon	1.499	1.624	1.517										
Smithfield	2.103	3.524	1.411	4.539	4.485	4.918	3.500	3.211	4.273	1.059	4.094	6.664	43.781
Winchester	0.700	1.900	0.900	3.509	8.400	4.140	3.460	2.100	1.890	3.900	3.660	4.220	38.820
Wirt Court-House			1.005	5.110	8.460	5.380	3.980	3.420	0.440	5.820	3.970	9.610	
<b>NORTH CAROLINA—</b>													
Ashville	2.180	2.400	1.100	2.440	2.300	2.600	6.146	2.716	4.115	1.947	3.393	6.009	43.941
Chapel Hill	2.596	5.280	2.817	2.763	2.405	3.754							
Davidson College	3.520	4.340	2.570	2.670	1.530	2.430	2.680	2.680	4.820	2.430	3.635		
Gaston	2.170	4.080	2.440	5.430	4.030	2.200	4.050	3.620	2.520	1.380	2.730	6.140	40.830
Marionborough	3.825	5.790	2.860	5.210	2.780	3.950	5.300	3.955					
Murfreesborough	2.170	4.400	1.870	4.680	3.350	2.970	2.000	0.300	2.350	0.760	3.210	4.200	32.540
<b>SOUTH CAROLINA—</b>													
Aiken	5.880	4.730	3.450	2.910	1.053	3.104	3.905	5.535	5.665	1.961	2.375	5.370	
All Saints	4.930	7.970	2.1030	3.990	3.510	1.510	11.920	3.330	5.370	3.400	3.010	1.770	51.140
Charleston, [Dawson]	2.250	6.040	1.980	1.250	3.670	1.490	6.110	5.890	7.020	0.770	2.930	2.660	
Charleston, [Johnson]	2.850	5.656	1.800	1.137	4.125	2.050	7.887	6.787	8.281	0.933	4.087	2.512	
Columbia				2.570	0.910	4.032	2.921	2.370	1.620	0.731	2.460	4.900	
St. John's		7.600	1.590	3.660	3.540	1.100	7.651	4.750	7.920	1.500	3.060	3.320	
<b>GEORGIA—</b>													
Athens	6.960	4.212	2.354	7.017	3.019	4.763	5.474	2.252	3.744				
Augusta									4.770	1.940			
Hillsborough	8.260	4.165	4.070	3.185	2.220	4.770							
Savannah	3.146	4.562	2.821	1.994	3.630	2.901	5.774	3.324	14.198	1.543	3.371	5.948	48.212
Sparta	11.020	4.900	4.380	6.640	2.700	5.300	4.230	5.800	3.920	1.880	2.950	9.360	63.080
Thomson												4.562	
Whitemarsh Island	2.010	4.460	1.100	3.870	3.450	2.270	8.460	9.460	9.290	1.840	2.280	3.860	52.350
<b>FLORIDA—</b>													
Alachua County	4.070	4.670	3.890	0.720	2.770	4.130	9.700	8.430	11.690	3.640	3.280	1.509	58.440
Alligator	2.610	2.610	2.610	2.610	2.610	2.610	2.610	2.610	2.610	2.610	2.610	2.610	29.699
Altamaha	2.125	4.250	2.000	2.400			6.550	10.350	10.500	2.800	2.010		
Jacksonville	3.150	5.375	3.550	1.252	3.000	1.055	7.657	3.512	10.475	2.000		2.350	
Micanopy						3.460	16.090	11.460	11.005	0.980	4.040	1.290	



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1858.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>FLORIDA—Continued.</b>													
St. Augustine .....	1.450	4.475	3.950	2.028	1.525	3.600	11.425	8.200	? 7.465	1.575	.....	2.150	.....
Salt Ponds .....	1.495	2.350	1.660	0.210	3.425	7.310	3.850	2.380	6.550	0.830	2.090	0.790	32.940
Warrington .....	7.137	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>ALABAMA—</b>													
Carlisle .....	6.800	3.990	.....	.....	1.250	.....	3.100	4.020	1.900	7.750	2.120	6.560	.....
Greene Springs .....	8.690	6.480	3.590	3.230	2.770	3.600	4.410	3.880	.....	4.290	2.160	7.500	.....
Greensborough .....	9.5:2	3.760	3.303	4.670	3.755	1.443	0.939	3.620	.....	2.770	3.375	8.476	.....
Montgomery .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.500	4.010	8.130	.....
Selma .....	.....	.....	.....	3.893	2.465	4.468	2.590	3.663	0.945	5.162	3.863	9.702	.....
<b>MISSISSIPPI—</b>													
Columbus .....	9.195	7.892	4.337	6.047	4.846	5.172	5.376	1.959	0.385	1.316	2.369	8.265	57.159
Natchez .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.370	6.190	.....
Paulding .....	.....	2.400	4.423	2.096	2.154	4.046	1.838	4.381	1.360	2.394	3.385	7.199	.....
<b>LOUISIANA—</b>													
Black River .....	10.820	4.310	3.470	4.460	3.710	4.320	3.270	3.370	2.600	4.790	3.600	.....	.....
New Orleans .....	5.125	6.185	6.165	3.065	2.935	6.940	8.225	11.670	4.950	4.810	4.015	4.495	68.580
<b>TEXAS—</b>													
Austin, [Van Nostrand] .....	2.950	0.960	7.020	0.490	8.800	1.070	3.800	0.440	? 5.010	2.900	0.750	2.180	? 36.370
Goliad .....	3.030	0.530	1.410	0.000	6.550	1.970	? 1.410	0.430	1.330	4.230	? 1.420	2.620	.....
Huntsville .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.040
Larissa .....	.....	.....	.....	.....	.....	.....	.....	0.100	.....	.....	.....	.....	.....
New Braunfels .....	.....	.....	.....	.....	? 8.700	? 6.300	.....	.....	? 1.800	? 1.400	? 1.300	? 1.300	.....
Union Hill .....	.....	.....	? 6.417	? 0.292	.....	? 2.333	.....	? 0.500	? 2.460	? 11.290	? 1.333	? 2.520	.....
Washington .....	4.100	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.655	5.550	.....
<b>TENNESSEE—</b>													
Glenwood .....	4.211	3.176	4.004	6.565	4.587	6.546	4.125	1.692	2.112	2.566	2.601	11.476	53.681
Memphis .....	4.910	3.250	4.750	3.150	7.560	5.000	9.640	3.370	1.400	1.920	3.140	5.460	53.550
<b>KENTUCKY—</b>													
Bardstown .....	3.041	3.216	1.265	4.698	7.249	? 4.865	7.528	2.720	2.590	3.390	3.195	9.360	53.117
Danville .....	1.858	3.278	1.533	3.430	.....	.....	5.756	2.837	.....	.....	2.147	7.948	.....
Louisville .....	.....	.....	.....	5.344	6.661	3.982	2.786	1.771	2.577	4.167	2.699	6.761	.....
Millersburg .....	.....	.....	.....	3.990	4.500	3.520	.....	.....	.....	.....	.....	.....	.....
Paris .....	2.239	3.120	1.050	4.530	5.412	4.376	? 3.227	1.300	1.597	2.415	2.042	7.907	39.215
Springdale .....	3.500	2.610	1.340	6.340	7.910	3.550	4.480	3.460	2.740	3.880	2.740	7.350	49.900
<b>OHIO—</b>													
Avon .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.905	4.310	4.934	.....
Bellevue .....	? 2.500	3.000	? 0.900	? 10.400	? 8.300	? 6.300	? 3.700	? 2.700	1.420	6.340	? 3.510	5.120	? 54.190
Bowling Green .....	.....	.....	.....	.....	4.684	4.748	4.661	2.339	0.994	2.968	3.569	3.888	.....
Cincinnati, [Harper] .....	2.560	1.760	1.050	4.340	8.320	5.690	3.010	7.970	0.850	4.660	2.570	6.410	49.190
Cincinnati, [Hurt] .....	.....	.....	.....	.....	.....	5.530	.....	.....	.....	.....	.....	.....	.....
Cleveland .....	1.230	1.960	1.310	4.070	7.540	3.900	5.790	5.080	3.370	1.530	5.060	3.320	44.160
College Hill .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.340	.....	.....
Collingwood .....	.....	.....	.....	.....	? 5.000	? 8.000	.....	.....	.....	.....	.....	.....	.....
Dayton .....	.....	.....	.....	.....	7.561	4.823	3.182	3.965	1.143	3.253	3.749	.....	.....
Edinburg .....	2.330	? 2.000	1.980	4.780	7.110	4.790	5.020	3.970	1.360	3.720	.....	3.920	.....
Hillsborough .....	1.796	2.500	1.237	4.238	9.567	5.342	4.009	4.589	1.722	2.853	3.057	6.373	47.283
Hiram .....	1.380	1.480	1.520	4.710	? 3.910	3.230	4.685	3.570	1.230	2.775	2.960	3.255	34.705
Hudson .....	.....	.....	.....	.....	.....	.....	.....	5.230	? 2.310	2.725	3.910	2.760	.....
Jackson, [Jackson county] .....	.....	.....	.....	3.910	7.120	.....	.....	.....	.....	.....	.....	.....	.....
Jackson, [Monroe county] .....	1.500	2.600	0.500	3.450	7.850	3.610	3.300	6.150	0.500	3.100	3.920	6.730	43.210
Lancaster .....	.....	.....	.....	3.867	11.183	7.263	5.775	4.816	0.708	2.367	2.707	6.846	.....
Madison, [Atkins] .....	.....	? 2.400	.....	.....	6.390	.....	.....	.....	.....	.....	.....	.....	.....
Madison, [Cunningham] .....	1.710	1.330	? 2.525	? 7.000	? 10.656	? 6.542	? 7.126	4.314	? 4.100	? 6.210	? 6.280	.....	.....
Medina .....	1.045	? 2.106	1.730	4.504	7.024	3.586	7.473	3.020	1.275	.....	.....	.....	.....
Montville .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.088	2.495	1.928	.....
New Lisbon .....	0.550	3.300	1.080	4.120	7.440	4.760	4.120	3.840	1.300	3.010	3.480	5.450	42.450
Northwood .....	1.410	? 1.980	1.200	4.090	7.310	4.860	2.800	.....	.....	.....	? 3.270	.....	.....
Portsmouth .....	1.430	2.800	1.321	3.380	6.340	.....	.....	.....	.....	.....	.....	.....	.....
Ripley .....	2.280	3.140	0.970	3.580	6.130	5.447	5.749	2.339	1.220	4.274	1.224	8.755	45.108
Savannah .....	2.435	3.301	1.423	5.990	7.152	5.728	6.922	3.705	1.853	2.552	4.680	5.975	51.716
Urbana .....	2.050	1.480	0.960	3.870	7.500	5.260	3.600	4.360	1.970	1.780	3.390	4.800	41.020
Welchfield .....	1.666	2.448	2.371	5.387	7.822	4.708	6.293	3.668	1.437	3.021	4.061	6.155	49.037
Westerville .....	1.555	1.850	1.030	5.640	7.150	4.570	2.800	8.470	1.740	2.340	3.150	5.100	45.395
<b>MICHIGAN—</b>													
Battle Creek .....	1.030	2.580	2.690	4.500	8.130	3.850	0.250	2.450	2.950	2.800	3.360	1.160	35.750
Detroit .....	.....	.....	.....	3.838	4.010	2.830	4.350	4.390	1.390	3.780	2.780	2.120	.....
Grand Rapids, [Currier] .....	? 2.560	? 1.475	3.800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Rapids, [Streng] .....	.....	1.170	3.710	2.380	6.570	4.500	0.780	2.880	4.330	3.360	2.250	1.000	.....
Marquette .....	? 2.548	? 1.400	? 2.366	? 5.520	4.170	2.830	3.590	2.290	4.060	2.820	? 3.610	? 3.200	? 38.404
New Buffalo .....	1.910	2.780	4.000	3.690	7.760	5.620	2.400	7.303	5.510	3.250	5.750	2.450	52.420
Ottawa Point .....	.....	.....	.....	.....	.....	.....	.....	.....	? 1.300	2.230	8.270	1.370	.....
Port Huron .....	.....	? 1.450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Thunder Bay Island .....	.....	.....	.....	.....	.....	.....	.....	4.570	1.820	3.780	5.110	3.670	.....
<b>INDIANA—</b>													
Cannelton .....	.....	.....	.....	5.070	6.450	4.870	2.920	4.260	1.570	4.430	2.810	5.980	.....
Evansville .....	3.050	.....	1.040	6.650	6.140	2.800	5.440	1.780	3.010	.....	.....	.....	.....
Logansport .....	? 2.127	? 1.750	? 2.715	5.350	11.130	7.710	1.430	4.850	3.300	2.750	.....	.....	.....
Madison .....	2.730	2.076	1.515	5.337	9.676	6.312	1.976	2.228	2.822	1.090	2.164	8.617	46.523
Michigan City .....	1.880	2.230	3.000	3.140	8.200	5.310	3.780	6.890	4.370	.....	.....	.....	.....
New Harmony .....	2.950	1.920	2.560	5.140	8.600	5.830	4.400	0.900	3.240	6.120	2.600	4.430	48.710
Notre Dame .....	.....	.....	.....	.....	.....	.....	.....	.....	4.492	3.917	3.428	.....	.....
Richmond .....	2.920	2.030	1.430	5.640	11.870	6.695	2.605	6.995	0.400	3.510	4.980	4.925	54.090
<b>ILLINOIS—</b>													
Athens .....	2.180	1.840	2.760	5.780	8.710	4.120	7.790	1.890	2.660	4.590	3.010	1.940	47.270
Augusta .....	2.046	1.516	3.175	7.216	9.512	5.556	7.933	2.334	2.459	3.005	3.114	2.882	51.048
Aurora .....	2.190	1.340	2.380	5.190	6.830	5.075	5.690	3.840	5.010	3.910	3.640	2.410	47.505
Batavia, [Mead] .....	2.018	1.860	2.910	5.360	6.070	5.780	10.490	2.350	5.380	3.730	4.360	2.410	52.718
Brighton .....	? 1.800	? 1.800	? 1.900	? 2.100	? 3.200	3.260	5.350	0.361	1.810	3.800	3.520	2.370	? 31.271
Edgington .....	.....	1.850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin .....	.....	? 1.800	? 3.080	3.950	8.000	4.080	6.420	3.310	4.200	2.940	4.290	1.730	.....



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1858.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>ILLINOIS—Continued.</b>													
Evansville		2.000											
Manchester	2.350	1.670	2.045	3.650	9.200	7.595	6.525	2.180	4.590	4.285	2.860	2.455	49.405
Marengo	1.150		2.990		7.640	8.000	3.710	6.270	4.450	3.420	4.170	1.540	
Ottawa	1.668	2.150	2.976	4.546	8.357	6.575	4.818	2.372	3.553	3.972	2.220	2.550	46.887
Pekin	0.954	1.550	3.730	7.656	11.492	6.955	8.623	3.311	3.780	3.320	6.175	3.555	60.701
Peoria	1.480	1.950	3.280	6.250	10.640	5.950	5.850	3.210	2.960	3.240	4.850	3.670	53.360
Riley	1.550		3.220	3.360	7.570		5.730	4.080	4.740	5.140	2.430	3.260	
Sandwich													
Upper Alton						5.000	7.275	1.900	2.350	3.415	2.810	2.665	
Warsaw	0.340	1.830	3.370	7.410	10.200	5.420	6.220						
Waynesville		2.150		2.730	7.125	6.000	2.875	1.625	2.000	2.625	3.125	2.225	
West Salem	3.470	2.440	3.740	5.280	8.230	5.660	5.000	1.450	2.190	4.080	3.220	6.000	51.000
West Urbana	1.225	0.540	1.952	5.713	8.200	8.031	3.792		3.114	3.585	4.315	2.130	
Whitewater	2.302	2.142	2.801	4.683	6.720	3.690	3.147	8.226	4.050	3.550	4.820	5.250	51.381
Winnebago	2.370	1.290	2.080	3.980	5.900	7.450	3.200	2.850	5.590	2.940	4.500	1.880	45.150
<b>MISSOURI—</b>													
Cape Girardeau	4.000												
St. Joseph	1.130												
St. Louis	3.420	2.120	3.960	6.070	10.640	11.700	8.100	2.870	3.100	7.730	4.920	8.520	55.150
Springfield		2.500	3.095	3.260									
<b>WISCONSIN—</b>													
Appleton	1.249	2.031	1.874	4.569	5.394	4.561	4.415	2.167	4.542	3.312	2.180	2.191	36.405
Bay City			1.900		2.800	3.400	6.700	5.950	4.200	4.100	2.100	3.300	
Bayfield									2.170	3.120	1.220		
Beloit		0.997	1.860	3.294	10.294	6.294	8.775	2.609	3.934	1.722	3.135	1.849	
Green Bay						4.230	3.200	3.230	3.100	4.300	3.007		
Jamesville	2.350	0.850	1.070	3.000	5.000	5.900		6.950	3.650	2.100	3.000	1.550	
Kenosha			1.270	3.420	6.200	7.130					4.440	0.100	
Madison	1.830	0.590	1.940	4.740	8.390	4.720	2.350			1.740	1.170		
Maplewood		0.880											
Menasha	3.350	0.837	2.870										
Milwaukee, [Winkler]		2.460	2.110	5.150	8.510	4.080	3.660	2.750	3.920	4.590	4.950	1.930	
New London	2.320	0.440	1.530	5.920	6.340	4.770	4.380	4.320					
Platteville	2.285	0.601	1.663	4.434	6.443	7.735	8.845	0.777	4.192	3.406	4.422	2.464	47.270
<b>IOWA—</b>													
Bellevue	2.710	2.1050	1.840	5.210	9.125	5.200	6.610	2.540	4.080	3.960	4.830	2.470	51.510
Border Plains					4.187	9.125	13.687	4.875	2.170	6.125	1.125	0.875	
Dubuque	1.910	0.780	1.840	4.370	8.230	4.860	8.000	1.370	5.552	5.630	3.010	0.953	47.195
Fairfield	2.350	2.550	3.050	6.840	8.473	6.940	9.440	1.830	4.330	6.200	8.700	4.700	65.900
Fort Madison	1.720	2.280	1.840	6.850	8.100	6.360	5.900	1.590	3.110	5.930	4.640	2.780	51.100
Iowa City	2.130	0.810	1.820	4.530	8.170	4.530	8.740	2.520	2.610	3.330	2.700	1.310	
Muscatine	2.160	2.000	2.200	5.670	8.400	6.770	7.300	4.120	6.100	4.950	2.540	2.900	56.550
Pleasant Plain	2.120	2.300		8.000	9.700	8.500	8.600	3.000	3.470	4.670	4.590	1.600	
Poultney		2.110	3.110	4.170	6.470	5.490	6.520	2.600					
Rossville	2.640	0.990	1.930	4.780	5.530			4.210	1.540	2.580	2.330	1.110	
Sioux City		0.560	0.890	4.360	3.300	4.720	7.420	6.070	3.600	2.210	0.890	0.320	
<b>MINNESOTA—</b>													
Beaver Bay											0.590	1.740	
Burlington	2.1537	2.0762	2.1112	2.450	1.312	3.562	5.625	3.750	3.000		1.381	2.000	
Forest City						1.830	16.910	5.250	3.770	1.720			
Hazlewood	2.1640			4.430	3.590	2.970	5.610	5.270	4.070	1.410	1.530	0.220	
Princeton	4.710			1.880		1.600							
Stillwater											1.540		
Wabasha	2.133	0.633	1.200		3.400	4.110	7.100	1.300					
<b>NEBRASKA—</b>													
Bellevue			2.1600	2.4350	2.560	7.270	15.850	1.360	2.740	2.000	0.590	0.720	
Omaha	1.820	0.800	1.800	5.750	3.190	6.840	15.700	2.400	2.400			1.060	
<b>KANSAS—</b>													
Burlingame		0.430	2.420	3.150	1.520	6.950	5.000	4.450	2.190	7.320	2.760	0.820	
Council City	0.650			2.880		14.200			2.875		3.110	1.620	
Leavenworth City, [Berthoud]						14.200			4.820	7.830			
Leavenworth City, [McCart]	0.990	0.650	2.680		4.980	11.790		5.330					
Manhattan	2.400	0.460		4.440	5.120	4.829	6.340	3.980	1.100	4.670	0.690	1.110	
Mapleton	3.020				3.080	4.570	4.250	1.100	1.700				
Topeka			2.625	3.500	1.125	5.250	2.625						
<b>UTAH—</b>													
Great Salt Lake City									0.147	3.276			
<b>OREGON—</b>													
Oregon City	4.050	3.810	4.870	1.830	2.990	2.040	0.100	0.440	4.040	4.550	4.440	9.930	43.090
Portland				1.350	1.510	0.130							
<b>CALIFORNIA—</b>													
Sacramento	2.446	2.461	2.882	1.214	0.205	0.100	0.000	0.004	0.001	3.010	0.147	4.842	17.312
San Francisco	2.515	1.555	3.620	0.705	0.275	0.040	0.000	0.115	0.000	2.163	0.645	6.100	17.764
<b>MEXICO—</b>													
Vera Cruz	3.830	2.1810	0.000										
<b>CENTRAL AMERICA—</b>													
Guatemala	0.512	0.020	1.673	1.870	5.768	12.839	11.241	4.492	8.382	3.244	0.067	0.102	50.210
<b>BERMUDA—</b>													
St. George's	3.775	4.440	1.773	4.270									
<b>SOUTH AMERICA—</b>													
Catharina Sophia, Surinam	8.161	1.484	8.977	12.435	11.326	11.927	4.980	3.588	3.538	2.793	9.683	7.357	85.740
<b>EASTERN CONTINENT—</b>													
Jerusalem, Palestine											0.100	5.220	



## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			Range for the year.		
			DATE.		HEIGHT.	DATE.		HEIGHT.			
			Day.	Hour.		Day.	Hour.				
		<i>Inches.</i>				<i>Inches.</i>			<i>Inches.</i>		
British America	Hamilton	29.65	Jan.	8	9 a. m.	30.32	March 21	9 a. m.	28.90	1.42	
	Montreal	29.94	Jan.	22	9 p. m.	30.79	March 21	2 p. m.	29.12	1.67	
	St. John's	29.39	Jan.	11	9 p. m.	30.18	May 4	9 p. m.	28.36	1.82	
	St. Martin	29.83	Jan.	22	9 p. m.	30.70	March 21	2 p. m.	29.02	1.68	
	Toronto	29.62	Jan.	8	6 a. m.	30.37	March 21	6 a. m.	28.92	1.45	
	Windsor	29.87	Dec.	31	7 a. m.	30.62	March 9	2 p. m.	28.61	2.01	
Maine	Gardiner	29.81	Jan.	24	7 a. m.	30.55	March 9	2 p. m.	28.88	1.67	
	Portland	29.89	Jan.	23	7 a. m.	30.73	March 9	7 a. m.	28.99	1.74	
New Hampshire	Shelburne	29.76	Jan.	23	7 a. m.	30.44	March 9	2 p. m.	28.97	1.47	
Vermont	Burlington	29.61	Jan.	22	9 p. m.	30.42	Feb. 10	2 p. m.	28.82	1.60	
	Norwich	29.65	Jan.	23	7 a. m.	30.40	Sept. 16	9 p. m.	28.96	1.44	
Massachusetts	Amherst	29.69	Jan.	8	2 p. m.	30.57	Sept. 16	2 p. m.	28.83	1.74	
	Cambridge	29.94	Jan.	23	7 a. m.	30.75	March 9	7 a. m.	29.08	1.67	
	Lawrence	29.86	Jan.	23	7 a. m.	30.63	Dec. 22	7 a. m.	28.99	1.64	
	Nantucket	29.99	Jan.	8	9 p. m.	30.75	March 9	7 a. m.	29.07	1.68	
	New Bedford	29.90	Jan.	23	7 a. m.	a 30.67	March 9	7 a. m.	29.02	1.65	
	Westfield	29.89	Jan.	23	7 a. m.	30.63	March 9	7 a. m.	b 29.16	1.47	
	Williamstown	29.27	Jan.	23	7 a. m.	29.99	March 9	2 p. m.	28.49	1.50	
	Worcester	29.44	Oct.	17	9 p. m.	30.29	March 9	7 a. m.	28.62	1.67	
	Rhode Island	Providence	29.82	Jan.	23	Sunrise.	30.55	March 9	Sunrise	28.97	1.58
Connecticut	Pomfret	29.36	Jan.	23	7 a. m.	30.10	March 9	7 a. m.	28.52	1.58	
	Wallingford	29.89	Jan.	23	7 a. m.	30.65	Sept. 16	2 p. m.	29.01	1.64	
New York	Bellport	29.29	Jan.	8	9 p. m.	29.93	March 8	9 p. m.	c 28.73	1.20	
	Buffalo	29.34	Jan.	8	8 a. m.	30.06	Feb. 9	9 p. m.	d 28.65	1.41	
	Cazenovia	28.58	Jan.	8	7 a. m.	29.23	Oct. 7	2 p. m.	28.03	1.20	
	Fishkill (e)	30.23	Jan.	23	2 p. m.	f 30.90	March 9	7 a. m.	g 29.45	1.55	
	Flatbush	29.92	Jan.	23	7 a. m.	30.69	Sept. 16	7 a. m.	c 29.20	1.49	
	Fort Edward	29.82	Jan.	24	9 p. m.	30.75	March 9	2 p. m.	29.06	1.69	
	New York city	30.04	Jan.	23	7 a. m.	30.71	March 9	7 a. m.	29.28	1.43	
	Rochester	29.41	Jan.	8	7 a. m.	30.12	Feb. 9	9 p. m.	h 28.77	1.35	
	Sag Harbor	29.69	Jan.	23	2 p. m.	30.46	March 9	7 a. m.	28.95	1.51	
	Waterford	29.94	Jan.	23	7 a. m.	30.73	Sept. 16	2 p. m.	29.24	1.49	
	New Jersey	Newark	29.95	Jan.	8	6 p. m.	30.68	Jan. 5	7 a. m.	28.76	1.92
	Pennsylvania	Berwick (e)	29.34	Jan.	8	2 p. m.	i 30.00	March 9	2 p. m.	28.58	1.42
Cannonsburg		29.80	July	6	9 p. m.	29.99	March 11	2 p. m.	28.20	1.79	
Easton		29.51	Jan.	8	9 p. m.	j 30.20	Dec. 21	9 p. m.	28.85	1.35	
Gettysburg		29.47	Jan.	8	2 p. m.	30.17	March 21	2 p. m.	28.82	1.35	
Harrisburg, [Heisely]		29.76	Jan.	8	2 p. m.	30.45	March 21	2 p. m.	29.11	1.34	
Harrisburg, [Hickok]		29.72	Jan.	8	2 p. m.	30.43	March 21	2 p. m.	29.05	1.38	
Lewisburg		29.55	Jan.	8	2 p. m.	30.26	March 21	2 p. m.	28.84	1.42	
Morrisville		30.05	Jan.	8	9 p. m.	30.80	Dec. 21	9 p. m.	29.37	1.43	
Mount Joy (e)		29.68	Jan.	8	2 p. m.	30.42	Dec. 21	9 p. m.	29.00	1.42	
Murrysville		28.83	Jan.	8	7 a. m.	29.48	Dec. 21	2 p. m.	28.20	1.28	
Norristown		29.91	Jan.	23	7 a. m.	30.65	Dec. 21	9 p. m.	29.18	1.47	
Philadelphia		29.87	Jan.	8	2 p. m.	30.53	Dec. 21	9 p. m.	29.21	1.32	
Pittsburg, [Mar. Hospital]		28.93	Jan.	8	7 a. m.	29.70	March 11	2 p. m.	28.32	1.38	
Somerset		27.64	Jan.	8	7 a. m.	28.16	Dec. 21	2 p. m.	27.11	1.05	
Westtown		29.42	Jan.	23	7 a. m.	30.11	March 21	2 p. m.	28.75	1.36	
Maryland		Annapolis	30.02	Jan.	8	2 p. m.	30.70	Dec. 21	2 p. m.	29.44	1.26
		Baltimore	29.90	Jan.	8	2 p. m.	30.58	March 21	2 p. m.	29.25	1.33
	Frederick	29.74	Jan.	8	7 a. m.	30.43	March 21	2 p. m.	29.08	1.35	
District Columbia	Washington	30.00	Jan.	8	7 a. m.	30.75	Feb. 9	9 p. m.	29.18	1.57	
Virginia	Portsmouth	30.01	Jan.	8	2 p. m.	30.67	March 8	2 p. m.	29.31	1.36	
North Carolina	Chapel Hill	29.57	Jan.	8	7 a. m.	k 30.17	March 8	2 p. m.	28.93	1.24	
	Davidson College	29.15	Jan.	8	7 a. m.	29.78	March 8	7 a. m.	28.51	1.27	
	Murfreesborough	29.28	Dec.	10	7 a. m.	29.99	Dec. 21	2 p. m.	28.75	1.24	

*a* Same height at 9 p. m. January 4.*b* Same height at 3 p. m. March 9.*c* Same height at 9 p. m. December 21.*d* Same height at 8 a. m. March 21.*e* Not corrected for temperature.*f* Same height at 3 p. m. January 23.*g* Same height at 2 p. m. January 9.*h* Same height at 7 a. m. December 21.*i* Same height at 2 p. m. and 9 p. m. January 22, and at 2 p. m. December 25.*j* Same height at 7 a. m. January 23.*k* Same height at 9 p. m. December 25.

## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			Range for the year.		
			DATE.		HEIGHT.	DATE.		HEIGHT.			
			Day.	Hour.		Day.	Hour.				
		Inches.			Inches.			Inches.	Inches.		
South Carolina	All Saints	29.99	Dec.	25	9 p. m.	30.52	March	8	7 a. m.	29.20	1.32
	Charleston, [Dawson]		Dec.	—		30.67	March	—		29.47	1.20
Georgia	Savannah	30.05	Dec.	10	7 a. m.	30.52	March	8	7 a. m.	<i>a</i> 29.36	1.16
Florida	Atsena	29.83	March	14	7 a. m.	<i>b</i> 30.10	March	8	7 a. m.	<i>a</i> 29.30	1.40
	Jacksonville	30.09	Jan.	8	9 p. m.	<i>c</i> 30.46	March	8	2 p. m.	29.45	1.01
	Salt Ponds ( <i>d</i> )	29.69	March	3	2 p. m.	29.96	April	1	7 a. m.	29.36	0.60
Texas	Goliad	29.98	Dec.	9	7 a. m.	30.61	April	9	9 p. m.	29.51	1.10
Tennessee	Glenwood	29.56	Sept.	19	7 a. m.	30.21	April	12	7 a. m.	<i>e</i> 28.92	1.29
	Memphis	29.76	Dec.	9	7 a. m.	30.42	May	10	2 p. m.	29.13	1.29
Kentucky	Bardstown ( <i>f</i> )	30.01	Dec.	9	7 a. m.	30.62	Dec.	14	9 p. m.	29.00	1.62
	Paris	29.18	Dec.	9	7 a. m.	29.76	April	12	2 p. m.	28.46	1.30
	Springdale	29.42	Dec.	9	7 a. m.	30.01	May	11	7 a. m.	28.79	1.22
Ohio	Bowling Green	29.22	Jan.	1	Sunrise.	<i>g</i> 29.86	April	13	7 a. m.	28.54	1.32
	Cincinnati, [Harper]	29.48	Dec.	9	2 p. m.	30.08	April	12	2 p. m.	28.68	1.40
	Cleveland	29.08	Aug.	15	9 p. m.	29.75	Dec.	21	7 a. m.	28.52	1.23
	Hillsborough	29.83	Jan.	8	7 a. m.	29.37	April	12	2 p. m.	28.11	1.26
	New Lisbon ( <i>c</i> )	28.62	Jan.	8	7 a. m.	<i>h</i> 29.20	May	11	2 p. m.	28.03	1.17
	Ripley	29.40	Dec.	9	7 a. m.	29.99	April	12	7 a. m.	28.79	1.20
	Savannah	28.89	Jan.	8	7 a. m.	29.48	April	12	2 p. m.	28.24	1.24
	Urbana	28.87	Jan.	8	7 a. m.	29.45	April	12	2 p. m.	28.18	1.27
	Westerville	28.87	Jan.	8	7 a. m.	29.44	April	12	2 p. m.	28.22	1.22
Michigan	Battle Creek	29.10	Jan.	8	7 a. m.	29.69	Jan.	11	7 a. m.	28.43	1.26
	Marquette	29.33	May	2	7 a. m.	29.94	Jan.	11	7 a. m.	28.56	1.38
	New Buffalo	29.29	Jan.	8	9 p. m.	29.89	Jan.	12	7 a. m.	28.63	1.26
Indiana	Madison	29.48	Dec.	9	2 p. m.	30.07	May	11	7 a. m.	28.84	1.23
	New Harmony	29.66	Dec.	9	7 a. m.	30.30	April	13	2 p. m.	28.91	1.39
Illinois	Athens	29.39	Dec.	9	7 a. m.	30.01	April	8	2 p. m.	28.60	1.41
	Batavia, [Mead]	29.11	Dec.	9	7 a. m.	29.79	Feb.	13	2 p. m.	28.35	1.44
	Manchester	28.81	April	3	7 a. m.	29.49	April	8	1 p. m.	28.11	1.38
	West Urbana	29.21	Jan.	7	9 p. m.	29.31	April	12	9 p. m.	28.56	1.25
	Wheaton	29.21	Jan.	7	9 p. m.	29.86	Feb.	1	9 p. m.	28.33	1.53
Missouri	St. Louis	29.53	Sept.	20	7 a. m.	30.18	April	8	2 p. m.	28.78	1.40
Wisconsin	Appleton	28.95	Jan.	7	9 p. m.	29.56	Jan.	11	7 a. m.	28.20	1.36
	Beloit	29.17	Jan.	7	9 p. m.	29.79	Dec.	30	2 p. m.	28.36	1.43
	Kenosha	29.48	Dec.	9	2 p. m.	30.07	Jan.	11	7 a. m.	28.70	1.37
	Milwaukee, [Winkler]	29.26	Jan.	7	9 p. m.	29.84	Jan.	11	7 a. m.	28.46	1.38
Iowa	Dubuque	29.31	Jan.	7	9 p. m.	30.00	April	8	2 p. m.	28.41	1.59
	Fairfield	28.76	Jan.	7	9 p. m.	29.77	Dec.	29	2 p. m.	27.29	2.48
	Muscatine	29.49	Jan.	8	7 a. m.	30.17	April	8	2 p. m.	28.62	1.55
Kansas	Lawrence	29.07	Dec.	9	7 a. m.	29.71	April	11	9 p. m.	28.31	1.40
	Leaven'th City, [McCarty]	28.63	Jan.	7	7 a. m.	29.17	April	8	7 a. m.	28.08	1.09
California	Sacramento	29.99	Jan.	2	2 p. m.	30.41	Jan.	22	2 p. m.	29.51	0.90
	San Francisco	29.93	Jan.	2	7 a. m.	30.38	Jan.	22	2 p. m.	29.44	0.94
Mexico	Vera Cruz	30.04	Dec.	9	11 p. m.	30.48	April	10	2 p. m.	29.59	0.89
Central America	Guatemala	25.24	Feb.	—	?	<i>i</i> 25.39	March	—	?	25.08	0.21
South America	Catharina Sophia, Sur ( <i>f</i> )	29.79	Feb.	11	6 p. m.	29.96	Jan.	12	2 p. m.	<i>j</i> 29.57	0.39
	Catharina Sophia, Surinam	29.88	Sept.	9	6 a. m.	30.04	April	21	6 p. m.	29.73	0.31

<sup>a</sup> Same height at 2 p. m. March 8.<sup>b</sup> Same height at 9 p. m. March 13 and 14, and at 7 a. m. March 15.<sup>c</sup> Same height at 7 p. m. December 10.<sup>d</sup> Not corrected for temperature.<sup>e</sup> Same height at 9 p. m. May 10.<sup>f</sup> Aneroid.<sup>g</sup> Same height at sunrise January 8.<sup>h</sup> Same height at 2 p. m. and 9 p. m. January 8.<sup>i</sup> Same height in March.<sup>j</sup> Same height at 6 p. m. January 11 and 12.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
BRITISH AMERICA—	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Hamilton (a) .....	48.26		48.02	41.14	June 26	88	June 25	b 84.50	Feb. 17	— 4	Feb. 17	1.50	92	.....
Montreal .....	38.86	46.97	41.25	42.36	June 24	c 89	June 25	80.83	Feb. 11	—17	Feb. 10	— 6.67	106	.....
Moose Factory (a) .....				26.43										
St. John's .....	39.56	44.50	40.94	40.93	Aug. 12	83	July 17	d 74.67	Jan. 23	— 7	Jan. 23	— 3.00	90	5.57
St. Martin (a) .....	33.46	49.22	38.69	40.46	June 26	97	June 26	85.90	Feb. 13	—30	Feb. 13	—16.20	127	.....
Stanbridge .....	37.13	48.10	39.30	41.51	June 25	90	July 7	83.33	Feb. 13	—27	Feb. 13	—13.67	117	.....
Toronto (a) .....	41.11	49.45	43.19	44.58	June 24	e 86	June 26	79.98	Feb. 17	— 7	Feb. 17	1.60	93	5.99
Windsor .....	38.22	47.65	40.48	42.12	July 7	e 87	July 14	77.30	Feb. 11	— 6	Feb. 11	4.00	93	6.26
MAINE—														
Cornish, [Guptill] .....	39.26	48.90	41.34	43.17	June 18	f 88	June 25	80.67	Feb. 12	— 7	Feb. 11	— 3.33	95	4.90
Cornish, [West] .....	37.68	47.82	39.80	41.77	June 28	g 86	June 24	78.33	Feb. 12	—13	Feb. 11	— 4.67	99	4.69
Gardiner .....	38.57	47.76	42.16	42.83	June 18	g 88	July 8	79.33	Jan. 9	—24	Dec. 30	— 7.00	112	5.57
Perry .....	37.10	45.91	38.39	40.47	July 7	88	July 7	75.33	Dec. 30	— 8	Dec. 30	— 2.67	96	4.79
Portland .....	40.18	48.99	42.49	43.89	June 18	h 87	July 8	78.50	Feb. 12	— 6	Feb. 11	2.33	93	5.52
Steuben (a) .....	37.30	46.53	38.99	40.94	July 8	88	July 8	88.33	Feb. 12	—10	Feb. 11	— 1.00	98	.....
NEW HAMPSHIRE—														
Shelburne .....	37.29	52.69	39.99	43.32	July 8	■	July 8	84.00	Dec. 30	—18	Feb. 11	— 3.33	114	5.59
West Enfield .....	37.62	48.27	39.69	41.86	June 27	94	June 25	81.33	Mar. 5	—18	Feb. 11	— 4.33	112	5.22
VERMONT—														
Brandon .....	38.84	50.01	41.45	43.43	June 25	91	June 25	82.00	Feb. 16	—13	Feb. 13	— 3.33	104	5.35
Burlington .....	39.02	47.14	41.74	42.63	June 25	i 88	June 26	82.00	Feb. 12	—14	Mar. 4	— 1.66	102	5.12
Craftsbury .....	35.26	45.93	38.51	39.90	June 18	89	June 25	78.00	Feb. 12	—18	Feb. 11	—10.00	107	5.44
Rupert .....	41.21	54.69	49.29	48.40	July 10	96	July 10	88.67	Mar. 4	— 6	Mar. 4	5.33	102	5.70
St. Johnsbury .....	34.35	47.58	37.21	39.71	June 24	k 90	June 24	77.67	Feb. 12	—31	Feb. 12	—12.67	121	5.64
MASSACHUSETTS—														
Amherst (a) .....	41.77	53.18	45.32	46.76	July 11	92	June 26	82.50	Mar. 4	— 8	Feb. 11	5.70	100	5.31
Cambridge .....	42.47	53.72	45.25	47.15	July 8	91	July 10	80.00	Mar. 4	0	Mar. 5	6.33	91	5.05
Florida .....														
Lawrence .....	40.22	52.93	44.26	45.80	July 11	95	July 11	82.33	Feb. 12	— 2	Feb. 11	6.00	97	5.01
Mendon .....	42.74	53.00	44.65	46.80	June 25	h 92	July 11	82.00	Mar. 3	0	Feb. 11	7.00	92	4.79
Nantucket .....	48.12	53.65	47.81	49.86	July 9	m 80	July 11	74.67	Feb. 17	11	Mar. 5	16.83	69	4.82
New Bedford .....	44.56	53.74	45.89	48.06	June 25	84	June 28	76.33	Mar. 5	3n	Mar. 5	8.20	81	5.80
Westfield .....	40.79	52.88	44.58	46.08	June 25	92	June 25	80.67	Feb. 24	— 3o	Feb. 12	7.00	95	5.42
Williamstown .....	40.38	49.68	42.99	44.35	July 10	86	July 10	81.00	Mar. 4	—10	Feb. 24	0.00	96	5.82
Worcester .....	43.18	53.82	45.56	47.52	June 25	h 92	June 25	82.67	Mar. 4	3p	Mar. 5	7.67	89	5.12
RHODE ISLAND—														
Providence (a) .....	43.81	55.14	45.99	48.31	June 25	91	July 10	81.33	Mar. 4	2	Mar. 5	10.00	89	4.68
CONNECTICUT—														
Columbia .....	43.69	54.72	43.58	47.33	June 25	92	June 25	81.33	Mar. 4	— 6	Mar. 4	5.33	98	5.10
Pomfret .....	41.27	51.16	43.60	45.34	June 25	86	June 26	80.10	Mar. 4	1	?	?	?	5.11
Saybrook .....	45.53	53.91	46.59	48.68	July 28	86	June 28	78.33	Feb. 17	6	Mar. 5	8.67	80	4.89
Wallingford .....	41.63	55.09	45.01	47.24	June 26	92	June 26	81.50	Mar. 4	— 4.5	Mar. 5	6.50	96.5	4.38
NEW YORK—														
Ballport .....	47.27	53.46	47.23	49.32	June 26	q 87	June 26	79.33	Mar. 4	p 6	Mar. 5	8.67	81	4.47
Buffalo (a) .....	46.80	51.05	47.79	48.55	July 9	85	July 9	80.33	Feb. 11	4	Mar. 5	8.33	80	5.37
Clinton .....	43.64	54.76	44.37	47.59	July 10	96	July 10	86.67	Feb. 19	—12	Mar. 5	2.33	103	6.27
Fishkill .....	44.91	56.08	48.23	49.74	June 26	94	June 26	85.33	Feb. 24	— 4	Feb. 23	8.67	98	4.53
Fort Edward .....	40.12	51.22	43.91	45.08	June 28	r 90	June 26	82.00	Feb. 12	—18	Feb. 14	— 2.67	108	5.56
Flatbush .....	46.65	56.01	48.05	50.24	June 26	93	June 28	83.20	Mar. 5	7	Mar. 5	9.40	86	5.18
Nichols .....	42.69	56.20	43.04	47.31	June 25	t 94	July 3	u 82.67	Feb. 24	—13	Mar. 5	3.00	107	6.08
Rochester .....	44.45	53.45	47.39	48.43	June 24	94	June 24	u 83.33	Feb. 19	p 2	Mar. 5	6.80	92	5.66
Sag Harbor (a) .....	47.20	59.16	48.38	51.58	June 28	95	June 28	82.00	Mar. 4	3	Mar. 5	10.67	92	4.88
Waterford (a) .....	42.60	54.27	45.44	47.44	July 8	b 91	June 27	83.67	Feb. 23	—18	Feb. 23	2.00	109	5.40
NEW JERSEY—														
Lambertville .....	45.46	60.45	48.74	51.55	June 26	98	.....	.....	Feb. 24	— 8.7	.....	.....	106.7	.....
Newark (a) .....	.....	.....	.....	50.51	June 26	h 91	July 11	84.00	Feb. 24	—0.25	Mar. 5	10.88	91.25	.....
PENNSYLVANIA—														
Berwick .....	46.59	58.02	49.17	51.26	June 25	93	July 10	84.00	Feb. 24	— 2	Mar. 5	5.33	95	4.24
Cannonsburg .....	47.00	57.70	52.21	52.31	July 1	92	July 1	81.67	Feb. 23	v 0	Feb. 23	12.67	92	6.07
Easton (a) .....	44.38	56.65	47.48	49.50	July 11	w 94	?	?	Feb. 24	— 5	Mar. 5	6.20	99	5.74
Fleming .....	44.37	57.93	47.06	49.79	June 22	95	July 3	81.33	Feb. 24	— 6	Mar. 5	7.67	101	5.45
Gettysburg .....	46.32	59.70	50.14	52.05	June 30	w 95	July 11	85.00	Feb. 24	— 8	Mar. 5	8.00	103	4.82
Harrisburg, [Heisely] ..	50.34	60.04	55.20	55.19	June 26	96	July 11	89.00	Feb. 23	4	Mar. 5	16.00	92	5.02
Harrisburg, [Hickok] ..	47.00	57.97	51.54	52.17	July 11	w 93	July 11	85.67	Feb. 25	2	Mar. 5	11.17	91	5.58
Lewisburg .....	44.75	56.73	48.19	49.89	June 26	w 93	July 10	84.00	Feb. 24	— 6	Feb. 17	9.53	99	6.07
Morrisville .....	46.15	59.10	49.27	51.51	June 28	96	June 28	h 86.00	Feb. 24	— 2	Mar. 5	11.00	98	3.89
Mount Joy .....	49.11	62.51	52.49	54.70	July 11	103	July 11	92.67	Feb. 24	— 7.5	Mar. 5	9.67	110.5	4.47
Murrysville .....	45.63	58.07	47.33	50.34	June 24	x 91	June 29	81.00	Feb. 22	—14	Feb. 22	1.67	105	5.72
Norristown .....	46.83	57.14	49.88	51.28	July 29	91	June 28	83.50	Feb. 24	—10	Feb. 24	8.80	101	4.97
North Whitehall (a) ..	43.82	57.17	52.27	51.09	Aug. 11	b 90	June 28	82.33	Feb. 25	— 5	Mar. 5	8.00	95	.....
Paradise .....				52.83										
Philadelphia .....	50.22	60.74	53.98	54.98	June 23	h 95	June 28	h 89.20	Mar. 5	n 10	Mar. 5	14.33	85	5.42
Pittsburg, [Mar. Hosp.]	48.02	57.86	51.68	52.52	July 3	w 91	July 2	84.67	Feb. 23	— 2	Mar. 5	9.00	93	5.92

a For changes in hours of observation, interruptions, &c., see monthly tables.

b Same temperature June 26th and 27th.

c Same temperature June 25th.

d Same temperature August 12th.

e Same temperature September 8th.

f Same temperature June 25th and July 8th.

g Same temperature July 8th.

h Same temperature July 11th.

i Same temperature June 26th.

j Same temperature February 13th.

k Same temperature June 12th.

l Same temperature March 4th.

m Same temperature July 11th and 12th, and August 6th.

n Same temperature March 6th.

o Same temperature December 26th.

p Same temperature March 5th.

q Same temperature June 26th.

r Same temperature July 9th.

s Same temperature June 29th.

t Same temperature July 3d and 10th.

u Same temperature July 10th.

v Same temperature February 24th.

w Same temperature July 29th.

x Same temperature July 1st.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
PENNSYLVANIA—Cont'd.														
Pocahontas	47.91	60.03	58.23	52.76	June 26	97	June 27	86.67	Feb. 24	— 9	Feb. 23	10.33	105	5.37
Shamokin	40.79	55.42	49.19	46.47	July 3	96	July 3	84.00	Feb. 25	— 8	Feb. 11	7.33	104	5.28
Somerset	43.86	56.66	47.07	49.20	July 2	99	July 2	79.67	Mar. 5	— 2 c	Mar. 5	2.33	93	6.64
Trenton	46.03	59.40	48.54	51.32	July 3	99	July 3	84.00	Feb. 23	— 5 e	Mar. 5	7.00	96	5.61
Westtown	46.89	57.73	49.23	51.28	June 26	93	July 11	84.67	Feb. 24	— 8	Mar. 5	8.83	101	5.31
DELAWARE—														
Georgetown	53.28	62.70	58.10	58.03	July 29	98	July 10	85.00	Mar. 5	11	Mar. 5	16.33	87	.....
MARYLAND—														
Annapolis	50.11	60.40	56.03	55.51	July 29	97	July 29	87.33	Mar. 5	c 9	Mar. 5	16.00	88	4.81
Baltimore (g)	50.17	59.81	54.50	54.83	June 30	94	June 30	85.00	Feb. 24	5	Feb. 24	11.50	89	5.82
Bladenburg (g)	47.64	62.10	49.81	53.18	July 19	98	July 3	84.67	Feb. 24	5	?	?	93	5.57
Frederick	49.65	58.32	51.53	53.33	June 30	93	July 3	87.50	Feb. 24	5	Mar. 5	14.17	88	5.03
Sykesville	47.68	59.40	51.18	54.76	July 29	98	June 30	83.00	Feb. 24	5	Mar. 5	9.67	89	4.79
DIST. OF COLUMBIA—														
Washington (g)	50.43	60.00	54.72	55.25	June 30	94	June 28	87.00	Mar. 5	11	Mar. 5	14.33	85	5.14
VIRGINIA—														
Crichton's Store (g)	55.43	65.84	64.21	61.83	Aug. 12	100	.....	?	Mar. 5	17	Mar. 5	24.33	83	5.07
Hartwood	51.48	63.61	53.72	56.27	Aug. 11	98	June 29	85.33	Feb. 24	j 10	Mar. 5	15.33	88	.....
Meadow Dale	41.73	55.93	50.06	49.21	June 29	98	June 29	78.00	Mar. 6	— 1	Mar. 5	7.00	87	.....
Poplar Grove	49.66	65.69	52.43	55.93	June 30	98	June 30	87.33	Feb. 23	4	Mar. 6	17.67	94	5.76
Portsmouth	55.28	66.36	55.61	59.28	July 3	100	July 3	88.33	Mar. 6	15	Mar. 5	21.33	95	3.60
Rougemont (g)	51.47	65.21	55.20	57.29	June 26	100	June 30	91.33	Mar. 5	c 8	Mar. 5	14.67	92	5.48
Smithfield (g)	52.19	61.04	56.87	57.70	June 27	93	Aug. 2	86.40	Mar. 5	11	Mar. 5	18.40	82	5.28
Wirt Court House	48.62	61.48	51.01	53.50	June 30	94	June 30	83.00	Mar. 7	— 7	Feb. 23	11.00	101	5.37
NORTH CAROLINA—														
Chapel Hill	53.70	67.81	56.35	59.30	Aug. 11	98	June 30	85.67	Mar. 3	18	Mar. 3	22.00	80	5.11
Davidson College (g)	53.07	65.88	57.64	58.86	Aug. 3	93	Aug. 2	84.50	Mar. 3	16	Mar. 2	24.67	77	4.37
Gaston	53.04	66.00	54.37	58.00	July 1	100	July 4	90.67	Mar. 6	14	Mar. 5	19.67	87	.....
Murfreesborough (g)	54.81	65.99	57.78	59.53	Aug. 4	98	Aug. 4	88.67	Mar. 6	17	Mar. 6	22.33	81	4.21
SOUTH CAROLINA—														
Aiken	56.58	70.71	59.12	62.03	Aug. 4	100	July 24	84.33	Mar. 2	20	Mar. 2	26.67	80	4.73
All Saints	60.08	69.03	64.42	64.18	Aug. 7	98	July 3	84.67	Mar. 3	24	Mar. 2	30.00	64	4.50
Charleston, [Dawson]	62.55	70.35	66.00	66.17	July	94	.....	.....	March	29	.....	65	.....	.....
Charleston, [Johnson]	62.70	70.35	65.29	66.31	July 4	94	July 4	87.33	Mar. 3	29	Mar. 2	35.00	65	.....
GEORGIA—														
Savannah	61.70	72.79	65.56	66.48	July 4	97	July 3	86.97	Mar. 2	27	Mar. 2	34.60	70	4.87
Sparta	55.83	71.87	61.74	63.15	Aug. 3	98	Aug. 3	84.67	Mar. 3	20	Mar. 2	29.00	78	4.80
Whitemarsh Island	62.68	71.23	64.72	66.21	July 3	94	July 3	85.00	Mar. 2	27	Mar. 2	33.67	67	4.76
FLORIDA—														
Alachua County (g)	62.23	75.99	66.73	68.28	July 1	98	July 4	84.33	Mar. 3	30	.....	?	68	3.65
Altamont	63.07	77.92	66.72	69.24	Aug. 2	100	Aug. 2	89.33	Mar. 2	q 37	Mar. 2	33.00	73	4.67
Arsena	67.73	73.28	70.54	70.62	Aug. 4	90	July 4	86.67	Mar. 2	32	Mar. 2	39.33	58	3.94
Belair	62.66	77.02	68.61	69.44	June 5	96	July 4	88.33	Mar. 2	s 30	Mar. 2	40.00	61	4.54
Jacksonville	66.61	75.29	67.42	69.77	June 2	98	July 3	88.33	Mar. 2	u 34	Mar. 2	39.00	61	4.54
Salt Ponds	75.70	81.27	.....	78.48	Aug. 2	92	Aug. 2	88.00	Mar. 3	34	Mar. 3	55.50	38	4.13
ALABAMA—														
Greene Springs	57.31	71.31	59.62	62.81	June 3	95	Aug. 7	85.00	Feb. 23	22	Feb. 22	31.00	73	4.32
MISSISSIPPI—														
Columbus	56.67	70.82	60.77	62.75	Aug. 8	93	July 19	84.33	Feb. 23	19	Feb. 22	26.70	77	4.26
LOUISIANA—														
New Orleans (g)	70.60	74.99	76.57	74.05	Aug. 1	95	July 23	91.67	Feb. 23	34	Feb. 23	39.33	61	.....
TEXAS—														
Austin, [Palm]	62.20	76.50	65.18	65.92	July 23	98	July 23	85.00	Dec. 8	25	Dec. 3	23.33	73	4.05
Austin, [Van Nostrand]	61.14	75.83	65.63	67.53	Aug. 20	98	Aug. 20	85.00	Dec. 9	22	Dec. 8	30.25	76	4.54
Goliad (g)	64.59	75.28	67.25	69.04	Aug. 20	98	July 26	87.33	Feb. 23	22	Dec. 8	36.33	66	4.62
Larissa	59.80	73.80	61.12	65.91	Aug. 20	100	Aug. 23	87.67	Feb. 23	21	Dec. 8	28.33	79	3.72
Union Hill	58.24	72.80	61.60	64.21	July 20	98	Sept. 9	84.67	Dec. 9	22	Dec. 8	27.33	77	5.03
TENNESSEE—														
Glenwood	51.96	64.01	55.39	57.13	Aug. 13	95	June 27	80.93	Feb. 23	8	Feb. 22	15.60	82	5.40
Memphis	57.03	67.34	59.94	61.44	Aug. 1	95	Aug. 3	86.67	Feb. 23	16	Feb. 22	20.00	79	4.56
KENTUCKY—														
Bardonia	51.05	63.29	54.33	56.92	June 30	95	June 30	90.50	Feb. 23	— 10	Feb. 23	8.67	105	5.07
Paris	49.35	60.87	52.49	54.24	June 30	92	July 3	84.33	Feb. 23	— 11	Feb. 23	6.00	103	5.55
Springdale (g)	46.59	64.54	57.32	56.15	Aug. 7	98	Aug. 2	85.67	Feb. 23	— 10	Feb. 23	12.17	106	5.28
OHIO—														
Bellefontaine	47.81	59.27	48.65	51.92	June 26	95	June 26	85.67	Feb. 23	— 8	Feb. 10	8.33	103	5.65
Bowling Green	46.28	58.32	48.74	51.11	June 30	94	June 30	84.00	Feb. 11	— 8	.....	?	102	.....
Cincinnati, [Harper]	52.81	61.57	56.98	58.12	June 29	94	June 26	87.00	Feb. 23	— 11	Feb. 10	16.67	93	5.24
Cleveland	46.61	55.32	47.94	49.96	July 8	92	June 27	84.67	Feb. 23	— 8.5	Feb. 11	8.50	100.5	.....

a Same temperature June 30th.

b Same temperature July 17th.

c Same temperature March 6th.

d Same temperature June 23d and 27th.

e Same temperature February 24th.

f Same temperature July 29th.

g For changes in hours of observation, interruptions, &amp;c., see monthly tables.

h Same temperature June 27th and 30th.

i Same temperature June 27th and 29th.

j Same temperature March 5th.

k Same temperature August 2d and 4th.

l Same temperature August 4th.

m Same temperature July 28th.

n Same temperature August 4th, 6th, 7th, and 12th.

o Same temperature July 4th and August 3d.

p Same temperature July 22d and 30th.

q Same temperature March 4th.

r Same temperature July 4th, and August 3d and 4th.

s Same temperature November 25th.

t Same temperature July 4th.

u Same temperature March 2d and 3d.

v Same temperature August 3d.

w Same temperature August 7th.

x Same temperature July 20th.

y Same temperature August 6th.

z Same temperature August 14th, 20th, and 21st.

aa Same temperature August 28th.

bb Same temperature August 14th, 26th, and 27th.

cc Same temperature July 19th and August 26th.

dd Same temperature September 3d.

ee Same temperature July 3d and August 13th.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp	Date.	M'n temp	Date.	Temp	Date.	M'n temp.		
Ohio—Continued.	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Cleveland, (near).....				54.50										
Edinburg.....	46.01	55.95	46.82	49.59	June 22	96	June 22	84.00	Feb. 23	—12	Mar. 5	1.33	108	5.83
Hillsborough.....	47.74	57.16	51.68	52.19	June 30	92	June 30	83.70	Feb. 11	—11	Mar. 2	11.30	90	4.89
Hiram.....	46.12	55.14	47.44	49.57	June 23	a 90	June 30	82.67	Feb. 11	—5	Mar. 5	5.00	95	6.38
Jefferson.....	49.63	55.38	51.76	52.26	June 29	96	June 29	90.67	Feb. 23	—10	Mar. 6	2.67	106	7.53
Madison, [Atkins].....	48.26	55.04	47.11	50.14	June 25	91	June 25	85.00	Feb. 23	—6	Mar. 5	4.67	100	5.74
Madison, [King].....	46.95	55.35	44.76	49.02	June 27	92	June 27	83.00	Feb. 23	—12	Mar. 5	3.67	104	5.94
New Lisbon.....	49.95	65.26	52.15	55.79	June 24	b 106	June 25	c 89.33	Feb. 23	—12	Mar. 5	7.10	118	4.30
Savannah.....	46.87	59.43	47.37	51.22	June 30	98	June 24	88.00	Feb. 23	—14	Mar. 5	0.00	112	6.47
Urbana.....	46.50	60.50	48.35	51.78	June 23	97	June 27	88.00	Feb. 23	—12	Feb. 22	4.33	109	5.75
Welchfield.....	46.55	57.10	45.70	49.78	July 1	101	July 1	d 86.67	Feb. 11	—6	Feb. 11	4.33	107	5.04
Westerville.....	47.52	59.31	50.48	52.44	June 26	e 94	July 8	86.33	Feb. 23	—10	Feb. 23	6.67	104	5.92
Windham.....	44.27	56.31	47.35	49.31	June 26	91	June 26	81.00	Feb. 23	—12	Mar. 5	7.67	103	.....
MICHIGAN—														
Battle Creek.....	45.28	56.40	47.14	49.61	Aug. 7	97	Aug. 7	85.67	Feb. 22	—15	Feb. 10	4.33	112	4.95
Cooper.....	47.81	54.63	46.77	49.74	Aug. 28	f 98	Aug. 29	e 89.33	Feb. 10	—4	Feb. 10	—4.00	102	3.66
Grand Rapids, [Streng].....	42.45	56.09	45.76	48.10	Aug. 6	g 98	Aug. 7	87.00	Feb. 22	—16	Feb. 22	2.67	114	6.12
Marquette.....	38.22	46.78	38.29	41.10	June 22	94	June 22	82.13	Feb. 11	—12	Feb. 10	—7.83	106	5.98
New Buffalo (i)...	46.64	55.11	45.20	48.98	June 30	94	June 26	84.00	Feb. 11	—14	Feb. 10	—0.67	108	6.86
Port Huron.....	44.52	54.29	44.54	47.78	June 30	97	June 30	83.33	Feb. 11	—13	Feb. 11	0.67	110	5.87
INDIANA—														
Logansport (i).....	47.18	60.35	51.19	52.91	Aug. 6	99	June 26	87.33	Feb. 7	—10	?	?	109	.....
Madison.....	49.54	58.30	51.93	53.26	June 23	j 90	June 23	k 83.00	Feb. 23	2	Feb. 22	11.33	88	5.15
New Harmony.....	52.19	62.69	54.64	56.51	July 12	94	June 27	87.33	Feb. 23	2	Feb. 10	13.00	92	5.33
Richmond, [Moore]...	46.44	57.83	50.05	51.44	Aug. 6	92	June 27	83.00	Feb. 23	—11	Feb. 10	8.30	100	.....
ILLINOIS—														
Athens.....	47.05	60.43	48.40	51.96	Sept. 6	99	Aug. 8	85.00	Feb. 23	—17	Feb. 10	—8.33	116	5.38
Augusta.....	45.27	56.97	49.89	50.71	July 1	l 91	Aug. 9	83.33	Feb. 11	—23	Feb. 10	—11.00	114	4.67
Aurora.....	44.38	55.79	46.06	48.74	June 30	93	Aug. 9	81.67	Feb. 11	—15	Feb. 10	—6.67	108	5.54
Batavia, [Mead].....	41.84	56.14	43.62	47.20	Aug. 10	102	June 23	89.00	Feb. 23	—23	Feb. 10	—11.67	125	5.89
Brighton.....	45.85	62.86	55.14	54.62	Aug. 9	95	Aug. 9	88.33	Feb. 15	—10	Feb. 15	6.33	96	.....
Edgington.....	44.04	56.85	47.74	49.54	Aug. 9	100	Aug. 8	86.33	Feb. 10	—17	Feb. 10	—10.67	117	5.97
Elgin.....	42.47	54.14	44.46	47.02	Aug. 5	m 93	Aug. 5	82.00	Feb. 23	—26	Feb. 10	—12.00	119	.....
Manchester (i).....	46.88	59.89	49.53	52.10	Aug. 8	94	Aug. 8	85.00	Feb. 10	—11	Feb. 10	—5.67	105	5.36
Marengo.....	45.77	55.99	44.89	48.88	Aug. 9	100	Aug. 5	n 88.00	Dec. 9	—16	Feb. 11	—9.33	116	5.90
Ottawa.....	44.74	54.95	47.35	49.01	Aug. 10	94	Aug. 5	84.00	Feb. 23	—12	Feb. 10	—9.67	103	5.39
Pekin.....	45.08	57.29	47.89	50.09	July 6	l 94	Aug. 5	o 84.67	Feb. 11	—16	Feb. 10	—7.00	110	5.25
Peoria.....	47.36	59.60	50.41	52.46	Aug. 8	102	Aug. 8	88.92	Feb. 11	—15	Feb. 10	—8.50	117	5.17
Riley.....	42.27	53.72	42.88	46.27	June 29	p 92	June 29	q 82.33	Feb. 23	—22	Feb. 10	—13.33	114	4.81
Waynesville (i).....	43.14	53.34	47.74	49.54	Aug. 5	97	Aug. 8	84.67	Feb. 23	—18	Feb. 10	—10.00	115	.....
West Salem.....	50.72	64.56	53.28	56.17	Aug. 5	99	Aug. 5	86.33	Feb. 23	—1	Feb. 10	—10.00	100	5.11
West Urbana.....	48.11	58.05	50.17	52.11	July 8	r 96	June 27	89.00	Feb. 23	—11	Feb. 10	—5.00	107	5.58
Wheaton.....	43.52	53.74	47.25	48.17	Aug. 9	93	Aug. 5	83.93	Feb. 11	—22	Feb. 10	—11.50	115	6.27
Winnebago.....	42.72	55.25	45.30	47.76	June 29	s 93	Aug. 6	84.00	Dec. 9	—17	Feb. 10	—8.83	110	5.63
MISSOURI—														
St. Louis.....	52.02	63.13	54.93	56.69	July 9	99	July 9	90.50	Feb. 23	0	Feb. 10	6.33	99	.....
WISCONSIN—														
Appleton.....	41.09	52.28	44.22	45.85	June 28	95	June 26	t 84.00	Dec. 9	—18	Dec. 8	—9.00	113	5.16
Bay City.....	35.63	44.41	36.82	38.95	July 6	99	July 6	84.33	Feb. 10	—24	Feb. 10	—14.00	123	5.02
Beloit.....	42.96	55.41	44.91	47.76	Aug. 6	u 94	Aug. 6	84.67	Feb. 22	—16	Feb. 10	—8.33	110	4.65
Kenosha.....	44.37	51.74	45.90	47.34	Aug. 9	v 88	Aug. 6	82.17	Feb. 11	—14	Feb. 10	—7.33	102	4.81
Manitowoc.....	42.57	51.73	44.44	46.24	Aug. 9	91	Aug. 9	81.67	F. b. 10	—11	Feb. 10	—4.00	102	6.29
Milwaukee, [Pomeroy].....	43.53	51.65	43.93	46.37	June 29	w 89	Aug. 7	83.33	Feb. 10	—12	Feb. 10	0.33	101	6.91
Milwaukee, [Winkler].....	43.03	51.81	43.53	46.12	Aug. 9	93	Aug. 9	81.33	Feb. 10	—14	Feb. 9	—9.00	107	4.91
Platteville.....	43.28	56.40	46.43	48.70	Aug. 5	102	Aug. 5	n 89.33	Feb. 10	—19	Feb. 10	—11.67	121	5.54
IOWA—														
Bellevue.....	42.42	55.86	45.12	47.80	Aug. 9	96	Aug. 6	m 84.67	Feb. 23	—12	Feb. 10	—8.33	103	5.85
Border Plains.....	43.11	55.43	45.13	47.89	Aug. 9	98	Aug. 9	88.67	Dec. 9	—22	Dec. 9	—5.33	120	5.61
Dubuque.....	44.15	54.02	46.97	48.39	Aug. 9	96	June 28	86.33	Feb. 10	—14	Feb. 10	—8.00	107	5.14
Fairfield.....	45.80	56.35	47.56	49.90	Aug. 10	94	Aug. 10	87.67	Feb. 22	—15	Feb. 10	—7.67	109	5.85
Fort Madison (i).....	45.00	56.66	50.19	50.62	Aug. 12	y 93	June 29	87.33	Feb. 10	—16	Feb. 10	—10.00	111	4.97
Muscatine.....	42.68	55.20	45.55	47.81	Aug. 9	93	Aug. 7	81.33	Feb. 10	—22	Feb. 10	—15.00	115	4.07
Pleasant Plain.....	44.66	57.71	46.80	49.72	July 9	96	Aug. 8	85.67	Feb. 10	—16	Feb. 10	—10.00	112	5.13
MINNESOTA—														
Hazlewood.....	38.86	48.86	41.46	43.06	June 23	92	June 30	84.67	Dec. 8	—16	Dec. 8	—9.00	108	4.85
NEBRASKA—														
Bellevue.....	44.87	55.43	47.13	49.14	June 30	z 90	Aug. 9	84.00	Feb. 10	—18	Feb. 10	—5.33	108	.....
KANSAS—														
Burlingame.....	47.25	61.13	49.75	52.71	July 20	98	July 20	82.67	Dec. 8	—4	Feb. 10	aa 8.00	99	4.37
Lawrence (i).....	49.07	61.94	52.51	54.51	Aug. 11	98	Aug. 11	88.00	Dec. 8	—3	Feb. 15	6.33	101	4.55

a Same temperature June 29th and 30th.

b Same temperature June 27th.

c Same temperature July 1st.

d Same temperature June 23d and 30th.

e Same temperature June 30th.

f Same temperature July 1st, 2d, and 3d.

g Same temperature June 28th and 30th.

h Same temperature March 5th.

i For changes in hours of observation, interruptions, &amp;c., see monthly tables.

j Same temperature July 7th and 21st.

k Same temperature July 3d, and August 6th and 8th.

l Same temperature August 9th and 10th.

m Same temperature August 9th.

n Same temperature August 6th.

o Same temperature August 10th.

p Same temperature July 8th.

q Same temperature August 5th and 6th.

r Same temperature August 2d, 5th, 7th, and 10th.

s Same temperature August 5th and 9th.

t Same temperature June 28th.

u Same temperature December 9th.

v Same temperature August 7th.

w Same temperature September 7th.

x Same temperature February 11th.

y Same temperature June 28th, 29th, and 30th.

z Same temperature August 9th and 17th.

aa Same temperature December 7th.

## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
KANSAS—Continued.	°	"	°	°		°		"		"		"	°	
Leavenworth City ....	49.87	59.25	50.95	53.69	July 19	95	June 30	88.67	Dec. 8	— 7	Feb. 10	a 5.00	103	5.25
Manhattan .....				54.16	June 25	81.00	Aug. 11	91.33						
CALIFORNIA—														
Marysville.....	55.87	72.03	63.31	63.20	July 10	101	July 10	90.67	Dec. 7	29	Dec. 7	38.00	74	3.04
Sacramento .....	54.73	64.64	59.36	58.58	July 11	97	July 11	85.67	Dec. 8	29	Dec. 7	36.00	68	2.81
San Francisco .....	53.09	62.09	53.52	56.23	Sept. 30	91	Sept. 30	73.33	Dec. 7	a 36	Dec. 7	40.67	55	3.73
MEXICO—														
Vera Cruz (c) .....	76.88		77.04	76.96										
CENTRAL AMERICA—														
Guatemala (c & d) ....	56.56	72.71	61.31	66.04	April ...	89.6			March...	41.4			48	
SOUTH AMERICA—														
Cathra Sophia, Sur. (c)	74.96	85.30	79.86	80.04	June 22	e 91	June 26	f 83.00	Feb. 3	g 70	Mar. 16	h 75.33	21	

a Same temperature December 8th.

b Same temperature August 11th.

c For changes in hours of observation, interruptions, &amp;c., see monthly tables.

d Mean at 9 a. m., 66.59; mean at noon, 73.02.

e Same temperature September 9th and November 2d.

f Same temperature September 8th.

g Same temperature March 14.

h Same temperature September 24th.



## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Montreal .....	.238	.263	.247	June 25	.997	Jan. 23	.000	743	664	729	0	20	18
St. Martin (a) .....	.226	.320	.265	July 7	1.304	Feb. 12	.002 <i>b</i>	819	705	829	18	24	46
Toronto (a) .....	.247	.270	.256	June 27	.858	Feb. 5	.020	793	633	766	24	17	38
Windsor .....	.247	.288	.255	July 14	.923	Feb. 13	.017	851	724	836	22	27	33
MAINE—													
Portland .....	.250	.268	.261	July 11	.836	Feb. 13	.032	797	633	785	22	13	34
MASSACHUSETTS—													
Amherst (a) .....	.276	.302	.287	June 26	1.127	March 4	.031	849	631	784	45	20	25
Lawrence .....	.255	.296	.283	June 27	1.038	Jan. 23	.015	787	588	771	12	15	24
Nantucket .....	.287	.286	.301	July 14	.758	March 6	.012	725	591	784	24	10	15
New Bedford .....	.297	.312	.309	June 25	.916	Feb. 11	.025	840	643	840	31	14	39
Westfield .....	.256	.275	.293	June 25	.849	Feb. 19	.024	780	570	801	28	13	36
Worcester .....	.272	.292	.279	June 26	.875	Jan. 15	.000 <i>c</i>	782	599	737	0	0	0
RHODE ISLAND—													
Providence (d) .....													
CONNECTICUT—													
Pomfret .....	.304	.311	.307	June 26	.936	Feb. 18	.043	887	744	868	47	30	43
Wallingford .....	.278	.301	.293	July 11	.887	Jan. 22	.038	850	587	805	45	17	34
NEW YORK—													
Buffalo (a) .....	.282	.299	.297	Aug. 10	.841	Feb. 11	.038	742	677	743	36	24	35
Clinton .....	.250	.267	.253	July 9	.832	Feb. 13	.008	675	529	676	23	20	21
Fort Edward .....	.272	.326	.302	June 25	1.189	March 7	.019	820	707	838	24	13	41
New York city .....	.297	.316	.312	July 3	.870	March 5	.016	685	579	664	21	18	15
PENNSYLVANIA—													
Easton (a) .....	.284	.280	.294	July 3	.884	Feb. 11	.022	775	535	736	40	10	28
Harrisburg, [Hickok] .....	.296	.305	.321	July 3	.850	Feb. 27	.009	751	542	692	9	14	19
Lewisburg .....	.298	.313	.311	June 6	.942	March 5	.022	798	554	737	29	14	18
Murrysville .....	.269	.293	.289	June 28	.976	March 6	.004 <i>e</i>	693	507	727	4	4	13
Norristown .....	.304	.327	.318	July 29	1.019	Feb. 25	.024	795	597	728	42	13	30
Philadelphia .....	.329	.340	.351	July 3	.975	March 5	.023	745	548	700	40	18	28
Somerset .....	.303	.361	.321	July 3	.887	Feb. 11	.028	892	701	858	50	37	36
Westtown .....	.335	.369	.350	July 10	1.148	Feb. 11	.025	847	667	838	37	13	36
MARYLAND—													
Annapolis .....	.365	.377	.405	Aug. 4	.989	Feb. 17	.055	824	630	766	50	28	34
Frederick .....	.335	.379	.365	June 8	1.051	Feb. 25	.000	800	654	795	2	0	28
DISTRICT OF COLUMBIA—													
Washington (a) .....	.348	.347	.362	June 29	.923	March 5	.025 <i>f</i>	780	565	712	31	14	17
NORTH CAROLINA—													
Murfreesborough (a) .....	.473	.576	.516	Aug. 2	1.400	March 5	.103	920	814	897	46	51	57
SOUTH CAROLINA—													
All Saints .....	.501	.545	.531	Aug. 22	1.111	March 4	.090	863	710	827	49	34	47
Charleston, [Dawson] (g) .....													
GEORGIA—													
Savannah .....	.516	.520	.534	July 5	1.001	March 3	.064	856	614	794	40	24	27
FLORIDA—													
Jacksonville .....	.612	.693	.632	July 1	1.282	March 3	.155	879	762	876	62	40	63
MISSISSIPPI—													
Columbus .....	.456	.480	.487	June 27	.974	Feb. 11	.077	855	577	800	49	18	37
TEXAS—													
Austin, [Van Nostrand] .....	.487	.447	.464	May 29	.918	Jan. 18	.047	821	492	683	35	15	12
Goliad (a) .....	.548	.541	.576	July 30	.990	Dec. 23	.000	835	574	790	0	8	27
Larissa (a) .....	.492	.569	.521	July 8	1.042	Feb. 23	.077	852	632	797	47	23	48
TENNESSEE—													
Glenwood .....	.382	.396	.406	Aug. 5	.899	Feb. 10	.042	830	576	791	33	16	20
Memphis .....	.451	.443	.471	July 5	1.010	Jan. 30	.003	843	603	792	15	1	29

\* The maxima being generally 100, or complete saturation, are omitted in this table.

*a* For changes in hours of observation, &c., see monthly tables.*b* Same amount February 13th.*c* Same amount February 15th, 22d, 23d, and 26th, March 2d, and April 17th.*d* Mean relative humidity, 621. For changes in hours of observation, &c., see monthly tables.*e* Same amount December 10th.*f* Same amount March 6th.*g* Mean force of vapor .545; obtained approximately from the mean dew point.

## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
KENTUCKY—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Bardstown .....	.382	.409	.397	Aug. 6	.963	Feb. 12	.050	853	624	809	30	15	27
Springdale (a) .....	.324	.435	.409	Aug. 6	1.427	Feb. 9	.000	883	662	792	0	19	22
OHIO—													
Cincinnati, [Harper] .....	.375	.455	.399	July 3	1.138	March 5	.024	779	666	712	42	29	20
Savannah .....	.309	.368	.327	Aug. 9	1.038	March 5	.018	811	676	847	41	13	49
Westerville .....	.335	.382	.354	July 3	1.396 <sup>b</sup>	Feb. 23	.028	834	652	807	31	20	40
MICHIGAN—													
Marquette .....	.224	.253	.222	Aug. 7	.999	Feb. 20	.000 <sup>c</sup>	799	689	788	14	0	0
INDIANA—													
Madison .....	.412	.463	.436	June 27	1.311	March 23	.049	847	722	836	20	21	?
New Harmony .....	.398	.439	.423	July 3	1.097	Feb. 23	.048	856	673	846	26	28	37
ILLINOIS—													
Augusta .....	.333	.382	.356	Aug. 4	.997	Feb. 23	.003 <sup>d</sup>	872	698	832	14	27	43
Manchester (a) .....	.372	.481	.399	Sept. 7	1.187	Feb. 9	.027	950	812	957	56	34	61
Peoria .....	.343	.359	.364	July 2	1.075	March 25	.000	832	582	797	40	16	0
Wheaton .....	.294	.307	.298	Aug. 9	.891	Dec. 19	.000	832	624	808	37	0	41
MISSOURI—													
St. Louis .....	.361	.387	.379	Aug. 4	.936	Dec. 8	.039	787	533	752	40	14	36
WISCONSIN—													
Appleton .....	.278	.361	.297	June 23	1.352	Feb. 10	.000	766	698	772	0	27	5
IOWA—													
Fairfield .....	.282	.303	.284	July 31	.904	Feb. 10	.000 <sup>d</sup>	695	540	671	23	0	0
Muscataine .....	.453	.516	.508	June 27	1.074 <sup>e</sup>	Feb. 11	.077	788	766	778	31	42	48
KANSAS—													
Leavenworth City .....	.365	.416	.373	July 15	1.023	Dec. 8	.032	834	673	831	45	23	43
MEXICO—													
Vera Cruz (a) .....	.763	.....	.791	.....	.....	.....	.....	813	.....	817	.....	.....	.....
CALIFORNIA—													
Sacramento .....	.313	.364	.356	July 9	.689	Dec. 7	.051	721	608	710	33	19	38
San Francisco .....	.344	.358	.359	Oct. 21	.529	Dec. 2	.066	778	599	803	23	22	28
CENTRAL AMERICA—													
Guatemala (f) .....	.432	.417	.453	.....	.....	.....	.....	940	521	832	.....	.....	.....
SOUTH AMERICA—													
Catharina Sophia, Sur. (a) ..	.743	.872	.860	May 15	1.083	April 7	.529	894	718	846	77	52	57

a For changes in hours of observation, &amp;c., see monthly tables.

b Same amount August 10th.

c Same amount March 13th and 15th, April 7th, September 29th, and November 22d.

d Same amount February 26th.

e Same amount June 30th.

f Mean force of vapor at 9 a. m., .435, and at noon, .415. Mean relative humidity at 9 a. m., 65.1, and at noon, 51.0. For changes in hours of observation, &amp;c., see monthly tables.



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	83	175	15	32	60	172	143	202	216	1098	53	158	18	36	62	186	111	184	808
Red River Settlement ..	121	25	59	17	206	54	62	109	212	865	---	---	---	---	---	---	---	---	---
St. John's .....	90	258	12	94	45	183	152	261	0	1095	---	---	---	---	---	---	---	---	---
St. Martin .....	8	244	23	213	31	317	96	156	0	1088	---	---	---	---	---	---	---	---	---
Stanbridge .....	93	97	74	293	164	38	173	72	74	1078	---	---	---	---	---	---	---	---	---
Toronto .....	31	213	38	129	27	194	34	308	121	1095	---	---	---	---	---	---	---	---	---
Windsor .....	146	79	32	45	64	141	168	162	184	1021	---	---	---	---	---	---	---	---	---
Wolfville (a) .....	17	105	58	54	24	80	166	237	133	874	27	60	19	24	29	94	128	172	553
MAINE—																			
Cornish, [Guptill] .....	92	75	18	101	122	91	124	472	0	1095	---	---	---	---	---	---	---	---	---
Cornish, [West] .....	83	150	89	40	82	234	258	159	0	1095	9	0	0	0	0	8	30	20	67
Gardiner .....	38	226	27	166	26	136	34	292	137	1082	26	66	2	27	22	126	34	150	453
Perry .....	66	120	34	125	58	202	58	416	5	1084	41	68	8	35	25	96	69	180	522
Portland .....	148	132	100	76	118	110	182	210	5	1081	28	8	10	9	19	66	143	74	357
Steuben .....	38	303	5	76	12	310	51	255	44	1094	35	90	3	7	1	165	118	86	505
NEW HAMPSHIRE—																			
Shelburne .....	0	0	248	0	0	1	633	0	161	1043	9	6	39	54	13	54	285	223	683
West Enfield .....	18	16	4	109	214	163	61	487	15	1087	18	15	2	102	103	136	47	343	766
VERMONT—																			
Brandon .....	230	3	38	100	297	63	54	229	75	1089	32	1	1	7	14	84	59	332	530
Burlington .....	100	91	6	72	99	290	25	341	0	1024	---	---	---	---	---	---	---	---	---
Craftsbury .....	29	153	29	72	311	110	93	263	35	1095	35	33	6	10	51	88	172	206	601
Rupert .....	---	---	---	---	---	---	---	---	---	---	57	12	1	42	51	557	38	45	808
St. Johnsbury .....	153	26	23	64	202	41	176	372	35	1092	23	6	1	3	39	36	151	44	303
MASSACHUSETTS—																			
Amherst .....	89	77	30	163	88	91	58	372	1	969	14	21	8	18	28	35	43	134	301
Bridgewater (b) .....	113	118	106	39	46	199	212	169	0	1002	41	27	19	24	27	67	76	40	321
Cambridge .....	52	110	95	49	24	301	125	182	155	1093	---	---	---	---	---	---	---	---	---
Florida .....	14	81	13	107	15	138	431	296	0	1095	9	78	16	88	15	147	318	227	898
Lawrence .....	11	172	40	125	11	224	33	477	2	1095	---	---	---	---	---	---	---	---	---
Mendon .....	5	238	21	21	29	413	45	320	0	1092	8	202	22	28	28	341	58	208	895
Nantucket .....	50	205	46	77	56	265	83	265	48	1095	---	---	---	---	---	---	---	---	---
New Bedford .....	64	187	20	94	44	302	57	324	3	1095	15	38	8	6	5	28	65	101	266
Newburyport .....	91	41	80	46	100	37	126	128	3	652	---	---	---	---	---	---	---	---	---
Richmond (c) .....	1	109	0	117	2	207	1	428	0	865	14	80	1	107	14	156	30	207	609
Westfield .....	79	123	43	137	47	118	203	336	0	1086	---	---	---	---	---	---	---	---	---
Williamstown .....	76	19	110	104	76	80	157	259	131	1012	---	---	---	---	---	---	---	---	---
Worcester .....	119	159	70	75	43	158	180	202	7	1013	---	---	---	---	---	---	---	---	---
RHODE ISLAND—																			
Providence .....	41	220	21	31	72	265	35	389	7	1081	---	---	---	---	---	---	---	---	---
CONNECTICUT—																			
Columbia .....	27	175	9	15	25	179	46	420	199	1095	13	105	6	8	15	124	21	264	556
Pomfret .....	63	197	22	50	80	219	23	428	0	1082	22	122	15	28	41	100	52	215	595
Saybrook .....	99	129	60	90	59	179	93	231	89	1029	22	40	23	21	21	74	125	103	429
Wallingford .....	207	119	19	103	189	119	89	250	0	1095	19	41	18	8	13	91	211	78	479
NEW YORK—																			
Baldwinsville .....	64	25	121	66	43	131	386	241	0	1077	20	3	17	16	13	48	415	159	691
Beverly .....	107	122	1	96	69	346	14	261	5	1021	24	72	17	69	45	222	144	115	708
Cazenovia .....	39	23	35	95	115	179	118	450	25	1079	30	11	12	69	43	118	229	321	833
Eden (d) .....	33	55	102	100	308	156	151	43	1	949	3	15	13	4	7	57	198	30	327
Morrisania (e) .....	98	129	65	148	107	117	185	158	0	1007	---	---	---	---	---	---	---	---	---
Nichols .....	60	8	50	385	127	36	80	351	1	1098	43	4	8	125	54	79	96	312	721
Ogdensburg .....	68	48	11	6	56	72	53	41	0	355	---	---	---	---	---	---	---	---	---
Sag Harbor .....	96	107	84	51	160	158	143	173	8	980	14	9	7	7	18	75	149	61	340
Saratoga .....	0	260	2	75	4	414	29	253	0	1037	1	272	3	74	4	405	31	239	1029
Wampsville .....	5	10	164	58	172	68	576	42	0	1095	8	7	153	49	141	55	470	30	911
NEW JERSEY—																			
Lambertville .....	52	174	37	92	76	196	45	313	0	985	---	---	---	---	---	---	---	---	---
Newark .....	54	171	23	90	10	172	46	165	0	731	---	---	---	---	---	---	---	---	---

a For 11 months only, June wanting.

b For 11 months only, August wanting.

c For 10 months only, August and September wanting.

d For 11 months only, January wanting.

e For 11 months only, February wanting.



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
PENNSYLVANIA—																			
Bedford (a).....	3	5	6	145	9	179	32	378	0	757	12	122	29	247	1	1	3	107	522
Berwick.....	41	28	358	40	62	64	398	75	4	1070									
Cannonsburg.....	5	33	236	48	0	141	501	120	11	1095									
Easton.....	104	111	36	136	70	54	159	271	89	1030									
Fleming.....	18	38	134	162	4	189	167	367	16	1095	11	7	22	62	17	34	161	330	694
Gettysburg.....	96	154	40	18	165	204	114	209	94	1094	29	44	34	22	66	152	237	209	793
Harrisburg, [Heisely]..	51	22	96	156	125	59	245	315	7	1076	17	8	5	34	42	31	121	153	411
Harrisburg, [Hickok]..	140	118	160	48	108	116	294	105	1	1090	5	15	20	3	19	26	77	11	176
Lewisburg.....	113	79	28	89	89	133	105	179	275	1090	24	10	3	14	25	56	63	124	319
Morrisville.....	43	155	94	79	105	249	118	158	88	1089	19	98	48	53	17	200	191	125	751
Mount Joy.....	29	15	4	311	29	20	12	129	534	1083									
Murrysville.....	13	105	144	78	16	386	82	85	163	1072	7	7	12	18	13	239	108	166	570
Norristown.....	6	49	140	98	28	121	425	78	0	945	2	30	112	27	11	75	410	24	691
North Whitehall.....	22	81	71	5	50	67	138	152	506	1092	17	35	33	1	22	44	178	97	427
Philadelphia.....	31	242	40	76	42	272	103	289	0	1095	7	24	6	6	9	80	80	85	297
Pittsburg, [Mar. Hosp.]	22	12	154	53	112	142	252	60	288	1095	6	1	16	11	24	152	190	23	423
Pocopson.....	108	116	103	38	85	224	237	114	21	1046	59	16	11	10	22	69	170	62	419
Shamokin.....	3	9	196	27	170	81	602	4	0	1092	5		49	8	1	15	681	13	775
Somerset.....	29	10	34	102	92	121	297	107	298	1090	26		18	64	31	126	406	128	808
Tarentum.....	72	76	40	34	53	202	101	108	408	1094	13		5	16	26	178	316	144	707
Westtown.....	78	92	68	140	70	174	62	399	0	1083	31	18	10	29	15	35	59	272	469
MARYLAND—																			
Annapolis.....	100	224	60	108	169	163	52	120	99	1095	35	10	1	0	2	248	50	19	365
Baltimore.....	212	86	85	87	138	83	149	187	18	1045									
Bladensburg.....	21	101	48	36	15	124	28	148	0	521									
Chestertown (b).....	86	91	170	56	82	106	178	105	8	882									
Frederick.....	50	215	8	41	41	128	188	164	244	1083	11	10	8	19	32	30	314	73	497
Sykesville.....	87	204	91	144	163	126	207	73	0	1095									
DISTRICT OF COLUMBIA—																			
Washington (c).....	89	96	98	72	177	65	65	171	192	1025	5	2	0	0	1	12	56	13	89
VIRGINIA—																			
Crichton's Store.....	320	95	46	32	169	273	86	47	21	1089	1	0	0	0	4	71	122	7	205
Montross (d).....	41	64	115	40	60	112	114	84	369	999	28	21	14	12	30	77	100	33	315
Poplar Grove.....	1	9	181	26	1	51	283	127	355	1034	18	14	9	15	28	194	249	132	659
Portsmouth.....	82	240	102	90	46	209	128	181	7	1085									
Rougemont.....	113	135	85	14	203	81	215	77	63	986	42	44	16	4	49	41	218	35	449
Smithfield.....	144	217	50	81	151	174	70	137	0	1024	50	73	20	13	24	74	168	161	583
Wirt Court-House.....	10	53	1	65	10	294	18	355	261	1067	2	20	0	23	7	379	28	368	827
NORTH CAROLINA—																			
Chapel Hill.....	207	223	42	26	98	196	213	74	0	1079	59	81	18	3	35	264	88	26	574
Davidson College.....	12	321	5	19	9	351	60	79	142	998	9	117	9	11	15	366	26	39	592
Murfreesborough.....	24	218	54	88	44	193	116	86	191	1014	16	103	20	33	10	97	207	44	530
SOUTH CAROLINA—																			
All Saints.....	150	177	82	83	174	230	138	59	2	1095	62	92	25	15	44	318	231	46	833
Charleston, [Dawson]..	7	224	29	127	16	223	29	72	0	727									
Charleston, [Johnson] (e)	31	79	10	29	37	84	18	63	6	357									
St. John's.....	19	195	16	258	21	213	15	226	0	963	45	42	27	15	17	53	106	109	414
GEORGIA—																			
Athens (f).....	29	97	81	110	89	51	55	138	174	824									
Savannah (g).....	72	212	64	140	135	247	66	147	0	1083	2	1	1	1	10	19	25	3	63
Sparta.....	45	225	73	135	62	265	117	164	0	1086	15	75	24	48	26	151	160	84	583
Whitemarsh Island.....	55	208	43	70	171	99	123	121	201	1091	21	75	17	29	46	82	111	76	457
FLORIDA—																			
Alachua County.....	55	216	47	178	20	270	37	211		1034									
Alligator.....	55	208	71	167	49	154	48	91	252	1095	21	57	60	53	33	126	53	32	435
Atsena.....	122	201	114	125	56	168	165	92	52	1095	46	171	70	100	54	124	75	60	700
Jacksonville.....	53	245	36	110	52	322	79	176	13	1086	19	90	43	57	32	250	53	58	602
St. Augustine (h).....	65	401	123	145	2	79	9	179	0	1003	36	325	101	110	1	75	10	150	808
Salt Ponds.....	90	150	169	148	71	20	21	50	11	730									

a For 10 months only, November and December wanting.

b For 11 months only, August wanting.

c Motion of clouds not observed in July and October.

d For 11 months only, December wanting.

e Surface current for 11 months only, July wanting.

f Surface current for 10 months only, Nov. and Dec. wanting.

g Motion of clouds not observed in September.

h For 11 months only, November wanting.



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1853.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
ALABAMA—																				
Greene Springs .....	57	38	145	245	32	104	145	64	183	1013	50	20	16	39	52	93	116	81	470	
MISSISSIPPI—																				
Columbus .....	175	87	141	137	209	56	152	136	0	1093	34	14	25	39	80	106	229	56	583	
Paulding (a) .....	18	154	52	168	27	273	56	192	0	940	19	91	19	111	24	290	77	140	771	
LOUISIANA—																				
Black River (b) .....	258	83	37	145	316	62	35	63	3	1002	48	31	14	44	111	149	75	76	548	
New Orleans .....	0	298	0	214	0	350	0	233	0	1095	---	---	---	---	---	---	---	---	---	
TEXAS—																				
Austin, [Palm] (c) .....	168	66	99	98	312	241	83	24	4	1095	24	3	5	19	29	29	22	16	147	
Austin, [Van Nostrand] .....	231	11	56	9	531	15	170	34	32	1089	40	3	11	12	242	50	52	13	423	
Goliad .....	295	82	67	440	68	5	21	37	1	1016	135	28	56	100	101	93	158	52	723	
Larissa .....	73	113	155	218	148	129	59	100	38	1033	12	16	10	18	101	67	52	19	295	
Union Hill .....	232	29	38	102	500	50	23	31	90	1095	156	18	19	52	121	26	46	20	758	
TENNESSEE—																				
Glenwood .....	89	115	63	220	192	126	46	105	139	1095	20	38	28	45	60	104	317	122	834	
KENTUCKY—																				
Bardstown .....	99	135	59	66	136	288	175	105	1	1064	62	44	35	24	64	222	173	120	744	
Paris .....	68	129	26	93	119	357	114	177	0	1083	10	4	20	3	114	38	315	2	536	
Springdale .....	37	136	56	27	80	291	103	80	285	1095	---	---	---	---	---	---	---	---	---	
OHIO—																				
Bellefontaine .....	34	146	41	106	29	328	165	180	0	1029	7	102	10	81	5	463	90	122	880	
Cincinnati, [Harper] .....	70	41	83	46	121	235	283	195	0	1074	---	---	---	---	---	---	---	---	---	
Edinburg .....	10	430	99	245	4	100	14	105	83	1090	0	32	8	34	1	280	357	154	866	
Hillsborough .....	3	190	1	230	7	385	23	242	2	1083	1	5	0	9	4	112	10	51	192	
Hiram .....	89	71	50	100	171	238	117	154	22	1012	15	12	10	5	25	50	159	93	369	
Jefferson .....	14	121	6	197	19	410	48	277	0	1092	18	254	32	142	11	178	23	240	898	
Madison, [Atkins] .....	51	70	13	51	161	111	146	78	292	973	8	8	9	1	11	12	80	8	137	
Madison, [King] .....	37	117	38	119	89	240	118	201	130	1089	17	50	44	39	37	292	212	196	887	
New Lisbon .....	58	63	46	160	94	264	146	257	4	1092	28	26	25	104	49	214	164	217	827	
Northwood (d) .....	35	128	66	98	52	224	166	157	28	954	33	53	36	30	34	135	111	166	598	
Ripley .....	15	26	12	168	18	32	23	185	276	755	3	8	1	3	2	3	19	86	125	
Savannah .....	32	38	9	219	8	320	172	297	0	1095	21	29	6	119	4	303	135	259	876	
Urbana .....	13	71	47	149	65	147	114	116	354	1076	28	38	15	17	40	151	289	111	689	
Welchfield .....	42	45	59	238	102	312	131	166	0	1095	0	0	0	2	3	18	8	13	44	
Westerville .....	108	51	30	37	139	297	213	172	11	1058	47	25	41	24	64	241	226	149	817	
MICHIGAN—																				
Battle Creek .....	42	60	116	76	152	147	222	90	169	1074	22	17	24	6	26	169	443	95	802	
Cooper .....	5	3	84	7	18	31	405	17	524	1094	18	11	89	92	28	71	117	36	462	
Grand Rapids .....	71	118	168	110	80	217	194	134	0	1092	48	64	87	33	37	128	460	115	1002	
Marquette .....	26	104	103	206	29	100	206	318	1	1093	---	---	---	---	---	---	---	---	---	
Monroe (e) .....	22	93	30	208	4	223	21	347	1	949	13	88	24	175	2	199	16	302	819	
Port Huron .....	149	67	16	82	126	246	116	188	48	1038	33	14	7	17	17	158	137	108	491	
INDIANA—																				
Logansport (f) .....	45	61	67	129	71	257	276	189	0	1095	24	44	49	78	30	179	248	138	790	
Madison .....	50	98	63	173	96	229	184	202	0	1095	19	62	43	112	75	149	111	82	653	
Michigan City (g) .....	185	56	36	126	228	73	41	69	52	866	92	10	10	23	96	64	46	81	422	
New Harmony .....	76	20	71	104	200	163	106	120	0	860	---	---	---	---	---	---	---	---	---	
Richmond, [Moore] .....	7	53	88	50	53	155	141	61	275	883	---	---	---	---	---	---	---	---	---	
ILLINOIS—																				
Athens .....	13	175	19	300	48	237	25	217	0	1034	4	9	1	8	0	96	203	210	531	
Augusta .....	36	119	112	150	124	203	143	145	63	1095	22	44	31	42	49	94	181	80	543	
Aurora .....	70	118	83	128	181	197	127	131	0	1095	23	26	24	35	33	172	368	117	798	
Batavia, [Mead] .....	1	274	3	106	5	460	64	182	0	1095	0	184	1	50	1	378	65	225	904	
Brighton .....	32	122	46	181	138	259	96	215	0	1089	10	102	50	121	42	185	41	124	675	
Edgington .....	39	230	13	134	104	225	41	308	1	1095	30	194	9	90	86	275	57	277	998	
Elgin (h) .....	63	141	64	147	121	124	13	183	112	1085	3	1	3	2	0	10	21	22	62	
Jacksonville (i) .....	35	13	17	37	58	59	38	37	0	294	---	---	---	---	---	---	---	---	---	
Manchester .....	110	94	60	54	334	118	228	95	2	1095	80	59	38	40	221	103	170	81	792	
Marengo .....	1	93	83	289	80	424	96	23	3	1092	---	---	---	---	---	---	---	---	---	

a For 11 months only, January wanting.

b For 11 months only, December wanting.

c Motion of clouds for 11 months only, June wanting.

d For 11 months only, August wanting.

e For 11 months only, September wanting.

f Motion of clouds for 10 months only, Jan. and Feb. wanting.

g For 10 months only, November and December wanting.

h Motion of clouds for 11 months only, December wanting.

i Surface current for 10 months only, Jan. and Feb. wanting.

## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1858.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
ILLINOIS—Continued.																			
Ottawa (a) .....	31	155	45	121	87	196	83	165	40	923	19	21	6	12	35	65	43	83	284
Pekin .....	124	99	97	119	285	75	54	192	44	1089	61	37	29	44	60	95	140	158	624
Peoria (b) .....	74	137	148	54	251	95	282	54	0	1095	6	1	2	3	15	17	40	10	94
Riley .....	60	92	76	81	106	141	216	176	128	1076	—	—	—	—	—	—	—	—	—
Waynesville (c) .....	120	21	165	17	144	49	340	41	155	1052	44	10	36	4	59	37	212	17	419
West Salem .....	74	95	55	107	270	82	44	118	250	1095	12	5	4	6	33	161	323	72	616
West Urbana (d) .....	43	195	63	186	160	225	72	148	0	1092	2	1	1	4	12	25	19	17	82
Wheaton .....	69	139	85	88	121	240	121	153	62	1078	13	10	2	4	9	45	85	64	232
Winnebago .....	60	176	54	188	80	269	84	184	0	1095	3	3	3	3	2	62	191	133	400
MISSOURI—																			
St. Louis .....	96	103	83	244	140	153	191	85	0	1095	—	—	—	—	—	—	—	—	—
WISCONSIN—																			
Appleton .....	67	346	15	39	25	442	44	117	0	1095	56	297	10	40	24	356	23	98	904
Bay City .....	11	403	29	21	116	334	75	104	0	1093	10	64	8	2	10	172	45	38	349
Beloit .....	172	122	61	114	235	166	127	97	0	1094	—	—	—	—	—	—	—	—	—
Janesville (e) .....	60	115	90	108	151	151	165	95	67	1002	—	—	—	—	—	—	—	—	—
Kenosha .....	35	95	156	94	212	197	156	80	25	1050	—	—	—	—	—	—	—	—	—
Manitowoc .....	148	85	62	118	149	132	164	237	0	1095	14	11	16	13	13	36	139	67	309
Milwaukee, [Pomeroy] .....	40	234	52	206	40	180	101	228	4	1091	—	—	—	—	—	—	—	—	—
Milwaukee, [Winkler] .....	65	178	122	174	35	119	185	217	0	1095	—	—	—	—	—	—	—	—	—
Platteville .....	83	92	142	261	64	114	86	253	0	1095	70	74	88	99	18	208	101	181	839
Waukesha (f) .....	88	98	41	11	118	75	130	62	380	1003	—	—	—	—	—	—	—	—	—
IOWA—																			
Bellevue .....	67	79	70	178	98	155	167	274	0	1088	—	—	—	—	—	—	—	—	—
Border Plains .....	115	40	88	195	179	66	52	291	60	1086	4	2	3	3	27	47	63	69	218
Dubuque .....	134	95	39	134	139	166	33	156	195	1091	33	47	21	51	25	129	80	173	559
Fairfield .....	15	76	6	187	39	200	23	224	325	1095	7	31	28	16	0	2	3	0	93
Fort Madison .....	29	145	18	178	25	345	37	303	15	1095	39	49	34	35	29	197	206	136	725
Iowa City .....	67	47	53	308	60	177	88	231	42	1073	—	—	—	—	—	—	—	—	—
Muscatine .....	83	94	107	104	159	182	198	168	0	1095	2	23	1	5	1	103	17	41	193
Pleasant Plain .....	28	135	59	168	166	190	102	205	23	1076	3	3	0	0	16	103	126	60	317
Sioux City .....	130	61	45	195	158	15	40	273	1	918	49	12	11	29	69	0	20	78	277
MINNESOTA—																			
Burlington .....	56	54	112	32	107	36	57	92	0	546	—	—	—	—	—	—	—	—	—
Hazlewood (g) .....	85	74	41	137	236	84	82	348	2	1089	34	41	76	38	40	13	30	46	318
Princeton (h) .....	138	69	144	71	103	65	167	82	87	926	85	11	79	13	0	23	222	27	543
NEBRASKA—																			
Bellevue .....	387	62	60	64	333	35	50	36	34	1061	140	36	21	25	96	33	57	41	449
Omaha (i) .....	73	61	38	120	174	79	51	160	180	936	77	43	40	61	86	83	68	107	565
KANSAS—																			
Burlingame .....	164	56	39	137	253	62	47	129	208	1095	—	—	—	—	—	—	—	—	—
Lawrence .....	226	76	79	102	344	52	54	99	24	1056	—	—	—	—	—	—	—	—	—
Leav' th City, [McCarty] .....	133	119	47	109	304	108	21	113	38	992	77	35	11	17	37	113	96	95	481
Manhattan (j) .....	115	103	77	78	153	126	17	66	266	1001	74	42	30	30	67	71	37	52	403
MEXICO—																			
Cordova .....	161	176	49	37	66	81	59	81	20	730	—	—	—	—	—	—	—	—	—
CALIFORNIA—																			
Marysville .....	122	5	3	71	252	130	14	122	16	1035	—	—	—	—	—	—	—	—	—
Sacramento .....	185	60	50	219	197	154	58	172	0	1095	0	4	4	99	22	127	65	38	359
San Francisco .....	84	19	2	3	59	80	382	41	425	1095	51	0	10	11	73	113	318	49	631
WEST INDIES—																			
Nassau, Bahamas .....	25	181	122	153	14	55	18	44	10	622	—	—	—	—	—	—	—	—	—
SOUTH AMERICA—																			
Catharina Sophia, Sur'm .....	30	429	221	214	57	16	1	7	0	975	1	202	336	174	2	1	0	0	716

a Surface current for 11 months only, November wanting.  
b Motion of clouds for 11 months only, November wanting.  
c Motion of clouds for 11 months only, January wanting.  
d Motion of clouds for 11 months only, September wanting.  
e For 11 months only, July wanting.

f For 11 months only, February wanting.  
g Motion of clouds for 11 months only, July wanting.  
h Surface current for 11 months only, April wanting.  
i For 11 months only, November wanting.  
j For 11 months only, January wanting.



THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

RECEIVED

1954

1954

1954

1954

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REDUCTIONS

OF

METEOROLOGICAL OBSERVATIONS

FOR THE YEAR 1859.

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1844

1844

1844

# No. 1.—LIST OF STATIONS AND OBSERVERS, 1859.\*

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	<i>Feet.</i>		
Adams Centre, N. Y. ....	43 48	75 52	632	6	C. D. Potter, M. D.
Aiken, S. C. ....	33 32	81 34	565	12	John H. Cornish.
Alligator, Fla. (a) .....	30 12	82 37	174	12	Edward B. Ives.
All Saints, S. C. (b) .....	33 40	79 17	20	12	Rev. Alexander Glennie.
Altoona, Pa. ....	40 37	78 22	1,620	■	W. R. Boyers.
Amherst, Mass. ....	42 22	72 34	267	12	Prof. E. S. Snell.
Annapolis, Md. ....	38 58	76 29	20	12	William R. Goodman.
Appleton, Wis. ....	44 10	88 35	800	12	Prof. R. Z. Mason.
Arkadelphia, Ark. ....	34 08	92 58	.....	7	Dennis Barlow.
Athens, Ga. ....	33 58	83 30	850	■	Prof. John D. Easter.
Atlanta, Ga. ....	33 43	84 18	1,050	12	J. G. Westmoreland, M. D.
Atsena, Fla. ....	29 07	83 02	12	12	Augustus Steele.
Auburn, Cal. ....	38 54	121 02	1,176	■	Robert Gordon.
Augusta, Ga. ....	33 28	81 54	1,470	11	William H. Doughty, M. D.
Augusta, Ill. ....	40 12	90 58	200	12	Dr. S. B. Mead.
Augusta, Mo. ....	38 36	90 30	780	1	C. Mallinckrodt.
Aurora, Ind. ....	39 04	84 47	?	12	George Sutton.
Aurora, Ill. ....	41 40	88 16	600	12	A. J. Babcock.
Austin, Texas. ....	30 15	97 47	?	12	Swante Palm.
Austin, Texas. ....	30 20	97 46	650	12	J. Van Nostrand.
Avon, Ohio. ....	41 27	82 04	800	12	Rev. L. F. Ward.
Baldwinsville, N. Y. ....	43 04	76 41	?	12	John Bowman.
Baltimore, Md. ....	39 18	76 37	?	7	Prof. Alfred M. Mayer.
Barlstown, Ky. ....	37 52	85 18	?	12	John H. Lunemann.
Bastrop, Texas. ....	30 05	97 22	.....	1	J. L. Cunningham.
Batavia, Ill. ....	41 52	88 20	?	12	Thompson Mead.
Batavia, Ill. ....	41 52	88 26	636	■	E. Capon.
Battle Creek, Mich. ....	42 20	85 10	750	12	Dr. W. M. Campbell.
Bay City, Wis. ....	46 33	91 00	658	11	Dr. Edwin Ellis.
Bayfield, Wis. ....	46 18 ?	90 50 ?	?	3	J. Harvey Nourse.
Beaver Bay, Min. ....	47 12	91 17	657	12	Thomas Clarke.
Beaver Bay, Min. ....	47 11	91 25	900	■	Henry Wieland.
Bedford, Pa. ....	40 01	78 30	?	■	Henry Heckerman.
Belair, Fla. ....	30 24	84 20	70	12	Benjamin F. Whitner.
Belfast, Me. ....	44 22	69 06	.....	■	J. Emerson Brackett.
Beloit, Wis. ....	42 30	89 04	750	12	Prof. William Porter.
Bellefontaine, Ohio. ....	40 21	83 40	1,031	12	Joseph Shaw.
Bellefonte, Pa. ....	40 50	77 49	.....	■	J. Ilgin Burrell.
Bellevue, Iowa. ....	42 15	90 25	.....	12	John C. Fory.
Bellevue, Neb. ....	41 08	95 50	.....	12	William Hamilton.
Bellport, N. Y. ....	40 44	72 54	15	12	Henry W. Titus.
Bendersville, Pa. ....	40 00	77 15	.....	■	Franklin W. Cook.
Bentonville, Ark. ....	36 23	94 09	1,790	■	P. Graham.
Berwick, Pa. ....	41 05	76 15	588	12	John Eggert.
Bethany, Mo. ....	40 16	94 02	.....	3	D. J. Heaston.
Beverly, N. Y. (c) .....	41 22	74 00	180	12	Thomas B. Arden.
Black River, La. (d) .....	31 30	91 46	108	■	Andrew R. Kilpatrick.
Bladensburg, Md. ....	38 57	76 58	.....	12	B. O. Lowndes.
Bloomington, Ill. ....	40 27	89 08	.....	4	Jesse Allison.
Bolivar, Mo. ....	37 37	93 20	.....	8	W. J. Van Kirk.
Bonham, Texas. ....	33 40	96 13	435 ?	3	Prof. Solomon Sias.
Boonville, Mo. ....	38 55	92 40	.....	■	Norris Sutherland.
Border Plains, Iowa (e) .....	42 36	94 05	.....	■	William K. Goss.
Boston, Mass. ....	42 20	71 03	.....	1	Edward L. Adams.

\* For the different names by which, in some cases, the same place is designated by the observers, see General List of Stations in the introduction.

a Lake City.  
b Waccamaw.  
c Phillipstown.

d Trinity.  
e Webster.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1859.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Boston, Texas.....	33 25	94 24	600	6	G. Freeze.
Bowling Green, Ohio.....	41 27	83 45	700	12	Dr. William R. Peck.
Brandon, Vt.....	43 45	73 00	-----	12	David Buckland.
Brecksville, Ohio.....	41 23	81 40	800	3	S. L. Hillier.
Bridgewater, Mass.....	42 00	71 00	142	8	C. W. Felt, G. B. Hanna, B. W. Parsons.
Brighton, Ill. (a).....	39 00	90 13	-----	2	Rev. William V. Eldredge.
Brownsville, Neb.....	40 24	95 33	-----	6	Charles B. Smith.
Brownsville, Ark.....	34 50	92 00	-----	6	B. F. Coulter.
Bruce, Ill.....	41 15 ?	88 45 ?	-----	2	Dr. George O. Smith.
Buck Horn, Ark.....	-----	-----	-----	4	Armistead Younger.
Buffalo, N. Y.....	42 50	78 56	600	12	William Ives.
Buffalo, N. Y. (b).....	42 45	79 05	-----	7	Godfrey Zimmerman.
Burkeville, Texas.....	31 00	93 34	-----	7	Dr. N. P. West.
Burlingame, Kan.....	38 35	96 45	-----	12	Edmund and Lucian Fish.
Burlington, Vt.....	44 29	73 11	346	12	McK. Petty.
Burlington, Wis.....	42 39	88 04	700 ?	7	D. Mathews.
Burlington, Iowa.....	40 48	91 12	486	11	John M. Corse.
Burlington, Minn.....	47 01	91 30	645	12	A. A. Hibberd.
Cahawba, Ala.....	32 19	87 15	160	8	Dr. Matthew Troy.
Cambridge, Mass.....	42 22	71 07	71	12	Prof. W. C. Bond.
Cannelton, Ind.....	37 58	86 40	450	12	Hamilton Smith, jr.
Cannonsburg, Pa.....	40 17	80 10	936	12	William Smith, D. D.
Carbon Cliff, Ill.....	41 31	90 29	688	7	Mrs. William S. Thomas.
Carlisle, Pa.....	40 12	77 11	500	10	Prof. W. C. Wilson.
Carlowville, Ala.....	32 10	87 15	300	10	Dr. H. L. Alison.
Carrollton, Mo.....	39 21	93 27	-----	6	John Campbell and S. S. Hoffaker.
Carthage, Ill.....	40 23	91 17	-----	9	Mrs. E. M. A. Bell.
Cassville, Mo.....	36 41	93 56	3,000	7	M. L. Wyrick.
Catharina Sophia, Surinam, S. A.....	5 48	56 47	-----	12	C. T. Hering.
Cazenovia, N. Y.....	42 55	75 46	1,260	12	Aaron White.
Centre Signal Station, Bermuda.....	32 20 ?	64 45 ?	-----	3	J. Foster.
Chambersburg, Pa.....	39 58	77 45	618	12	William Keyser.
Chanarcillo, Chili, S. A.....	27 28 S.	70 28	3,860	3	Edward B. Dorsay.
Chapel Hill, N. C.....	35 54	79 17	-----	12	James Phillips, D. D.
Charleston, S. C.....	32 46	80 00	30	12	Joseph Johnson, M. D.
Charlotte, N. Y. (c).....	43 14	77 51	-----	6	Andrew Mulligan.
Chatfield, Minn.....	43 50	92 25	-----	8	T. F. Thickstun.
Chestertown, Md.....	39 14	76 02	-----	9	Prof. A. Sutton.
Chicago, Ill.....	41 53	87 41	600	7	Samuel Brooks.
Chromedale, Pa. (d).....	39 55	75 25	196	2	John H. Smealy.
Cincinnati, Ohio.....	39 06	84 27	-----	12	G. W. Harper.
Cincinnati, Ohio.....	39 06	84 28	-----	12	E. C. and J. H. Phillips.
Cinnaminson, N. J.....	40 01	75 03	83	8	William Perry.
Claremont, N. H.....	43 29	72 22	536	4	Arthur Chase.
Clarksville, Ga.....	34 35	83 31	1,632	7	Jarvis Van Buren.
Clarksville, Ga.....	34 41	-----	-----	2	Col. John R. Stanford.
Cleveland, Ohio.....	41 30	81 40	665	12	Gustavus A. Hyde.
Clinton, N. Y.....	43 00	75 20	500	4	Dr. H. M. Paine.
Clyde, N. Y.....	43 10	77 10	400	8	Matthew Mackie.
College Hill, Ohio.....	39 19	84 25	-----	8	John W. Hammitt.
College Hill, Ohio.....	39 19	84 25	800	11	Prof. J. H. Wilson.
Collingwood, Ohio.....	41 49	83 34	-----	12	Miss Sarah E. Bennett.
Columbia, Ct.....	41 42	72 16	-----	12	William H. Yeomans.
Columbia, S. C.....	33 59	80 48	-----	10	J. B. White.
Columbia, S. C.....	33 59	80 48	-----	7	J. N. Barton.
Columbus, Miss.....	33 30	88 29	227	12	James S. Lull.
Columbus, Texas.....	29 43	96 36	198	1	W. G. De Graffenried.
Concord, N. H.....	43 12	71 29	378	1	E. P. Colby.
Cordova, Mexico.....	-----	-----	-----	12	J. A. Nieto.
Cornishville, Me.....	43 40	70 44	800	12	G. W. Guptill.

a Piasa Farms.  
b Pine Hill.

c Under the direction of Captain George C. Meade, Topographical Engineers, Superintendent of Survey of the N. and NW. Lakes.  
d Lima.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1859.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fet.		
Cornish, Me	43 40	70 44	784	12	Silas West.
Corunna, Mich	42 57	84 06	759	1	Heber Crane.
Covington, Ga	33 34	84 00	763	8	Benjamin F. Camp.
Crack Whip, Va. (a)	39 30	78 31	1,750	1	D. H. Ellis.
Craftsbury, Vt	44 40	72 30	1,100	12	James A. Paddock.
Crescent City, Cal	41 45	124 11	12	6	Robert B. Randall.
Crichton's Store, Va. (b)	36 40	77 46	500	12	Colonel R. F. Astrop.
Cross Creek, Va.	40 19	80 31 ?	-----	12	B. D. Sanders.
Cross Roads, Texas	30 27	97 26	672	2	F. S. Wade.
Dallasburg, Ohio	39 17	84 07	500 ?	8	F. G. Hill.
Dallas, Texas	32 40	96 45	-----	6	John M. Crockett.
Dausville, N. Y.	42 34	77 46	-----	4	John J. Brown.
Danvers, Mass	42 35	71 03	-----	2	A. W. Mack.
Danville, Ky	37 40	84 30	950	11	Prof. O. Beatty.
Davenport, Iowa	41 30	90 37	555	5	A. J. Finley.
Davidson College, N. C.	35 30	80 54	850	5	W. C. Kerr.
Deer Creek, Neb.	42 49	106 00 ?	5,000	2	Major Thomas S. Twiss.
Delafield, Wis.	43 10	88 20	900	5	A. W. Clarke.
Denver City, Kan	39 35	105 18	-----	2	D. C. Collier.
Detroit, Mich	42 24	82 58	597	12	L. S. Horton.
Dexter, Me	44 55	69 20	-----	12	Benjamin F. Wilbur.
Dixon, Ill	41 50	89 36	-----	8	J. T. Little.
Downieville, Cal.	39 27	-----	2,200	2	T. R. Kibbe, M. D.
Dubuque, Iowa	42 30	90 52	1,258	12	Asa Horr, M. D.
Dudley, Ohio	40 35	83 35	-----	4	Hannah E. Hampton.
Dundee, Mo	38 30	91 10	457	5	S. S. Bailey.
Easton, Pa.	40 43	75 16	320	12	George R. Houghton.
East Smithfield, Pa.	41 56	76 37	1,000 ?	4	James E. Tracy.
Eden, N. Y.	42 30	79 07	700	4	Anna S. Landon.
Edgington, Ill	41 25	90 46	-----	12	Dr. E. H. Bowman.
Elgin, Ill.	42 00	88 15	600	12	J. B. Newcomb.
Elkhorn, Neb.	41 22	96 12	800 ?	12	Miss Anna M. J. Bowen.
Elk Run, Ohio	40 47	80 44	1,152	5	Smith B. McMillan.
Emerson, Mo	39 56	91 40	-----	5	Wm. B. Kizer.
Fairfield, Iowa	41 01	91 57	940	12	Dr. J. M. Shaffer.
Fairfield, Iowa	41 01	91 57	940	4	Miss Sue McBeth.
Falmouth, Va.	38 15	77 34	350	1	Hiram Van Doren.
Farmer, N. Y.	42 37	76 53	-----	1	John Lefferts and A. B. Covert.
Farmington, Mo.	37 48	90 24	-----	6	Nathan P. Force.
Fayette Village, Iowa	42 50	91 50	1,000 ?	7	John M. McKenzie.
Fishkill Landing, N. Y.	41 34	74 18	42	12	William H. Denning.
Flatbush, N. Y.	40 37	74 01	54	12	Rev. B. D. Van Kleek.
Fleming, Pa.	40 55	77 53	780	12	Samuel Brugger.
Florida, Mass	42 42	73 10	2,500	12	L. F. Whitcomb.
Fontenelle, Neb.	41 31	96 45	-----	2	John Evans.
Fordham, N. Y.	40 54	74 03	147	10	John Aubier.
Forest City, Min	45 45	96 00	-----	12	A. C. Smith.
Forestville, Iowa (c)	42 40	91 50	-----	1	Daniel Sheldon.
Fork Union, Va.	37 40	78 21	-----	3	Silas B. Jones.
Fort Edward, N. Y.	43 13	73 42	-----	5	Prof. Solomon Sias.
Fort Gratiot, Mich (d)	42 60	82 25	-----	3	Lieut. Charles N. Trumbull, Top. Engs., and Heber Squier.
Fort Madison, Iowa	40 37	91 28	-----	12	Daniel McCready.
Fort Niagara, N. Y. (d)	43 18	79 08	-----	5	L. Leffman.
Fort Rac, B. A. (e)	-----	-----	-----	3	Lawrence Clarke, jr.
Fort Riley, Kansas	39 02	97 00	1,300	7	Rev. David Clarkson.
Fort Simpson, B. A.	61 51	-----	-----	8	Bernard R. Ross.
Fort Vancouver, Oregon	45 40	122 30	-----	6	Dr. Barnes.
Franklin, Iowa	42 45	92 11	-----	3	Dexter Beal.
Freedom, Me	44 30	69 19	-----	2	E. A. Fuller.

a Wardensville.

b Genito Mills.

c Richland.

d Under the direction of Captain George C. Meade, Topographical Engineers, Superintendent of Survey of the N. and NW. Lakes.

e On Great Slave Lake.



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	° ' "	° ' "	Feet.		
Freedom, Ohio .....	41 13	81 08	1,100	8	H. M. Davidson.
Frederick, Md .....	39 24	77 18	-----	12	Henry E. Hanshew.
Fredericksburg, Va .....	38 20	77 28	600	6	Charles H. Robey.
Freehold, N. J. ....	40 15	74 21	-----	12	O. R. Willis.
Gainesville, Fla. (a) .....	29 35	82 26	-----	12	James B. Bailey.
Gainesville, Ark .....	36 12	90 35	500	3	James F. Davies.
Galena, Ill. ....	42 25	90 33	-----	4	Emil Hacuser.
Gardiner, Me .....	44 11	69 46	90	12	R. H. Gardiner.
Geneva, N. Y. ....	42 53	77 02	-----	1	Job Elletson.
Georgetown, D. C. ....	38 55	77 05	-----	1	Rev. C. B. MacKee.
Germantown, N. Y. ....	42 08	73 58	175	2	William Tompkins.
Germantown, Pa .....	40 03	75 10	-----	6	Thomas Meehan and S. Ebert.
Gettysburg, Pa .....	39 49	77 15	624	12	Prof. M. Jacobs.
Gilbert's Trading Post, Neb .....	42 28	108 40	7,400?	1	Charles H. Miller.
Gilmer, Texas .....	32 46	94 48	1,017	6	J. M. Glasgow.
Glenwood, Tenn (b) .....	36 28	87 13	481	12	Prof. William M. Stewart.
Gonzales, Texas .....	29 28	97 39	-----	5	M. H. Allis.
Grand Haven, Mich .....	43 01	86 11	600	4	Heber Squier.
Grand Rapids, Mich .....	43 00	86 00	852	11	L. H. Streng.
Great Salt Lake City, U. T. ....	40 45	111 26	4,250?	11	W. W. Phelps.
Great Valley, N. Y. ....	42 12	78 45	-----	6	Kathalo Kelsey.
Green Bay, Wis .....	41 30	88 06	584	8	D. Underwood.
Greencastle, Ind .....	39 39	86 46	-----	8	William H. Larabee.
Greene Springs, Ala .....	32 50	87 46	-----	11	H. Tutwiler.
Greenfield, Mo .....	37 24	93 48	1,800?	7	S. B. Bowles, M. D.
Green Plains, N. C. (c) .....	36 32	77 45	-----	12	Dr. George W. Moore.
Greensborough, Ala .....	32 40	87 40	-----	12	R. B. Waller.
Greenville, Mo .....	37 07	90 30	-----	11	O. D. Dalton.
Greenville, Texas .....	33 10	97 22	-----	2	R. Dejernett.
Greenwood, Dakota Ter. (d) .....	42 52	98 24	1,900?	2	F. Norvell.
Grenada, Miss .....	33 46	89 53	-----	3	Albert Moore.
Guatemala, Central America .....	14 37	30 30	4,961	12	Antonio Canudas.
Halifax, Nova Scotia .....	44 39	63 37	-----	1	R. J. Nelson.
Hamilton, Canada .....	43 15	79 57	-----	12	Dr. Craigie.
Hardinsburg, Ky., (Mt. Alba College) .....	37 45	86 24	500?	7	Mrs. M. A. Waller and J. C. Barbage.
Harrisburg, Pa .....	40 16	76 50	-----	12	John Heisely.
Harrisburg, Pa .....	40 16	76 55	320	12	W. O. Hickok.
Harrisonville, Mo .....	38 36	94 17	-----	7	John Christian.
Hartland, Me .....	44 51	69 30	200	5	Rev. H. B. Marshall and L. S. Strickland.
Hartland, Me .....	44 51	69 30	-----	2	E. E. Brown and S. W. Hall.
Hartwood, Va .....	38 15	77 34	350	3	Abram Van Doren.
Havana, N. Y. ....	42 20	76 54	1,041	5	E. C. Frost.
Hazlewood, Min .....	45 00	95 30	-----	12	Rev S. R. Riggs.
Henrietta, N. Y. ....	43 06	77 51	600	11	A. S. Wadsworth.
Hermann, Mo .....	38 40	91 27	598	7	Philip Weber.
Hernando, Miss .....	36 48	89 55	275	3	William M. Johnson.
Hillsborough, Ohio .....	39 13	83 30	1,000	12	J. McD. Mathews.
Hillsborough, Ohio .....	39 00	-----	-----	6	J. W. Gamble.
Hiram, Ohio .....	41 20	81 15	675	6	S. M. Luther.
Hocking Port, Ohio .....	39 18	81 41	-----	8	John Rhodes, M. D.
Hornersville, Mo .....	36 03	90 00	-----	5	W. H. Horner.
Houseville, N. Y. ....	43 40	75 32	-----	3	Walter D. Yale.
Hudson, Ohio .....	41 15	81 24	1,137	12	E. W. Childs and C. A. Young.
Huntsville, Texas .....	-----	-----	-----	12	T. Gibbs.
Iberia, Ohio .....	40 46	82 51	1,160	3	S. T. Boyd.
Ilion, N. Y. ....	43 01	75 14	-----	7	J. D. Ingersoll.
Ireland, Bermuda .....	32 20?	64 45	123	1	John G. Calder.
Jackson, Ohio .....	39 34	80 56	540	12	Enoch D. Johnson.
Jacksonport, Ark .....	35 36	91 15	-----	7	Dr. G. A. Martin.
Jacksonville, Fla .....	30 30	82 00	13	12	Dr. A. S. Baldwin.
Jacksonville, Ill .....	39 48	90 19	-----	1	Timothy Dudley.

a Alachua county.  
b Clarkesville.

c Gaston.  
d Indian agency.

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	° ' "	° ' "	<i>Fect.</i>		
Janesville, Wis.....	42 42	89 91	768	6	George J. Kellogg.
Jefferson, Texas.....	32 44	94 20	65?	1	W. T. Epperson.
Jerusalem, Palestine, E. C.....	31 47	35 13 E.	2,610	3	Dr. R. G. Barclay.
Kanawha, Va.....	38 53	81 25	-----	6	W. C. Reynolds.
Kandotta, Min.....	45 45	94 55	-----	2	Edwin Whitefield.
Kanosh, Neb.....	40 51	95 53	1,050	5	Bela White.
Kaufman, Texas.....	32 37	96 20	-----	7	James T. Rayel.
Kelley's Island, Ohio.....	41 36	82 43	587	9	George C. Huntington.
Kenosha, Wis.....	42 35	87 50	600	12	Rev. John Gridley.
Kirksville, Mo.....	40 11	92 33	-----	7	Dr. Robert Byers.
Laconia, N. H. (a).....	-----	-----	-----	12	Josiah B. French.
La Grange, Tenn.....	-----	-----	-----	6	J. R. Blake.
Lake George, Mich.....	46 15 ?	85 00 ?	-----	4	Capt. A. W. Whipple and Edw'd Perrault.
Lake Mills, Wis.....	43 00	89 00	-----	7	Isaac Atwood.
Lake Village, N. H. (b).....	-----	-----	-----	12	Josiah B. French.
Lambertville, N. J.....	40 23	74 56	-----	12	Lemuel H. Parsons.
Lancaster, Ohio.....	39 40	82 40	-----	1	Lewis M. Dayton.
Lancaster, Ohio.....	39 46	82 36	-----	1	W. E. Davis.
Lancaster, Mo.....	40 30	92 30	-----	6	John M. Weatherford.
Lansing, Mich.....	42 44	84 15	750?	4	J. C. Holmes and C. Abbe.
Larissa, Texas.....	31 45	95 50	755	12	F. L. Yoakum.
Lawrence, Mass.....	42 42	71 11	133	12	John Fallon.
Lawrence, Kansas.....	38 58	95 12	800	7	G. W. Brown.
Leavenworth City, Kansas.....	39 19	94 55	787	1	H. D. McCarty.
Leavenworth City, Kansas.....	39 20	94 33	1,342	5	E. L. Berthoud.
Lebanon, Ill.....	38 37	89 56	450?	2	L. E. Cobleigh.
Lecompton, Kansas.....	39 02	95 10	760	6	Dr. William Y. Ellis.
Leitersburg, Md.....	39 35	77 30	-----	12	J. E. Bell.
Leonardtown, Md.....	38 17	76 43	-----	■	Dr. A. McWilliams.
Lewinsville, Va.....	38 56	77 04	180	10	Rev. C. B. MacKee.
Lewisburg, Pa.....	40 58	76 58	-----	12	Charles S. James.
Lewisburg, Va.....	38 00	80 00	2,000	12	J. W. Stalnaker.
Lexington, Ky.....	38 06	84 18	-----	4	S. R. Williams.
Lexington, Mo.....	39 10	93 50	-----	■	Joseph A. Wilson.
Limington, Maine.....	43 40	70 40	1,000	4	W. G. Lord.
Linden, Pa.....	41 10	77 11	-----	4	James Barrett.
Lisbon, Maine.....	44 00	70 04	-----	9	Asa P. Moore.
Livingston, Ala.....	32 35	88 19	180	7	Rev. Stephen U. Smith.
Livingston, Ala.....	32 38	88 14	180	1	Dr. R. D. Webb.
Logansport, Ind.....	40 45	86 14	-----	12	Isaac Bartlett.
Louisville, Ky.....	38 03	85 30	450	5	Rev. S. R. Williams.
Lunenburg, Vt.....	44 28	71 41	1,124	12	Hiram A. Cutting.
Luray, Mo.....	40 28	91 55	-----	5	B. P. Hanan.
Lyons, N. Y.....	43 04	77 04	-----	5	E. Ware Sylvester.
Lyons City, Iowa.....	41 50	90 10	401	7	A. T. Hudson.
Madison, Ohio.....	41 49	81 10	-----	11	Rev. L. S. Atkins.
Madison, Ohio.....	41 52	81 00	650	12	Mrs. Ardelia C. King.
Madison, Wis.....	43 05	89 25	892	■	Prof. J. W. Sterling.
Madrid, N. Y.....	44 43	75 33	280	5	E. A. Dayton.
Manchester, N. H.....	42 59	71 28	300	1	Samuel N. Bell.
Manchester, Ill.....	39 33	90 34	683	12	John Grant.
Manhattan, Kansas.....	39 13	96 45	1,000	12	Isaac T. Goodnow.
Manhattan, Kansas.....	39 13	96 45	-----	■	Rev. N. O. Preston.
Manitowoc, Wis.....	44 07	87 37	-----	12	Jacob Lüps.
Marengo, Ill.....	42 14	88 38	842	12	O. P. and J. S. Rogers.
Marion, Ohio.....	40 36	83 12	971	2	T. Chase.
Marquette, Mich.....	46 32	87 41	630	12	G. H. Blaker.
Marysville, Cal.....	39 12	121 42	-----	3	W. C. Belcher.
Meadow Dale, Va.....	38 23	79 35	-----	2	J. B. Slaven.
Memphis, Tenn.....	35 08	90 00	262	11	Dr. W. J. Tuck and Dr. R. W. Mitchell.
Mendon, Mass.....	42 06	71 33	-----	12	Dr. John G. Metcalf.

a At the outlet of Lake Winnepissigee.

b Four miles south of Laconia.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1859.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Micanopy, Fla.....	29 35	82 31	78	12	Dr. James B. Bean.
Michigan City, Ind (a).....	41 41	86 53	622	4	William Woodbridge.
Middletown, Ct.....	41 33	72 39	175	12	John Johnston.
Millersburg, Ky.....	38 20	84 00	804	2	Rev. George S. Savage, M. D.
Milwaukee, Wis.....	43 04	87 59	658	5	F. C. Pomeroy.
Milwaukee, Wis.....	43 03	87 57	593	4	I. A. Lapham.
Milwaukee, Wis.....	43 04	87 38	-----	8	E. P. Larkin.
Milwaukee, Wis.....	43 04	87 59	593	12	Carl Winkler, M. D.
Minatitlan, Mexico (b).....	17 59	94 07	60	3	Charles Lazelo.
Mirador, Mexico.....	19 50	96 25	3,500	12	Carl Sartorius.
Mishawaka, Ind.....	41 39	86 02	-----	9	George C. Menifield.
Monck, Kansas.....	38 19	94 49	-----	6	John O. Wattles.
Monroe, Mich.....	-----	-----	-----	11	George W. Bowsby.
Monroe, Mich.....	41 56	83 22	-----	12	Miss Helen I. Whelpley.
Monroe Piers, Mich (a).....	41 53	83 19	585	6	John Lane.
Monterey, Cal.....	36 40	121 55	-----	6	Colbert A. Canfield.
Montgomery, Ala.....	32 25	86 22	162	6	William S. Foster.
Montgomery, Ala.....	32 25	86 24	-----	6	Rev. J. A. Shepherd.
Montreal, Canada.....	45 30	73 36	57	11	Dr. A. Hall.
Montrose, Va.....	38 07	76 54	200	10	E. E. Spence.
Mont View, Va.....	38 00	78 30	521	11	J. Ralls Abel.
Montville, Ohio.....	41 07	81 47	1,261	12	William P. Clark.
Moorestown, N. J.....	39 58	75 02	104	5	Miss E. E. Thornton.
Moose Factory, Hud. Bay Ter.....	51 15	80 45	-----	11	J. Mackenzie.
Moquelumne Hill, Cal.....	38 18	120 28	1,500	6	Wesley K. Boucher.
Morrisania, N. Y.....	40 53	74 00	150	12	Joseph Zaeppfel.
Morristown, N. J.....	40 48	74 33	-----	1	William Day.
Morrisville, Pa.....	40 12	74 53	30	3	Mahlon Moore.
Morrisville, Pa.....	40 12	74 53	30	12	E. Hance.
Mosinee, Wis.....	44 44	89 35	-----	2	Dr. J. S. Pashley.
Moulton, Ala.....	34 32	87 25	643	3	Ashley D. Hunt.
Mount Joy, Pa.....	40 08	77 32	-----	12	Miss Mary E. Hoffer.
Mount Pleasant, Ohio.....	40 20	80 32	-----	3	David H. Tweedy.
Mount Union, Ohio.....	41 20	81 01	-----	5	Newton Anthony
Mount Washington, N. H.....	44 15	71 16	6,285	4	Joseph S. Hall.
Murfreesborough, N. C.....	36 30	77 06	-----	12	Rev. A. McDowell.
Murrysville, Pa.....	40 28	79 35	960	3	Thomas H. Stuart.
Muscatine, Iowa.....	41 26	91 05	586	12	T. S. Parvin.
Mustapha, Va.....	39 20	81 41	-----	7	James Frazer.
Nantucket, Mass.....	41 16	70 06	30	12	Hon. William Mitchell.
Naperville, Ill.....	41 46	88 10	-----	5	M. S. Ellsworth and Lewis Ellsworth.
Nassau, Bahamas, W. I.....	25 05	77 02	28	8	A. M. Smith.
Natchez, Miss.....	31 34	91 25	264	12	Robert McCary.
Nazareth, Pa.....	40 43	75 21	-----	4	J. C. Harvey.
Nebraska City, Neb.....	40 40	95 43	1,005	8	E. E. Mason.
Neosho Falls, Kan.....	38 03	95 31	-----	10	B. F. Goss.
New Albany, Ind.....	38 17	85 45	-----	4	Dr. Alex. Martin.
Newark, N. J.....	40 45	74 10	30	12	W. A. Whitehead.
Newark, Ohio.....	40 06	82 28	-----	8	Israel Dille.
New Bedford, Mass.....	41 39	70 56	90	12	Samuel Rodman.
New Braunfels, Texas (c).....	29 42	98 15	-----	10	Otto Friedrich.
New Brunswick, N. J.....	40 30	75 31	30?	7	Edwin Allen.
New Buffalo, Mich.....	41 45	86 46	600	12	J. B. Crosby.
New Castle, Me.....	44 07	69 36	88	7	Charles L. Nichols.
New Danemora, Wis.....	44 17	90 38	-----	6	Emil Haeuser.
New Harmony, Ind.....	38 08	87 50	320	12	John Chappellsmith.
New Haven, Ct.....	41 18	72 57	-----	1	H. G. Du Bois, jr.
New Lisbon, Ohio.....	40 45	80 46	961	12	J. F. Benner.
New Orleans, La.....	29 57	90 00	-----	12	Lewes B. Taylor.
New York city, N. Y.....	40 43	74 05	159	12	Prof. O. W. Morris.
Nichols, N. Y.....	42 00	76 32	-----	12	Robert Howell.

a Under the direction of Captain George C. Meade, Topographical Engineers, Superintendent of Survey of the N. and N.W. Lakes.

b Chinameca.  
c New Wied.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1859.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Fed.		
Norristown, Pa. ....	40 08	75 19	153	12	Rev. J. Grier Balston.
North Belgrade, Me. ....	44 30	69 53	-----	6	Almond H. Wyman.
North Bend, Ohio. ....	39 08	84 35	800	5	A. A. Warder.
North Littleton, N. H. ....	44 20	71 49	-----	1	Rufus Smith.
North Whitehall, Pa. ....	40 40	75 26	250	12	Edward Kohler.
Northwood, Ohio (a) ....	40 28	83 45	1,170	11	J. C. Smith.
Norway, Me. ....	44 12	70 39	-----	8	G. W. Verril, jr.
Norwich, Vt. ....	43 42	72 21	-----	7	Prof. A. Jackman.
Notre Dame, Ind. ....	41 45	86 10	-----	1	Thomas Vagnier.
Ogdensburg, N. Y. ....	44 43	75 26	-----	11	W. E. Guest.
Omaha, Neb. ....	41 15	96 10	-----	12	John G. Rain.
Omaha, Neb. ....	41 15	96 00	-----	2	William N. Byers.
Ontonagon, Mich. (b) ....	46 52	89 30	1,196	5	Henry Selby.
Oregon City, Oregon. ....	-----	-----	-----	3	G. H. Atkinson.
Orville, Ala. ....	32 24	87 06	200	3	Dr. S. K. Jennings.
Oswego, N. Y. ....	43 28	77 34	232	12	W. S. Malcolm.
Otsego, Mich. ....	42 27	85 40	-----	6	Matthew Coffin.
Otsego, Wis. ....	43 27	89 13	-----	6	L. M. Doyle.
Ottawa, Ill. ....	41 20	88 47	500	12	Dr. J. O. Harris.
Ottawa Point, Mich. (b) ....	44 16	83 25	600	12	John Oliver.
Paducah, Ky. ....	37 06	88 36	-----	8	A. Mattison.
Pardeeville, Wis. ....	43 29	89 14	-----	3	S. Armstrong.
Paris, Ky. ....	38 16	84 07	810	12	Dr. L. G. Ray.
Paris, Mo. ....	39 30	92 00	1,700?	7	William F. Maxey.
Patoka, Ind. ....	38 28	87 26	-----	2	A. P. Turner.
Paulding, Miss. ....	32 03	89 10	-----	9	Rev. E. S. Robinson.
Pekin, Ill. ....	40 36	89 45	-----	12	J. H. Riblet.
Penn Yan, N. Y. ....	42 42	77 11	747	12	Dr. H. P. Sartwell.
Peoria, Ill. ....	40 36	89 40	-----	12	Dr. Frederick Brendel.
Perry, Me. ....	45 00	67 06	100	12	William D. Dana.
Perrysville, Ark. ....	35 00	92 46	-----	7	William H. Blackwell.
Philadelphia, Pa. ....	39 57	75 11	-----	12	Prof. James A. Kirkpatrick.
Pittsburg, Pa., [Marine Hospital] ....	40 30	80 00	-----	12	Alexander M. Spence.
Platteville, Wis. ....	42 45	90 45	-----	12	J. L. Pickard and A. K.
Pleasant Plain, Iowa. ....	41 07	91 54	-----	12	Townsend McConnel.
Pocopson, Pa. ....	39 54	75 37	218	12	Fenelon Darlington.
Point Coupee, La. (c) ....	30 42	91 30	-----	7	A. W. Jackson, M. D.
Point Pleasant, Va. ....	38 50	82 08	480	6	W. R. Boyers.
Pomfret, Ct. ....	41 52	72 00	587	12	Rev. D. Hunt.
Pomona, Tenn. ....	36 00	85 00	2,200	4	J. W. Dodge & Son.
Poplar Grove, Va. ....	38 20	81 21	720	12	James E. Kendall.
Port Huron, Mich. ....	42 53	82 24	606	6	James Allen.
Portland, Me. ....	43 37	70 19	-----	12	Henry Willis.
Portland, Me. ....	43 39	70 15	187	8	J. W. Adams.
Portland, Oregon. ....	45 24	122 30	150	8	George H. Stebbins.
Port La Vaca, Tex. ....	28 40	96 45	14	2	James Gardiner.
Portsmouth, Ohio. ....	38 50	82 49	468	12	D. B. Cotton.
Portsmouth, Va. ....	36 50	76 19	34	12	Prof. N. B. Webster.
Poultney, Iowa. ....	41 40	91 21	-----	3	B. F. Odell.
Preston, Tex. ....	33 47	96 35	-----	5	James E. Moke.
Princeton, Min. ....	45 50	93 45	-----	12	O. E. Garrison.
Providence, R. I. ....	41 49	71 25	120	12	Prof. A. Caswell.
Raleigh, N. C. ....	35 47	78 48	317	8	W. H. Hamilton and Thomas Carter.
Red River Settlement, B. A. ....	50 06	90 00	653	12	Donald Gunn.
Rhineland, Mo. ....	38 46	91 46	800?	2	Charles Vogel.
Richmond, Ind. ....	39 47	84 46	-----	8	John Haines.
Richmond, Ind. ....	39 47	84 46	-----	7	W. W. Austin.
Richmond, Ind. ....	39 47	84 47	800	7	Joseph Moore.
Richmond, Mass. ....	42 23	73 20	1,190	2	William Bacon.
Richmond, Mo. ....	39 12	93 56	-----	7	Rufus W. Finley.

a Belle Centre.

b Under the direction of Captain George C. Meade, Topographical Engineers, Superintendent Survey of the N. and NW. Lakes.

c Poydras College.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1859.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	N <sup>o</sup> . of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Rigolet, Labrador .....	54 30	56 21	-----	11	Henry Connelly.
Riley, Ill. ....	42 08	88 33	650	12	E. Babcock.
Ripley, Ohio .....	38 47	83 31	-----	5	J. Ammen.
Rochester, N. Y. ....	43 08	77 51	516	12	Prof. Chester Dewey, LL. D.
Rochester, N. Y. ....	43 08	77 51	522	10	Dr. M. M. Mathews.
Rockport, Ohio .....	41 31	81 53	665	12	Edward Colbrunn.
Rockville, Ind. ....	39 46	87 06	-----	2	H. H. Anderson and J. W. Tenbrock.
Rocky Run, Wis. ....	43 26	89 19	-----	6	W. W. Curtis.
Rose Hill, Va. ....	38 00	76 57	250	12	George Wythe Upshaw.
Rossville, Iowa .....	43 10	91 21	1,400	12	C. D. Beeman.
Rougemont, Va. ....	38 05	78 21	450	12	George C. Dickinson.
Roundtop, Tex. ....	-----	-----	-----	12	Bruno Schuman.
Rupert, Vt. ....	43 15	73 11	750	12	Joseph Parker.
Ruthven, Va. ....	37 21	77 33	-----	4	Julian C. Ruffin.
Sackett's Harbor, N. Y. (a) .....	43 55	75 57	263	6	Henry Metcalf.
Sacramento, Cal. ....	38 35	121 28	41	12	Dr. Thomas M. Logan.
St. Augustine, Fla. ....	29 48	81 35	8	12	Dr. P. B. Mauran.
St. George's, Bermuda .....	32 23	64 40	123	12	R. M. Sanford.
St. John's, Newfoundland .....	45 35	52 39	170	12	J. Delaney.
St. John's, S. C. ....	33 00	80 00	50	12	T. P. Bavenel.
St. Johnsbury, Vt. ....	44 25	72 00	540	12	Franklin Fairbanks.
St. Louis, Mo. ....	38 37	90 16	-----	12	George Engelmann.
St. Louis, Mo. ....	28 37	90 16	428	11	Augustus Fendler.
St. Martin, Canada .....	45 32	73 36	118	12	Dr. Charles Smallwood.
St. Mary's, Md. ....	38 10	76 41	40	1	Rev. James Stephenson.
St. Mary's River, Mich. ....	46 20?	84 10	585	1	?
Salt Ponds, Fla. (b) .....	24 33	81 48	-----	12	William C. Dennis.
Sandwich, Ill. ....	41 39	88 43	-----	12	Dr. N. E. Ballou.
San Francisco, Cal. ....	37 48	122 27	130	11	Dr. W. O. Ayres.
San Patricio, Tex. ....	27 55	97 50	-----	6	James O. Gaffney.
Santa Clara, Cal. ....	37 20	122 00	98	4	Prof. Oliver S. Frambes.
Santa Clara, Cal. ....	37 10	122 00	100	5	S. A. Gould.
Saratoga, N. Y. ....	43 06	74 00	960	11	Walter H. Riker.
Savannah, Ga. ....	32 05	81 07	42	9	Dr. John F. Posey.
Savannah, Ohio .....	41 12	82 34	-----	12	Dr. John Ingram.
Saybrook, Ct. ....	41 18	72 20	10	12	James Rankin.
Schenectady, N. Y. ....	42 49	73 55	290	4	Alexis A. Julien.
Schenectady, N. Y. ....	42 48	73 55	-----	2	Hubert A. Schaubert.
Selma, Ala. ....	32 25	87 04	200	9	Dr. Samuel K. Jennings.
Seville, Fla. ....	30 29	84 07	-----	10	Lardner Gibbon.
Sewickleyville, Pa. ....	40 27	80 09	-----	3	John J. Travelli.
Shamokin, Pa. ....	40 45	76 31	700	12	P. Friel.
Sharonville, Ohio .....	33 12	84 35	800	8	W. T. Bowen.
Shelburne, N. H. ....	44 23	71 06	700	12	Fletcher Odell.
Shelbyville, Ind. ....	39 30	85 43	-----	7	J. T. Bulloch.
Sioux City, Iowa .....	42 31	96 25	-----	1	Dr. John J. Saville.
Sisterdale, Tex. ....	29 54	98 35	1,000	12	Ernst Kapp.
Smithfield, Va. ....	36 50	76 41	100	12	Dr. John R. Purdie.
Somerset, Pa. ....	40 02	79 02	2,195	12	George Mowry.
South Bend, Ind. ....	41 37	86 08	600	8	Miss Georgiana Webb and J. H. Dayton.
South Groton, Mass. ....	42 34	71 30	300	3	Alfred Collier.
Sparta, Ga. ....	33 17	83 09	550	11	Dr. E. M. Pendleton.
Spencertown, N. Y. ....	42 19	73 41	800	11	James M. Alexander.
Springdale, Ky. ....	38 07	85 34	570	12	Mrs. L. Young.
Springfield, Mass. ....	42 06	72 35	-----	3	F. A. Brewer.
Springfield, Tex. ....	31 39	96 40	4,500	1	T. A. Turner.
Spring Hill, Ala. (c) .....	30 42	88 01	-----	11	Rev. J. J. Nicholson.
Spring Hill, Kan. (d) .....	38 37	94 56	-----	7	Rev. J. H. Drummond.
Spring Hill, Ark. ....	33 33	93 35	-----	7	P. F. Finley.
Stanbridge, Canada East. ....	45 08	73 00	-----	12	J. C. Baker.

a Under the direction of Captain George C. Meade, Topographical Engineers, Superintendent Survey of the N. and NW. Lakes.  
b Key West.

c Near Mobile.  
d Celestville.

## No. 1.—LIST OF STATIONS AND OBSERVERS, 1859.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° ' "	° ' "	Feet.		
Steuben, Me.....	44 28	67 50	50	12	J. D. Parker.
Stockton, Mo.....	37 36	93 48	800	7	William Wells.
Stratford, N. H.....	44 44	71 34	1,000	12	Branch Brown.
Stratham, N. H.....	43 00	70 54	—	7	Andrew Wiggin.
Stribling Springs, Va.....	38 17	79 12	1,639	4	Jed. Hotchkiss.
Superior, Wis. (a).....	46 38	92 03	—	5	George B. Stunts.
Superior, Wis.....	46 38	92 03	—	3	William Mann.
Sykesville, Md.....	39 23	76 57	700	12	Miss Harriott M. Baer.
Tarentum, Pa.....	40 37	79 19	950	11	John H. Baird.
Tarrant, Tex.....	33 16	95 34	—	7	Dr. B. L. D'Spain and J. M. Ewing.
Texana, Tex.....	28 55	96 40	60	1	William Coleman.
The Plains, Va.....	38 50	77 51	—	2	John Pickett.
Thomaston, Ga. (b).....	32 56	84 30	750	12	Dr. James Anderson.
Thompson, Ga.....	33 26	82 28	—	5	Dr. W. T. Grant.
Thunder Bay Island, Mich. (a).....	45 02	83 09	600	12	J. J. Malden.
Tickfaw Station, La.....	30 30	90 32	—	6	C. B. Swasey.
Tiskilwa, Ill.....	41 15	89 30	—	■	Verry Aldrich.
Toledo, Ohio.....	41 45	83 36	—	■	E. B. Raffensperger.
Topsham, Me.....	44 00	70 00	60	8	Warren Johnson.
Toronto, Canada West.....	43 39	79 02	108	12	Magnetic Observatory.
Trenton, Mo., (near).....	40 02	93 39	—	1	Thomas A. Conkling.
Troy, Ohio.....	40 03	84 06	975	12	Charles L. McClung.
Turk's Island, Bahamas.....	21 29	71 05	—	6	J. B. Hayne.
Tuscumbia, Mo.....	38 13	92 23	800?	4	William M. Lumpkin.
Union Hill, Texas.....	30 30	96 31	540	12	Dr. W. H. Gantt.
Union Rancho, Cal.....	39 30	121 00	—	■	James Slaven.
Uniontown, Ala.....	32 30	87 33	—	5	Rev. R. A. Cobb.
University Place, Tenn.....	35 12	85 48	2,060	1	Charles B. Barney.
Upper Alton, Ill.....	38 55	90 10	—	9	John James.
Urbana, Ohio.....	40 06	83 45	1,015	12	Prof. M. G. Williams.
Vassalborough, Me.....	40 27	69 42	—	■	James Van Blascow.
Vera Cruz, Mexico.....	19 10	96 08	26	■	Dr. G. Berendt.
Waldron, Ark.....	34 53	94 00	—	7	George W. Featherston.
Wallingford, Ct.....	41 26	72 50	133	12	B. F. Harrison.
Wampsville, N. Y.....	43 04	75 50	500	12	Dr. Stillman Spooner.
Warren, Me.....	44 05	59 15	—	■	Calvin Bickford.
Warrenton, Mo.....	38 50	91 09	—	■	Marion F. Hamaker and M. A. Tidswell.
Warrington, Fla.....	30 20	87 16	12	4	T. Abert.
Wausau, Wis.....	45 00	89 40	—	12	Dr. W. A. Gordon.
Washington, Ark.....	33 43	93 37	—	12	Dr. Nathan D. Smith.
Washington, D. C.....	38 56	76 58	—	12	Smithsonian Institution.
Washington, Texas.....	30 26	96 15	—	12	B. H. Rucker.
Waterford, N. Y.....	42 48	73 41	—	12	John C. House.
Waterloo, Iowa.....	42 30	92 30	—	1	L. W. Doyle.
Waukesha, Wis.....	43 00	88 11	812	2	S. A. Bean.
Waynesville, Ill.....	40 16	89 07	—	3	J. E. Cantril.
Waynesville, Mo.....	37 50	92 07	—	4	B. G. Lingow.
Webberville, Texas.....	30 14	97 34	394?	11	E. W. Yellowby.
Welshfield, Ohio.....	41 23	81 12	1,115	12	B. F. Abell.
West Day, N. Y.....	43 20	74 16	—	2	Jude M. Young.
Westerville, Ohio.....	40 04	83 10	—	12	Prof. John Haywood.
Westfield, Mass.....	42 06	72 48	—	12	Rev. Emerson Davis, D. D.
West Green, N. C.....	36 06	79 45	840	2	Samuel W. Westbrook.
West Haverford, Pa.....	40 00	75 21	—	12	Dr. Paul Swift.
West Salem, Ill.....	38 30	88 00	—	12	Henry A. Titze.
Westtown, Pa.....	39 57	75 43	550	■	Samuel Alsop.
West Urbana, Ill.....	40 09	88 17	550	12	Dr. John Swain.
Westville, Miss.....	31 52	90 00	—	■	J. R. Cribbs.
Westwood, Va.....	37 33	77 27	—	12	C. J. Meriwether.
Wet au Glaize, Mo.....	38 06	92 17	—	7	B. D. Dodson.

\* Under the direction of Captain George C. Meade, Topographical Engineers, Superintendent Survey of the N. and NW. Lakes.

b The Rock.



## No. 1.—LIST OF STATIONS AND OBSERVERS, 1859.

NAME OF STATION.	North latitude.	West longitude from Greenwich.	Height above the sea.	No. of months observed.	NAME OF OBSERVER.
	° /	° /	<i>Feet.</i>		
Weymouth, Mass. ....	42 10	71 00	150	1	Norton Q. Tirrell, M. D.
Wheaton, Ill. ....	41 49	88 06	682	12	G. H. Collier.
Wheeling, Va. ....	40 07	80 42	-----	2	George P. Lockwood.
Wheelock, Texas. ....	30 55	96 27	500?	7	F. Kellogg.
Whitemarsh Island, Ga. ....	32 04	81 05	18	12	R. T. Gibson.
Williamstown, Mass. ....	42 43	73 13	720	11	Martin L. Berger and William P. Alcott.
Willow Creek, Ill. ....	41 45	89 05	1,040	8	E. E. Bacon.
Wilson, N. Y. ....	43 20	78 56	250	12	E. S. Holmes.
Winchester, Tenn. ....	35 12	86 00	-----	8	S. W. Houghton.
Winchester, Va. ....	39 15	78 10	-----	12	John W. Marvin.
Windham, Ohio. ....	41 10	81 05	-----	12	Samuel W. Treat.
Windsor, Nova Scotia. ....	44 59	64 07	200	12	Rev. Prof. J. M. Hensley and Prof. H. Howe.
Winnebago, Ill. ....	42 17	89 11	-----	12	J. W. Tolman.
Wolfville, Nova Scotia. ....	45 06	64 25	95	11	C. F. Hartt.
Woodstock, Vt. ....	43 36	72 35	650	1	Charles Marsh.
Woodstock, Ill. ....	42 20	88 30	-----	2	George R. Bassett.
Woodstown, N. J. ....	39 39	75 25	30	3	George Watson.
Worcester, Mass. ....	42 16	71 48	536	12	H. C. Prentiss.
Worthington, Pa. ....	40 52	79 39	-----	12	Samuel Scott.
Wyandotte City, Kan. ....	39 08	94 20	707	7	John H. Miller.
Yellsville, Ark. ....	36 14	92 40	-----	4	L. W. West and W. B. Flippin.
Ypsilanti, Mich. ....	42 15	83 47	-----	12	C. S. Woodard.
Zanesville, Ohio. ....	39 58	82 01	700	1	Aaron Peters.
Zebulon, Ga. ....	33 07	84 26	-----	3	Mrs. J. T. Arnold.

## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton	29.71	10	9 a. m.	30.20	15	9 a. m.	28.96
Montreal	30.07	10	2 p. m.	30.71	7	9 p. m.	29.08
Moose Factory	30.07						
St. John's	29.71	25	7 a. m.	30.33	16	9 p. m.	28.88
St. Martin	30.02	10	6 a. m.	30.61	15	2 p. m.	29.13
Toronto	29.68	10	6 a. m.	30.28	15	6 a. m.	28.94
Windsor	30.06	24	2 p. m.	30.62	■	7 a. m.	29.11
Wolfville	29.96	3	7 a. m.	30.64	8	7 a. m.	29.17
Maine—Gardiner	29.99	24	7 a. m.	30.45	8	7 a. m.	29.20
Perry	30.06	3	2 p. m.	30.60	15	9 p. m.	29.26
Portland	30.05	24	7 a. m.	30.60	7	9 p. m.	29.20
Steuben	30.03	20	9 p. m.	30.66	8	7 a. m.	29.14
New Hampshire—Shelburne	29.85	24	7 a. m.	30.28	8	7 a. m.	29.14
Vermont—Burlington	29.74	10	7 a. m.	30.30	7	9 p. m.	28.80
St. Johnsbury	29.46	10	9 p. m.	a 29.96	15	9 p. m.	28.71
Woodstock	29.34	24	7 a. m.	29.80	7	9 p. m.	28.47
Massachusetts—Amherst	29.89	24	7 a. m.	30.39	15	2 p. m.	29.17
Bridgewater	29.96	24	7 p. m.	30.45	15	2 p. m.	29.23
Cambridge	30.12	24	9 p. m.	30.63	7	9 p. m.	29.28
Danvers	30.34	24	7 a. m.	b 30.80	7	9 p. m.	29.67
Lawrence	29.99	24	7 a. m.	c 30.51	7	9 p. m.	29.22
Nantucket	30.14	24	9 p. m.	30.68	7	9 p. m.	29.48
New Bedford	30.04	24	9 p. m.	30.60	7	9 p. m.	29.28
Westfield	30.02	24	9 p. m.	30.50	7	9 p. m.	29.19
Weymouth	29.67	25	7 a. m.	d 30.17	7	9 p. m.	29.01
Williamstown	29.42	24	7 a. m.	29.88	15	9 p. m.	28.75
Worcester	29.54	24	7 a. m.	30.40	7	9 p. m.	28.80
Rhode Island—Providence	29.92	24	Sunrise.	30.50	7	10 p. m.	29.08
Connecticut—Middletown	29.96	24	7 a. m.	30.46	7	9 p. m.	29.16
Pomfret	29.48	24	9 p. m.	29.99	7	9 p. m.	28.77
Wallingford	30.03	24	7 a. m.	d 30.55	3	9 p. m.	29.17
New York—Bellport	29.44	24	7 a. m.	29.89	8	2 p. m.	28.81
Buffalo	29.42	23	7 a. m.	29.85	7	2 p. m.	28.69
Cazenovia	28.65	10	2 p. m.	29.05	7	6.20 p. m.	27.89
Fishkill Landing	30.31	24	7 a. m.	30.75	15	9 p. m.	29.64
Flatbush	30.08	24	7 a. m.	30.56	7	9 p. m.	29.35
Fort Edward	29.94	10	2 p. m.	30.48	7	9 p. m.	29.07
New York city	30.15	24	7 a. m.	30.65	7	9 p. m.	29.38
Oswego	29.42	10	2 p. m.	29.90	15	2 p. m.	28.66
Penn Yan	29.50	■	2 p. m.	29.92	7	Sunset.	28.74
Rochester, [Dewey]	29.48	10	2 p. m.	30.16	15	2 p. m.	28.70
Spencertown	29.41	24	7 a. m.	29.90	15	7 a. m.	28.73
Waterford	30.08	24	7 a. m.	30.57	15	2 p. m.	29.32
New Jersey—Lambertville	30.12	24	9 p. m.	30.62	7	9 p. m.	29.49
Newark	30.09	10	9 p. m.	30.52	15	9 p. m.	29.46
Pennsylvania—Berwick (e)	29.38	24	7 a. m.	f 29.84	7	9 p. m.	g 28.75
Cannonsburg	28.94	23	7 a. m.	29.37	15	7 a. m.	28.32
Carlisle	29.30	24	7 a. m.	29.75	15	2 p. m.	28.62
Chambersburg	29.46	24	7 a. m.	29.90	15	7 a. m.	28.84
Easton	29.68	24	8 a. m.	30.16	15	2 p. m.	29.02
Gettysburg	29.62	24	7 a. m.	30.09	15	2 p. m.	28.98
Harrisburg, [Heisely]	29.90	24	7 a. m.	30.35	15	2 p. m.	29.23
Harrisburg, [Hickok]	29.85	24	7 a. m.	30.33	15	2 p. m.	29.17
Lewisburg	29.67	24	7 a. m.	30.15	15	2 p. m.	28.97
Linden (h)	29.66	10	1 p. m.	30.16	15	1 p. m.	29.00
Morrisville	30.25	24	2 p. m.	d 30.72	7	9 p. m.	29.52

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

a Same height at 7 a. m. on the 24th.

b Same height at 1 and 9 p. m. on the 24th.

c Same height at 2 p. m. on the 24th.

d Same height at 9 p. m. on the 24th.

e Not corrected for temperature.

f Same height at 9 p. m. on the 23, and 2 p. m. on the 24th.

g Same height at 7 and 9 p. m. on the 15th.

h Incomplete.



## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania . . . . .							
Mount Joy ( <i>a</i> ) . . . . .	29.77	24	9 p. m.	30.22	15	2 p. m.	29.12
Murrysville . . . . .	28.63	23	7 a. m.	29.37	7	2 p. m.	28.21
Norristown . . . . .	30.03	24	7 a. m.	30.56	15	2 p. m.	29.35
Philadelphia . . . . .	29.96	24	7 a. m.	30.47	7	9 p. m.	29.39
Pittsburg, [Marine Hospital] . . . . .	29.06	23	2 p. m.	29.53	7	2 p. m.	28.34
Somerset . . . . .	27.69	23	7 a. m.	28.01	15	2 p. m.	27.15
Westtown . . . . .	29.55	24	7 a. m.	30.03	15	2 p. m.	28.92
Maryland . . . . .							
Annapolis . . . . .	30.18	24	7 a. m.	30.65	15	2 p. m.	29.58
Baltimore . . . . .	30.10	24	7 a. m.	30.59	15	2 p. m.	29.42
Chestertown . . . . .	30.17	24	7 a. m.	30.64	15	2 p. m.	29.50
Frederick . . . . .	29.89	24	7 a. m.	30.47	7	2 p. m.	29.19
Leonardtown . . . . .	29.76	24	7 a. m.	30.13	7	9 p. m.	29.18
District Columbia . . . . .	30.15	24	7 a. m.	30.61	15	2 p. m.	29.47
Virginia . . . . .	30.19	23	9 p. m.	30.61	7	9 p. m.	29.55
North Carolina . . . . .							
Chapel Hill . . . . .	29.74	24	7 a. m.	30.15	7	2 p. m.	29.18
Davidson College . . . . .	29.28	23	7 a. m.	29.66	15	7 a. m.	28.77
Murfreesborough . . . . .	29.52	24	7 a. m.	30.02	15	2 p. m.	28.91
South Carolina . . . . .							
All Saints . . . . .	30.16	23	9 p. m.	30.53	15	2 p. m.	29.68
Charleston . . . . .	30.28	24	7 a. m.	30.62	15	9 p. m.	29.81
Columbia, [Barton] . . . . .	30.03	23	9 p. m.	30.37	15	2 p. m.	29.57
Columbia, [White] . . . . .	28.99	18	9 p. m.	29.30	15	2 p. m.	28.69
St. John's ( <i>b</i> ) . . . . .	30.30	19	2 p. m.	30.60	15	7 a. m.	29.87
Georgia . . . . .							
Athens . . . . .	29.47	24	7 a. m.	29.83	14	2 p. m.	29.01
Atlanta ( <i>a</i> ) . . . . .	30.07	18	2 p. m.	<i>c</i> 30.35	15	7 a. m.	29.70
Augusta . . . . .	29.97	25	7 a. m.	30.20	1	7 a. m.	29.60
Savannah . . . . .	30.24	24	9 p. m.	30.59	15	2 p. m.	29.83
Thomaston . . . . .	29.25	23	7 a. m.	29.59	14	2 p. m.	28.86
Thomson . . . . .	29.77	24	7 a. m.	30.10	22	7 a. m.	29.16
Florida . . . . .							
Atsena . . . . .	29.90	18	9 p. m.	30.12	6	7 a. m.	29.40
Jacksonville . . . . .	30.30	18	9 p. m.	30.58	14	2 p. m.	29.98
St. Augustine . . . . .	30.13	18	2 p. m.	<i>c</i> 30.40	15	2 p. m.	29.80
Salt Ponds ( <i>a</i> ) . . . . .	29.79	19	2 p. m.	29.93	16	7 a. m.	29.66
Alabama . . . . .							
Greensborough ( <i>d</i> ) . . . . .	29.84			?			?
Mississippi . . . . .							
Columbus . . . . .	30.04	23	7 a. m.	30.59	7	2 p. m.	29.61
Natchez . . . . .	29.17	22	9 p. m.	30.20	6	2 p. m.	29.27
Paulding . . . . .	29.93	23	7 a. m.	30.35	13	9 p. m.	29.58
Texas . . . . .							
New Braunfels . . . . .	27.88	4	9 p. m.	28.15	13	2 p. m.	<i>e</i> 27.72
Sisterdale . . . . .	28.85						
Washington . . . . .	29.85	23	7 a. m.	30.34	13	2 p. m.	29.51
Tennessee . . . . .							
Glenwood . . . . .	29.74	23	7 a. m.	30.29	14	2 p. m.	29.22
La Grange . . . . .	29.39	23	7 a. m.	<i>f</i> 29.83	8	2 p. m.	28.90
Memphis . . . . .	29.97	22	9 p. m.	30.54	6	2 p. m.	29.55
Kentucky . . . . .							
Bardstown . . . . .	29.63	22	9 p. m.	30.13	14	2 p. m.	29.09
Danville . . . . .	29.22	23	7 a. m.	29.65	14	9 p. m.	28.67
Louisville . . . . .	29.70	22	9 p. m.	30.27	14	3 p. m.	29.12
Paris . . . . .	29.34	22	9 p. m.	29.86	14	2 p. m.	28.79
Springdale . . . . .	29.55	23	7 a. m.	30.09	14	2 p. m.	28.98
Ohio . . . . .							
Avon . . . . .	29.14	23	7 a. m.	29.64	15	7 a. m.	28.53
Bowling Green . . . . .	29.34	23	7 a. m.	29.84	14	9 p. m.	28.71
Cincinnati, [Harper] . . . . .	29.55	23	7 a. m.	30.18	5	2 p. m.	29.00
Cincinnati, [Phillips] . . . . .	29.82	23	7 a. m.	30.45	7	7 a. m.	29.20
Cleveland . . . . .	29.08	23	7 a. m.	29.50	15	7 a. m.	28.47
Hillsborough . . . . .	28.94	23	7 a. m.	29.43	14	2 p. m.	28.23
Hudson . . . . .	28.89	23	7 a. m.	29.34	15	7 a. m.	29.23
Lancaster ( <i>d</i> ) . . . . .	28.91	23	7 a. m.	29.36	15	7 a. m.	<i>g</i> 28.35
Montville . . . . .	28.76	23	7 a. m.	29.21	14	9 p. m.	28.18
New Lisbon ( <i>a</i> ) . . . . .	28.71	18	7 a. m.	<i>h</i> 29.10	15	7 a. m.	28.15
Northwood . . . . .	28.87	23	7 a. m.	29.35	14	9 p. m.	29.19

*a* Not corrected for temperature.*b* Aneroid; incomplete.*c* Same height at 9 p. m. on the 18th.*d* Incomplete.*e* Same height at 2 p. m. on the 20th.*f* Same height at 9 p. m. on the 22d.*g* Same height at 2 p. m. on the 14th.*h* Same height at 7 a. m. on the 23d.

## No. 2.—BAROMETER, CORRECTED TO 32° F., JANUARY, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio.....	Portsmouth.....	29.49	23	7 a. m.	29.86	14	2 p. m.	29.06
	Ripley.....	29.54	23	7 a. m.	30.09	1	7 a. m.	28.99
	Savannah.....	29.03	23	7 a. m.	29.45	15	7 a. m.	28.33
	Troy.....	30.15	18	2 p. m.	30.50	15	7 a. m.	29.57
	Urbana.....	29.01	23	7 a. m.	29.48	15	7 a. m.	28.44
	Westerville.....	28.99	23	7 a. m.	29.46	14	2 p. m.	<i>a</i> 28.41
Michigan.....	Battle Creek.....	29.18	18	7 a. m.	29.60	14	9 p. m.	28.61
	Detroit.....	29.01	23	7 a. m.	29.42	15	7 a. m.	28.70
	Lansing.....	29.08	22	8 p. m.	29.50	14	8 p. m.	28.53
	Marquette.....	29.32	■	9 p. m.	29.74	20	7 a. m.	28.69
	New Buffalo ( <i>b</i> ).....	29.39	22	9 p. m.	29.88	27	9 p. m.	28.77
	Ottawa Point.....	29.44	10	6 a. m.	29.94	15	6 a. m.	28.88
	Thunder Bay Island.....	29.40	10	9 a. m.	29.86	15	6 a. m.	28.90
	Ypsilanti.....	29.14	18	7 a. m.	29.52	14	9 p. m.	28.56
	Aurora.....	29.62	22	9 p. m.	30.07	14	9 p. m.	29.01
	Cannelton.....	29.83	22	9 p. m.	30.41	14	2 p. m.	29.24
Indiana.....	New Harmony.....	29.85	22	9 p. m.	30.43	14	2 p. m.	29.22
	Richmond.....	29.10	23	7 a. m.	29.54	14	2 p. m.	28.50
	Batavia, [Mead].....	29.27	22	7 a. m.	<i>c</i> 29.78	14	2 p. m.	28.76
	Manchester.....	28.96	22	7 a. m.	29.57	14	1 p. m.	28.39
	Marango.....	28.99	18	2 p. m.	29.59	14	2 p. m.	28.53
	Upper Alton.....	29.62	22	2 p. m.	30.19	14	7 a. m.	29.08
	West Urbana.....	29.35	22	9 p. m.	29.87	14	7 a. m.	<i>d</i> 28.82
	Wheaton.....	29.29	22	9 p. m.	29.83	14	2 p. m.	28.72
	St. Louis.....	29.70	22	2 p. m.	<i>e</i> 30.30	14	7 a. m.	<i>f</i> 29.14
	Appleton.....	29.03	22	9 p. m.	29.56	20	7 a. m.	28.57
Wisconsin.....	Beloit.....	29.27	22	9 p. m.	29.77	27	2 p. m.	28.72
	Kenosha ( <i>g</i> ).....	29.59	20	9 p. m.	30.06	13	2 p. m.	29.10
	Madison.....	29.04	22	2 p. m.	29.56	27	9 p. m.	28.51
	Manitowoc ( <i>g</i> ).....	29.80	22	9 p. m.	30.26	27	9 p. m.	29.19
	Milwaukee, [Winkler].....	29.35	22	2 p. m.	29.82	27	9 p. m.	28.80
	Waukesha.....	29.19	17	9 p. m.	29.54	14	2 p. m.	28.68
	Border Plains.....	28.87	22	2 p. m.	29.47	27	2 p. m.	28.19
	Dubuque.....	29.42	22	2 p. m.	30.00	27	2 p. m.	28.75
	Fairfield.....	27.74	22	7 a. m.	28.40	27	2 p. m.	26.89
	Muscatine.....	29.64	22	9 p. m.	30.17	27	2 p. m.	29.08
Minnesota.....	Beaver Bay.....	29.22	22	7 a. m.	29.70	20	7 a. m.	28.60
Nebraska.....	Gilbert's Trading Post.....	22.97	22	7 a. m.	23.31	27	7 a. m.	22.63
Kansas.....	Leavenworth City.....	28.77	22	7 a. m.	29.30	27	7 a. m.	<i>f</i> 28.45
Utah.....	Great Salt Lake City.....	25.88			26.48			25.28
California.....	Sacramento.....	30.22	7	7 a. m.	30.49	31	2 p. m.	29.44
Mexico.....	Cordova.....	27.26	23	9 a. m.	27.58	28	3 p. m.	27.04
	Mirador.....	23.03	8	7 a. m.	<i>h</i> 23.27	6	7 a. m.	22.80
	Vera Cruz ( <i>b</i> ).....	30.19	8	8 a. m.	30.53	13	2 p. m.	29.92
	Nassau, Bahamas ( <i>i</i> ).....	30.23	18		<i>j</i> 30.34	12		<i>k</i> 30.14
West Indies.....	St. George's, Bermuda.....	30.08			30.46			29.48
Central America.....	Guatemala.....	25.30	9	9 a. m.	25.42	21	3 p. m.	25.17
South America.....	Catharina Sophia, Surinam.....	29.89	■	6 a. m.	29.97	15	2 p. m.	29.80
	Catharina Sophia, Surinam ( <i>l</i> ).....	29.98	6	2 p. m.	<i>m</i> 30.06	8	2 p. m.	29.90
	Chanarcillo, Chili.....	26.08	19	12 m.	26.20	28	3 p. m.	26.02
East'n Continent.....	Jerusalem, Palestine ( <i>l</i> ).....	27.69	18	2 p. m.	27.99	16	9 p. m.	27.46

*a* Same height at 7 a. m. on the 15th.*b* Incomplete.*c* Same height at 2 p. m. on the 22d.*d* Same height at 9 p. m. on the 14th.*e* Same height at 9 p. m. on the 22d.*f* Same height at 2 p. m. on the 27th.*g* Not corrected for temperature.*h* Same height at 9 p. m. on the 8th.*i* Mean obtained from daily maximum and minimum.*j* Same height on the 19th.*k* Same height on the 14th and 17th.*l* Aneroid.*m* Same height at 6 a. m. on the 7th and 18th.



## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton .....	29.61	11	9 a. m.	29.94	20	9 a. m.	28.94
Montreal .....	29.52	25	7 a. m.	<i>a</i> 30.42	20	9 p. m.	29.17
Moose Factory .....	29.90						
St. John's .....	29.52	9	7 a. m.	30.13	21	9 p. m.	28.82
St. Martin .....	29.86	11	2 p. m.	30.46	20	2 p. m.	28.87
Toronto .....	29.63	11	6 a. m.	29.98	20	6 a. m.	28.88
Windsor .....	29.90	8	7 a. m.	30.44	21	7 a. m.	28.97
Wolfville .....	29.86	8	7 a. m.	30.45	21	7 a. m.	29.05
Maine .....	29.95	8	7 a. m.	30.37	20	9 p. m.	29.09
Gardiner .....	29.91	8	7 a. m.	30.37	20	9 p. m.	28.98
Perry .....	29.91	8	7 a. m.	<i>b</i> 30.33	20	9 p. m.	29.09
Portland .....	29.92	8	7 a. m.	30.37	20	9 p. m.	29.02
Steuben .....	29.92	8	7 a. m.	<i>c</i> 29.69	20	2 p. m.	28.63
New Hampshire—Concord .....	29.36	6	7 a. m.	30.08	21	7 a. m.	29.01
Shelburne .....	29.74	8	7 a. m.				
Vermont .....	29.62	25	7 a. m.	30.01	20	2 p. m.	28.84
Burlington .....	28.70	6	7 a. m.	29.08	20	12 m.	28.12
Lunenburg .....	29.60	17	7 a. m.	29.94	19	7 a. m.	28.92
Norwich ( <i>d</i> ) .....	29.35	11	9 p. m.	29.70	20	7 p. m.	28.49
St. Johnsbury .....	29.75	11	9 p. m.	30.13	20	2 p. m.	29.06
Massachusetts—Amherst .....	29.94	8	7 a. m.	30.37	21	9 p. m.	29.23
Cambridge .....	30.23	8	7 a. m.	<i>e</i> 30.58	20	9 p. m.	29.62
Danvers .....	29.85	6	7 a. m.	30.27	20	2 p. m.	<i>f</i> 29.17
Lawrence .....	29.99	11	9 p. m.	30.39	9	9 p. m.	29.32
Nantucket .....	29.91	8	7 a. m.	<i>a</i> 30.31	9	2 p. m.	<i>g</i> 29.24
New Bedford .....	29.89	5	9 p. m.	30.25	20	2 p. m.	29.27
Westfield .....	29.28	5	9 p. m.	29.66	20	2 p. m.	28.60
Williamstown .....	29.41	8	2 p. m.	29.89	20	2 p. m.	28.75
Worcester .....	29.85	17	10 p. m.	30.29	9	10 p. m.	29.18
Rhode Island—Providence .....	29.82	6	7 a. m.	30.25	20	2 p. m.	29.15
Connecticut—Middletown .....	29.35	10	9 p. m.	29.73	20	2 p. m.	28.74
Pomfret .....	29.89	11	9 p. m.	30.31	20	2 p. m.	29.21
Wallingford .....	29.33	11	2 p. m.	29.65	9	9 p. m.	28.75
New York—Bellport .....	29.33	11	8 a. m.	29.67	20	8 a. m.	28.72
Buffalo .....	28.55	17	7 a. m.	28.88	20	2 p. m.	27.96
Cazenovia .....	30.21	11	2 p. m.	<i>h</i> 30.60	20	2 p. m.	29.55
Fishkill Landing .....	29.96	11	2 p. m.	30.32	20	2 p. m.	29.27
Flatbush .....	29.97	11	2 p. m.	30.39	20	2 p. m.	29.36
New York city .....	29.32	11	2 p. m.	29.65	20	7 a. m.	28.67
Oswego .....	29.39	11	2 p. m.	<i>h</i> 29.68	20	2 p. m.	28.80
Penn Yan .....	29.36	11	7 a. m.	29.70	20	7 a. m.	28.66
Rochester, [Dewey] .....	29.29	11	7 a. m.	29.66	20	2 p. m.	28.63
Spencertown .....	29.96	11	7 a. m.	30.32	20	2 p. m.	29.25
Waterford .....	29.99	11	9 p. m.	<i>i</i> 30.38	9	9 p. m.	<i>f</i> 29.50
New Jersey—Lambertville .....	29.99	11	6 p. m.	30.36	9	6 p. m.	29.40
Newark .....	29.29	11	7 a. m.	<i>k</i> 29.58	20	2 p. m.	28.67
Pennsylvania—Berwick ( <i>j</i> ) .....	28.77	7	7 a. m.	29.11	3	7 a. m.	28.34
Cannonsburg .....	29.17	12	7 a. m.	29.57	20	2 p. m.	28.65
Carlisle .....	29.32	11	7 a. m.	29.69	20	2 p. m.	28.85
Chambersburg .....	29.53	11	7 a. m.	29.92	20	2 p. m.	28.96
Easton .....	29.49	11	7 a. m.	29.81	20	2 p. m.	28.96
Gettysburg .....	29.77	11	2 p. m.	30.11	9	9 p. m.	29.28
Harrisburg, [Heisely] .....	29.89	14	7 a. m.	<i>l</i> 30.16	3	2 p. m.	29.26
Harrisburg, [Hickok] .....	29.54	11	7 a. m.	29.90	20	2 p. m.	28.97
Lewisburg .....	29.49	11	7 a. m.	29.90	20	1 p. m.	28.96
Linden ( <i>d</i> ) .....							

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

*a* Same height at 9 p. m. on the 11th.*b* Same height at 9 p. m. on the 7th.*c* Same height at 7 a. m. and at 2 p. m. on the 8th.*d* Incomplete.*e* Same height at 1 p. m. on the 11th.*f* Same height at 9 p. m. on the 20th.*g* Same height at 2 p. m. on the 20th.*h* Same height at 2 p. m. on the 7th.*i* Same height at 2 p. m. on the 11th.*j* Not corrected for temperature.*k* Same height at 7 a. m. on the 17th, at 2 p. m. on the 5th, 7th, 11th, and 17th, and at 9 p. m. on the 5th and 7th.*l* Same height at 2 p. m. and 9 p. m. on the 14th.

## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania							
Morrisville	30.09	11	2 p. m.	<i>a</i> 30.48	9	9 p. m.	29.48
Mount Joy ( <i>b</i> )	29.64	11	7 a. m.	30.00	10	2 p. m.	29.07
Murrysville	28.68	11	7 a. m.	29.00	20	7 a. m.	28.20
Norristown	29.93	11	2 p. m.	30.30	9	9 p. m.	29.34
Philadelphia	29.88	11	2 p. m.	30.23	9	9 p. m.	29.32
Pittsburg, [Marine Hospital]	28.91	11	7 a. m.	29.22	20	7 a. m.	28.42
Somerset	27.57	1	2 p. m.	27.83	3	7 a. m.	27.17
Westtown	29.42	11	7 a. m.	29.77	9	9 p. m.	28.88
Maryland							
Annapolis	30.04	11	2 p. m.	30.39	9	9 p. m.	29.59
Baltimore	29.95	11	7 a. m.	30.35	9	9 p. m.	29.37
Chestertown	30.04	11	7 a. m.	30.40	9	9 p. m.	29.45
Frederick	29.74	11	7 a. m.	30.12	9	9 p. m.	29.23
Leonardtown	29.62	1	7 a. m.	<i>c</i> 29.88	9	9 p. m.	29.13
Dist. of Columbia							
Washington	30.01	11	7 a. m.	30.37	9	9 p. m.	29.47
Virginia							
Point Pleasant	29.38	12	7 a. m.	<i>d</i> 29.80	2	7 a. m.	<i>e</i> 29.00
Portsmouth	30.02	1	7 a. m.	30.38	9	9 p. m.	29.36
Ruthven	29.66	1	7 a. m.	<i>e</i> 29.95	9	9 p. m.	28.97
North Carolina							
Chapel Hill	29.58	1	7 a. m.	29.91	9	2 p. m.	29.03
Davidson College	29.10	1	7 a. m.	29.43	9	2 p. m.	28.56
Murfreesborough	29.38	1	7 a. m.	<i>c</i> 29.75	3	7 a. m.	29.03
South Carolina							
All Saints	30.01	1	7 a. m.	30.39	9	2 p. m.	29.38
Charleston	30.13	1	7 a. m.	30.44	9	2 p. m.	29.59
Columbia, [Barton]	29.84	1	7 a. m.	30.19	9	2 p. m.	29.31
Columbia, [White]	28.86	1	7 a. m.	29.19	9	2 p. m.	28.41
St. John's ( <i>f</i> )	30.14	1	2 p. m.	30.43	9	2 p. m.	29.55
Georgia							
Athens	29.29	1	7 a. m.	29.61	9	2 p. m.	28.80
Savannah	30.09	1	7 a. m.	30.43	9	2 p. m.	29.56
Thomasston	29.08	13	7 a. m.	29.37	9	2 p. m.	28.70
Thomson	29.59	1	7 a. m.	29.90	9	2 p. m.	29.16
Florida							
Atsena	29.82	13	9 p. m.	30.02	9	2 p. m.	29.39
Jacksonville	30.14	1	7 a. m.	30.43	9	7 a. m.	29.66
St. Augustine	29.99	1	7 a. m.	<i>g</i> 30.21	9	7 a. m.	29.57
Salt Ponds ( <i>b</i> )	29.73	14	2 p. m.	29.87	3	7 a. m.	<i>h</i> 29.49
Alabama							
Greensborough	29.65	13	2 p. m.	29.95	8	9 p. m.	29.25
Mississippi							
Columbus	29.85	13	7 a. m.	30.24	8	9 p. m.	29.38
Natchez	29.51	12	9 p. m.	29.90	8	2 p. m.	29.05
Paulding	29.75	13	7 a. m.	30.05	8	9 p. m.	29.35
Texas							
Austin, [Palm]	29.48	20	9 p. m.	29.85	14	7 a. m.	29.01
New Braunfels	27.75	12	9 p. m.	27.95	24	2 p. m.	<i>i</i> 27.60
Northern tier of counties	29.40						
Sisterdale	28.65	20	7 a. m.	29.00	3	2 p. m.	28.26
Washington	29.66	21	7 a. m.	29.98	8	7 a. m.	<i>j</i> 29.40
Webberville	29.52	21	7 a. m.	29.84	8	2 p. m.	29.24
Tennessee							
Glenwood	29.55	13	7 a. m.	29.93	2	2 p. m.	29.17
La Grange	29.22	20	9 p. m.	29.56	8	9 p. m.	28.84
Memphis ( <i>k</i> )	29.76	21	7 a. m.	30.18	8	2 p. m.	29.46
Kentucky							
Bardstown	29.46	13	7 a. m.	29.87	2	2 p. m.	29.03
Danville	29.03	13	7 a. m.	<i>a</i> 29.35	2	2 p. m.	28.55
Louisville	29.50	12	9 p. m.	<i>l</i> 29.86	2	3 p. m.	29.04
Paris	29.14	14	9 p. m.	29.46	2	2 p. m.	28.70
Springdale	29.39	13	7 a. m.	29.75	2	2 p. m.	28.88
Ohio							
Avon	28.98	11	7 a. m.	29.34	20	7 a. m.	28.58
Bowling Green	29.22	11	7 a. m.	29.54	19	9 p. m.	28.76
Cincinnati, [Harper]	29.52	13	7 a. m.	29.84	2	2 p. m.	29.04
Cincinnati, [Phillips]	29.62	13	7 a. m.	30.01	2	2 p. m.	29.09
Cleveland	28.98	11	7 a. m.	29.25	20	7 a. m.	28.53

*a* Same height at 9 p. m. on the 11th.*b* Not corrected for temperature.*c* Same height at 7 a. m. on the 11th.*d* Same height at 2 p. m. on the 7th and 26th, and at 9 p. m. on the 7th,

12th, and 26th.

*e* Same height on the 3d and 15th to the 19th.*f* Aneroid. Incomplete.*g* Same height at 9 p. m. on the 13th.*h* Same height at 7 a. m. on the 9th.*i* Same height at 7 a. m. on the 27th.*j* Same height at 2 p. m. on the 8th.*k* Maximum and minimum not corrected for temperature.*l* Same height at 7 a. m. on the 21st.



## No. 3.—BAROMETER, CORRECTED TO 32° F., FEBRUARY, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio	College Hill	28.63	1	7 a. m.	28.90	2	2 p. m.	28.24
	Hillsborough	28.78	13	7 a. m.	29.10	2	2 p. m.	28.32
	Hudson	28.76	11	7 a. m.	29.09	2	9 p. m.	28.30
	Montville	28.64	6	9 p. m.	28.96	20	7 a. m.	28.23
	New Lisbon (a)	28.58	11	7 a. m.	28.86	20	7 a. m.	28.15
	Northwood	28.75	2	9 p. m.	29.35	6	7 a. m.	b 29.02
	Portsmouth	29.37	13	7 a. m.	29.61	2	2 p. m.	29.01
	Ripley	29.39	12	9 p. m.	29.72	2	9 p. m.	28.98
	Savannah	28.85	6	9 p. m.	29.16	2	9 p. m.	c 28.40
	Troy	29.95	1	7 a. m.	30.20	2	9 p. m.	29.48
	Urbana	28.85	13	7 a. m.	29.15	2	2 p. m.	28.43
	Westerville	28.84	6	2 p. m.	29.13	2	2 p. m.	28.41
Michigan	Battle Creek	29.07	2	2 p. m.	d 29.38	19	9 p. m.	28.61
	Detroit	28.90	7	7 a. m.	29.14	15	2 p. m.	28.69
	Lansing	29.00	6	8 p. m.	29.30	19	8 p. m.	28.53
	Marquette	29.29	24	2 p. m.	29.73	19	2 p. m.	28.83
	New Buffalo	29.26	6	7 a. m.	29.60	19	9 p. m.	28.74
	Ottawa Point	29.34	11	9 a. m.	29.73	20	6 a. m.	28.69
	Thunder Bay Island	29.33	24	6 p. m.	29.75	20	6 a. m.	28.58
	Ypsilanti	29.03	7	7 a. m.	29.39	20	7 a. m.	28.58
Indiana	Aurora	29.47	28	6 a. m.	29.77	2	2 p. m.	28.94
	Cannelton	29.64	13	7 a. m.	e 30.02	2	7 a. m.	29.20
	New Harmony	29.65	13	7 a. m.	30.05	2	7 a. m.	29.20
Illinois	Batavia	29.16	6	7 a. m.	29.53	19	2 p. m.	28.67
	Manchester	28.81	13	7 a. m.	29.21	19	1 p. m.	28.33
	Marengo	28.89	6	2 p. m.	f 29.19	19	2 p. m.	28.40
	Upper Alton	29.45	13	7 a. m.	29.83	19	7 a. m.	29.07
	West Urbana	29.18	13	7 a. m.	29.55	19	2 p. m.	28.77
	Wheaton	29.16	12	9 p. m.	29.50	19	2 p. m.	28.63
Missouri	St. Louis	29.53	13	7 a. m.	29.93	19	2 p. m.	29.05
Wisconsin	Appleton	28.95	6	7 a. m.	29.40	19	2 p. m.	28.39
	Beloit	29.14	13	2 p. m.	29.58	19	2 p. m.	28.59
	Kenosha (a)	29.44?	6	7 a. m.	29.77	19	9 p. m.	29.00
	Madison	28.97	12	2 p. m.	29.57	19	7 a. m.	28.52
	Manitowoc (a)	29.71	6	7 a. m.	30.06	19	2 p. m.	29.12
	Milwaukee, [Winkler]	29.25	6	2 p. m.	29.61	19	2 p. m.	g 28.70
Iowa	Border Plains	28.75	9	7 a. m.	29.20	19	7 a. m.	28.18
	Dubuque	29.30	6	7 a. m.	29.69	19	2 p. m.	28.75
	Fairfield	27.21	10	7 a. m.	27.60	19	2 p. m.	26.82
	Muscatine	29.49	6	7 a. m.	b 29.83	19	7 a. m.	28.96
Minnesota	Beaver Bay	29.22	24	7 a. m.	29.64	17	2 p. m.	28.70
Kansas	Lawrence (h)	28.99	21	7 a. m.	29.43	20	7 a. m.	28.54
Utah	Great Salt Lake City	25.78			26.21			25.36
California	Sacramento	30.02	2	2 p. m.	30.34	27	7 a. m.	29.62
	San Francisco	29.93	3	7 a. m.	30.24	17	2 p. m.	29.54
Mexico	Cordova	27.12	13	9 a. m.	27.37	8	3 p. m.	26.90
	Mirador	22.89	12	8 p. m.	23.03	8	2 p. m.	22.67
	Vera Cruz (h)	29.98	12	12 p. m.	30.22	8	12 m.	29.74
West Indies	Centre Signal Station, Bermuda	30.02	12	Noon.	i 30.20	10	Noon.	29.75
	Nassau, Bahamas (j)	30.19	1		30.30	9		29.97
	St. George's, Bermuda	29.99			30.23			29.63
Central America	Guatemala	25.25	12	10 p. m.	25.36	16	4 p. m.	25.14
South America	Catharina Sophia, Surinam	29.91	18	6 a. m.	29.98	5	6 a. m.	29.80
	Catharina Sophia, Surinam (k)	29.96	27	6 p. m.	30.02	3	6 a. m.	29.90
	Chanarcillo, Chili	26.06	24	6 a. m.	l 26.11	15	3 p. m.	26.02
East'n Continent	Jerusalem, Palestine (k)	27.63	27	7 a. m.	27.80	6	2 p. m.	d 27.42

a Not corrected for temperature.

b Same height at 7 a. m. on the 13th.

c Same height at 2 p. m. on the 3d.

d Same height at 9 p. m. on the 6th.

e Same height at 7 a. m. on the 21st.

f Same height at 7 a. m. and 2 p. m. on the 13th.

g Same height at 9 p. m. on the 19th.

h Incomplete.

i Same height at noon on the 15th.

j Mean obtained from daily maximum and minimum.

k Aneroid.

l Same height at 9 a. m. on the 24th.

## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America—Hamilton	29.43	2	9 a. m.	30.17	10	9 p. m.	28.44
Montreal	29.84	2	7 a. m.	30.62	18	9 p. m.	29.17
Moose Factory	29.72				30		28.62
St. John's	29.44	12	2 p. m.	30.00	1	9 p. m.	28.41
St. Martin	29.69	2	6 a. m.	30.49	19	6 a. m.	29.62
Toronto	29.41	1	10 p. m.	30.17	19	6 a. m.	28.32
Windsor	29.79	14	9 p. m.	30.40	28	9 p. m.	29.10
Wolfville	29.71	12	2 p. m.	30.22	26	9 p. m.	29.03
Maine—Gardiner	29.84	3	7 a. m.	30.42	19	2 p. m.	29.01
Perry	29.77	14	9 p. m.	30.34	26	9 p. m.	29.04
Portland	29.79	2	9 p. m.	30.38	19	2 p. m.	29.01
Steuben	29.80	3	7 a. m.	30.34	19	9 p. m.	29.08
New Hampshire—Shelburne	29.63	3	7 a. m.	? 30.17	?	?	?
Vermont—Burlington	29.48	2	7 a. m.	30.20	19	7 a. m.	28.46
Lunenburg	28.54	3	7 a. m.	a 29.12	19	12 m.	27.71
Norwich (b)	29.56	2	7 a. m.	30.11	4	9 p. m.	29.11
St. Johnsbury	29.22	2	7 a. m.	29.89	19	7 a. m.	28.26
Massachusetts—Amherst	29.63	2	2 p. m.	30.28	19	7 a. m.	28.82
Bridgewater	29.68	2	2 p. m.	30.30	19	2 p. m.	29.02
Cambridge	29.81	2	2 p. m.	c 30.44	19	2 p. m.	29.04
Lawrence	29.74	2	7 a. m.	30.37	19	7 a. m.	28.95
Nantucket	29.88	2	9 p. m.	30.47	19	7 a. m.	d 29.33
New Bedford	29.78	2	9 p. m.	30.40	29	9 p. m.	29.13
Westfield	29.74	2	9 p. m.	30.40	19	7 a. m.	29.02
Williamstown	29.45	2	9 p. m.	29.75	19	7 a. m.	28.33
Worcester	29.28	2	7 a. m.	29.86	19	2 p. m.	28.55
Rhode Island—Providence	29.67	2	10 p. m.	30.29	19	Sunrise.	28.98
Connecticut—Middletown	29.65	2	9 p. m.	30.31	19	7 a. m.	28.91
New Haven	29.90	2	9 p. m.	30.53	19	7 a. m.	29.17
Pomfret	29.24	2	9 p. m.	29.84	19	7 a. m.	28.52
Wallingford	29.76	2	2 p. m.	c 30.41	19	7 a. m.	29.04
New York—Bellport	29.21	2	9 p. m.	29.75	4	2 p. m.	28.36
Buffalo	29.12	2	8 a. m.	29.92	18	9 p. m.	28.25
Cazenovia	28.44	2	2 p. m.	29.10	19	7 a. m.	27.52
Fishkill Landing	30.08	2	9 p. m.	30.70	19	2 p. m.	29.42
Flatbush	29.82	2	7 a. m.	30.44	29	2 p. m.	29.15
New York city	29.87	5	7 a. m.	30.51	19	7 a. m.	29.19
Oswego	29.10	2	2 p. m.	29.90	19	7 a. m.	28.21
Penn Yan	29.28	2	2 p. m.	29.93	19	Sunrise	28.40
Rochester, [Dewey]	29.22	2	7 a. m.	29.95	19	7 a. m.	28.12
Spencertown	29.17	2	2 p. m.	29.83	19	7 a. m.	28.26
Waterford	29.83	2	7 a. m.	30.50	19	7 a. m.	28.94
New Jersey—Lambertville	29.89	2	2 p. m.	30.52	19	7 a. m.	29.24
Moorestown	29.70	3	7 a. m.	30.20	19	7 a. m.	29.05
Newark	29.84	2	7 a. m.	30.49	19	7 a. m.	29.19
Pennsylvania—Berwick (e)	29.14	2	7 a. m.	f 29.83	19	7 a. m.	g 28.42
Cannonsburg	28.65	2	7 a. m.	29.20	29	7 a. m.	28.00
Carlisle	29.02	2	7 a. m.	29.67	18	9 p. m.	28.30
Chambersburg	29.22	2	7 a. m.	29.85	18	9 p. m.	28.51
Easton	29.43	2	7 a. m.	30.11	19	7 a. m.	28.76
Gettysburg	29.35	2	7 a. m.	f 29.99	18	9 p. m.	28.63
Harrisburg, [Heisely]	29.62	2	2 p. m.	30.28	18	9 p. m.	28.87
Harrisburg, [Hickok]	29.74	2	9 p. m.	30.31	19	2 p. m.	29.19
Lewisburg	29.42	2	7 a. m.	30.09	18	9 p. m.	28.65
Linden (b)	29.42	2	7 a. m.	30.08	18	9 p. m.	28.64
Morrisville	29.97	2	2 p. m.	30.64	19	7 a. m.	29.37
Mount Joy (e)	29.53	2	2 p. m.	c 30.14	18	9 p. m.	28.82
Murrysville	28.58	2	7 a. m.	29.10	18	9 p. m.	27.93

\* For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

a Same height at 12 m. on the 3d.

b Incomplete.

c Same height at 9 p. m. on the 2d.

d Same height at 2 p. m. on the 19th.

e Not corrected for temperature.

f Same height at 2 p. m. on the 2d.

g Same height at 9 p. m. on the 18th.



## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania.....Norristown.....	29.77	2	7 a. m.	30.45	18	9 p. m.	29.10
Philadelphia.....	29.76	2	7 a. m.	30.36	29	2 p. m.	29.21
Pittsburg, [Marine Hospital].....	28.76	2	7 a. m.	29.32	29	7 a. m.	28.12
Somerset.....	27.47	2	7 a. m.	27.95	19	7 a. m.	26.97
Westtown.....	29.30	2	2 p. m.	29.94	18	9 p. m.	28.66
Maryland.....Annapolis.....	29.91	2	7 a. m.	30.55	29	2 p. m.	29.30
Baltimore.....	29.82	2	7 a. m.	30.51	18	9 p. m.	29.11
Chestertown.....	29.90	2	7 a. m.	30.56	18	9 p. m.	29.24
Frederick.....	29.61	2	7 a. m.	30.29	18	9 p. m.	28.90
Leonardtown.....	29.52	2	7 a. m.	30.05	18	9 p. m.	29.00
Dist. of Columbia.....Washington.....	29.87	2	7 a. m.	30.53	18	9 p. m.	29.18
Virginia.....Point Pleasant.....	29.60	11	7 a. m.	<i>a</i> 30.00	18	7 a. m.	<i>b</i> 29.00
Portsmouth.....	29.89	2	9 p. m.	30.56	29	2 p. m.	29.35
Ruthven.....	29.52	2	9 p. m.	30.05	29	7 a. m.	28.97
North Carolina.....Chapel Hill.....	29.47	2	2 p. m.	29.97	18	2 p. m.	28.92
Murfreesborough.....	29.25	2	7 a. m.	29.78	29	2 p. m.	28.68
South Carolina.....All Saints.....	29.90	2	2 p. m.	30.31	29	7 a. m.	29.47
Charleston.....	30.02	2	9 p. m.	30.38	29	2 p. m.	29.51
Columbia, [Barton].....	29.73	2	2 p. m.	30.13	29	2 p. m.	29.28
Columbia, [White].....	28.77	2	2 p. m.	29.12	29	2 p. m.	28.37
St John's ( <i>c</i> ).....	29.98	2	2 p. m.	30.36	29	2 p. m.	29.57
Georgia.....Athens.....	29.19	2	7 a. m.	29.56	29	7 a. m.	28.73
Atlanta ( <i>d</i> ).....	29.88	2	7 a. m.	<i>e</i> 30.20	29	7 a. m.	29.45
Augusta.....	29.99	31	9 p. m.	30.24	3	2 p. m.	<i>e</i> 29.77
Savannah.....	29.98	2	2 p. m.	30.29	29	2 p. m.	29.54
Thomaston.....	28.94	31	9 p. m.	29.28	29	7 a. m.	28.49
Thomson.....	29.44	2	2 p. m.	<i>e</i> 29.81	29	7 a. m.	<i>f</i> 28.98
Florida.....Atsena.....	29.74	2	9 p. m.	29.92	28	9 p. m.	29.41
Jacksonville.....	30.05	12	9 p. m.	30.27	29	7 a. m.	29.70
St. Augustine.....	29.88	20	7 a. m.	30.11	28	7 a. m.	29.51
Salt Ponds ( <i>d</i> ).....	29.67	20	2 p. m.	29.87	29	7 a. m.	29.47
Alabama.....Greensborough.....	29.57	16	7 a. m.	<i>g</i> 29.78	-----	-----	?
Moulton.....	29.23	31	7 a. m.	29.56	28	2 p. m.	28.73
Mississippi.....Columbus.....	29.71	16	7 a. m.	30.01	28	9 p. m.	29.04
Natchez.....	29.41	19	2 p. m.	<i>h</i> 29.70	28	2 p. m.	<i>i</i> 28.80
Texas.....Austin, [Palm].....	29.38	18	7 a. m.	29.78	28	2 p. m.	28.69
New Braunfels.....	27.71	15	7 a. m.	<i>j</i> 27.90	28	2 p. m.	27.40
Northern tier of counties.....	29.36	-----	-----	-----	-----	-----	-----
Sisterdale.....	28.56	18	7 a. m.	28.95	28	2 p. m.	28.02
Washington.....	29.54	18	7 a. m.	29.94	28	2 p. m.	28.95
Webberville.....	29.48	15	7 a. m.	29.83	28	7 a. m.	29.12
Tennessee.....Glenwood.....	29.39	16	7 a. m.	29.76	28	9 p. m.	28.65
La Grange.....	29.11	15	2 p. m.	<i>g</i> 29.53	-----	-----	-----
Memphis.....	29.60	31	7 a. m.	30.06	28	2 p. m.	28.98
Kentucky.....Bardstown.....	29.32	4	9 p. m.	29.68	18	7 a. m.	28.85
Danville.....	28.88	2	2 p. m.	<i>e</i> 29.25	28	9 p. m.	28.30
Louisville.....	29.33	1	9 p. m.	29.78	28	9 p. m.	28.61
Paris.....	28.98	1	9 p. m.	29.43	28	9 p. m.	28.37
Springdale.....	29.23	1	7 a. m.	<i>k</i> 29.65	28	9 p. m.	28.61
Ohio.....Avon.....	28.87	1	9 p. m.	29.50	29	7 a. m.	28.19
Bowling Green.....	29.03	1	9 p. m.	29.67	18	2 p. m.	28.38
Cincinnati, [Harper].....	29.37	1	7 a. m.	29.84	28	9 p. m.	28.67
Cincinnati, [Phillips].....	29.48	1	9 p. m.	30.02	28	9 p. m.	28.76
Cleveland.....	28.85	1	9 p. m.	29.43	29	7 a. m.	28.17
College Hill.....	28.49	2	7 a. m.	<i>l</i> 28.96	28	9 p. m.	27.95
Hillsborough.....	28.65	1	9 p. m.	<i>m</i> 29.14	28	9 p. m.	28.01

*a* Same height at 3 and 9 p. m. on the 11th, and at 7 a. m. and 2 and 9 p. m. on the 12th and 28th.

*b* Same height at 2 and 9 p. m. on the 18th, and at 7 a. m. and 2 and 9 p. m. on the 19th.

*c* Aneroid. Incomplete.

*d* Not corrected for temperature.

*e* Same height at 9 p. m. on the 2d.

*f* Same height at 9 p. m. on the 29th.

*g* Same height at 9 p. m. on the 15th.

*h* Same height at 7 a. m., 2 p. m., and 9 p. m.

*i* Same height at 9 p. m. on the 28th.

*j* Same height at 7 a. m. and 9 p. m. on the 18th.

*k* Same height at 9 p. m. on the 1st.

*l* Same height at 2 and 9 p. m. on the 1st.

*m* Same height at 7 a. m. on the 2d.

## No. 4.—BAROMETER, CORRECTED TO 32° F., MARCH, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio.....	Hudson.....	28.63	1	2 p. m.	29.24	29	7 a. m.	27.87
	Montville.....	28.51	1	7 a. m.	29.42	29	7 a. m.	27.74
	New Lisbon (a).....	28.46	1	9 p. m.	29.01	18	2 p. m.	27.70
	Northwood.....	28.58	1	9 p. m.	29.11	29	7 a. m.	27.83
	Portsmouth.....	29.25	1	9 p. m.	29.60	18	2 p. m.	<sup>b</sup> 28.82
	Savannah.....	28.68	1	9 p. m.	29.29	29	7 a. m.	27.90
	Troy.....	29.76	2	7 a. m.	30.31	28	9 p. m.	29.11
	Urbana.....	28.70	2	7 a. m.	29.24	29	7 a. m.	28.03
	Westerville.....	28.69	2	7 a. m.	29.25	29	7 a. m.	28.00
	Battle Creek.....	28.87	1	9 p. m.	29.50	28	9 p. m.	28.16
Michigan.....	Detroit.....	28.69	13	2 p. m.	29.09	29	2 p. m.	27.97
	Lansing.....	28.82	1	8 p. m.	29.44	29	7 a. m.	28.07
	Marquette.....	29.00	1	2 p. m.	29.85	3	9 p. m.	28.45
	New Buffalo.....	29.07	1	7 a. m.	29.67	28	9 p. m.	28.38
	Ottawa Point.....	29.15	2	9 a. m.	29.90	29	6 a. m.	28.06
	Thunder Bay Island.....	29.12	1	3 p. m.	29.87	29	9 a. m.	28.04
	Ypsilanti.....	28.85	2	7 a. m.	29.47	29	7 a. m.	28.09
	Aurora.....	29.31	1	6 a. m.	29.77	28	9 p. m.	28.66
	Cannellton.....	29.47	1	7 a. m.	29.90	28	9 p. m.	28.72
Indiana.....	New Harmony.....	29.47	1	7 a. m.	29.93	28	9 p. m.	28.65
	Batavia.....	28.95	1	7 a. m.	29.49	28	9 p. m.	28.41
	Manchester.....	28.61	1	7 a. m.	29.06	28	1 p. m.	28.04
Illinois.....	Marengo.....	28.70	1	2 p. m.	29.25	3	2 p. m.	28.23
	Upper Alton.....	29.27	1	7 a. m.	29.72	28	2 p. m.	28.56
	West Urbana.....	29.02	1	2 p. m.	29.47	3	2 p. m.	28.61
	Wheaton.....	28.96	1	7 a. m.	29.56	28	9 p. m.	28.32
	St. Louis.....	29.32	1	7 a. m.	29.75	28	2 p. m.	28.54
Missouri.....	Appleton.....	28.73	1	7 a. m.	29.48	3	2 p. m.	28.15
Wisconsin.....	Beloit.....	28.83	1	2 p. m.	29.51	28	2 p. m.	28.30
	Kenosha (a).....	29.27	1	2 p. m.	29.90	28	9 p. m.	28.77
	Madison.....	28.72	1	2 p. m.	29.38	3	2 p. m.	28.23
	Manitowoc (a).....	29.48	1	2 p. m.	30.16	3	2 p. m.	28.90
	Milwaukee, [Winkler].....	29.05	1	2 p. m.	29.79	3	2 p. m.	28.54
	Waukesha.....	28.84	1	7 a. m.	29.53	3	9 p. m.	28.43
	Border Plains.....	28.51	1	7 a. m.	28.96	11	7 a. m.	28.03
Iowa.....	Dubuque.....	29.06	1	7 a. m.	29.06	3	7 a. m.	28.56
	Fairfield.....	27.06	1	7 a. m.	27.55	3	7 a. m.	26.71
	Muscatine.....	29.22	1	7 a. m.	29.79	11	7 a. m.	28.75
Minnesota.....	Beaver Bay.....	29.02	1	7 a. m.	29.66	3	9 p. m.	28.38
Kansas.....	Lawrence.....	28.85	29	7 a. m.	29.22	28	7 a. m.	28.34
California.....	Sacramento.....	30.15	29	7 a. m.	30.38	21	9 p. m.	29.77
	San Francisco.....	30.08	29	7 a. m.	30.35	21	9 p. m.	29.69
Mexico.....	Cordova.....	27.07	18	9 p. m.	27.44	28	3 p. m.	26.74
	Minatitlan (c).....	29.84	18	9 p. m.	30.16	29	7 a. m.	29.64
	Mirador.....	22.83	18	8 p. m.	23.19	28	2 p. m.	22.52
	Vera Cruz.....	29.39	18	9 p. m.	30.32	28	3 p. m.	29.53
West Indies.....	Nassau, Bahamas (d).....	30.15	2		30.30	29		29.98
	St. George's, Bermuda.....	29.96			30.24			29.52
Central America.....	Guatemala.....	25.23	19	10 a. m.	25.38	29	4 p. m.	25.12
South America.....	Catharina Sophia, Surinam.....	29.92	1	6 a. m.	29.97	20	6 p. m.	29.85
	Catharina Sophia, Surinam (c).....	29.93	9	2 p. m.	30.01	21	6 a. m.	<sup>e</sup> 29.87
	Chanarcillo, Chili (c).....	26.12	27	9 a. m.	<sup>f</sup> 26.18	15	6 a. m.	26.04
East'n Continent.....	Jerusalem, Palestine.....	27.67	16	7 a. m.	<sup>g</sup> 27.92	6	9 p. m.	27.33

<sup>a</sup> Not corrected for temperature.<sup>b</sup> Same height at 9 p. m. on the 26th.<sup>c</sup> Aneroid.<sup>d</sup> Mean obtained from daily maximum and minimum.<sup>e</sup> Same height at 6 p. m. on the 18th and 20th.<sup>f</sup> Same height at 9 p. m. on the 25th.<sup>g</sup> Same height at 2 p. m. on the 16th.



## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Halifax .....	29.63	29	9½ a. m.	30.20	6	3½ p. m.	29.05
Hamilton .....	29.51	0	9 a. m.	30.00	3	9 a. m.	29.02
Montreal .....	29.67	10	7 a. m.	30.34	19	2 p. m.	28.57
Moose Factory .....	29.92						
St. John's .....	29.20	24	7 a. m.	29.88	7	7 a. m.	28.23
St. Martin .....	29.64	9	10 p. m.	30.16	24	6 a. m.	28.93
Toronto .....	29.53	0	6 a. m.	30.02	14	2 p. m.	28.99
Windsor .....	29.66	30	7 a. m.	30.16	6	2 p. m.	29.04
Wolfville .....	29.64	29	7 a. m.	30.08	5	9 p. m.	29.13
Maine .....							
Gardiner .....	29.76	10	7 a. m.	30.18	4	2 p. m.	29.16
Perry .....	29.69	29	7 a. m.	30.16	4	2 p. m.	29.10
Portland .....	29.74	28	2 p. m.	30.16	24	7 a. m.	<sup>a</sup> 29.15
Steuben (b) .....	29.64	10	7 a. m.	30.18	4	9 p. m.	29.19
New Hampshire .. Shelburne .....	29.59	29	7 a. m.	30.25	24	7 a. m.	28.99
Vermont .....							
Burlington .....	29.47	10	7 a. m.	29.92	23	9 p. m.	28.71
Lunenburg .....	28.56	30	7 a. m.	28.85	24	7 a. m.	<sup>c</sup> 27.95
Norwich (b) .....	29.52	24	7 a. m.	29.90	23	7 a. m.	29.17
St. Johnsbury .....	29.23	28	7 a. m.	29.62	23	9 p. m.	28.47
Massachusetts .....							
Amherst .....	29.61	10	7 a. m.	30.01	23	9 p. m.	28.83
Boston .....	29.78	10	7 a. m.	30.20	23	9 p. m.	29.16
Bridgewater .....	29.59	28	9 p. m.	30.24	23	2 p. m.	28.96
Cambridge .....	29.78	9	9 p. m.	30.19	23	9 p. m.	29.09
Lawrence .....	29.70	10	7 a. m.	30.13	23	9 p. m.	29.03
Nantucket .....	29.81	10	7 a. m.	30.19	23	2 p. m.	29.27
New Bedford .....	29.74	10	7 a. m.	30.12	23	2 p. m.	<sup>c</sup> 29.13
Westfield .....	29.74	10	7 a. m.	30.12	24	7 a. m.	29.25
Williamstown .....	29.10	28	7 a. m.	29.46	23	9 p. m.	28.33
Worcester .....	29.26	10	7 a. m.	29.65	23	9 p. m.	28.54
Rhode Island .....							
Providence .....	29.63	10	Sunrise.	30.03	23	10 p. m.	28.96
Connecticut .....							
Middletown .....	29.61	10	7 a. m.	30.02	23	2 p. m.	28.89
Pomfret .....	29.20	10	7 a. m.	29.59	23	9 p. m.	28.49
Wallingford .....	29.73	10	7 a. m.	30.15	23	9 p. m.	28.94
New York .....							
Bellport .....	29.18	23	2 p. m.	<sup>c</sup> 29.56	9	9 p. m.	29.51
Buffalo .....	29.21	9	8 a. m.	29.74	11	8 a. m.	28.70
Cazenovia .....	28.40	2	7 a. m.	28.91	23	2 p. m.	28.68
Fishkill Landing .....	30.08	10	7 a. m.	30.45	23	9 p. m.	29.25
Flatbush .....	29.78	9	9 p. m.	30.19	23	2 p. m.	29.01
Fort Edward .....	29.67	28	7 a. m.	30.45	24	7 a. m.	29.14
New York city .....	29.85	9	9 p. m.	30.23	23	7 a. m.	29.21
Oswego .....	29.09	1	7 a. m.	29.50	23	9 p. m.	28.39
Penn Yan .....	29.32	10	2 p. m.	29.72	23	2 p. m.	28.63
Rochester, [Dewey] .....	29.21	9	7 a. m.	29.68	23	2 p. m.	28.57
Waterford .....	29.80	9	9 p. m.	30.23	23	9 p. m.	29.00
New Jersey .....							
Lambertville .....	29.86	9	7 a. m.	30.57	23	2 p. m.	29.00
Newark .....	29.81	10	7 a. m.	30.21	23	9 p. m.	29.10
Pennsylvania .....							
Berwick (d) .....	29.15	9	7 a. m.	<sup>e</sup> 29.58	23	2 p. m.	28.25
Cannonsburg .....	28.66	9	7 a. m.	29.14	23	7 a. m.	28.08
Carlisle .....	29.00	9	7 a. m.	29.44	23	2 p. m.	28.16
Chambersburg .....	29.19	9	7 a. m.	29.64	23	2 p. m.	28.14
Easton .....	29.38	9	7 a. m.	<sup>f</sup> 29.78	3	2 p. m.	29.08
Gettysburg .....	29.32	9	7 a. m.	29.74	23	2 p. m.	28.13
Harrisburg, [Heisely] .....	29.61	9	7 a. m.	30.05	23	2 p. m.	28.73
Harrisburg, [Hickok] .....	29.76	2	9 p. m.	30.08	23	9 p. m.	29.01
Lewisburg .....	29.38	9	7 a. m.	29.85	23	2 p. m.	28.54
Linden .....	29.39	9	7 a. m.	29.85	23	1 p. m.	28.56
Morrisville .....	29.93	13	2 p. m.	30.35	23	2 p. m.	29.17
Mount Joy (d) .....	29.51	1	7 a. m.	29.90	23	2 p. m.	28.58
Norristown .....	29.77	9	7 a. m.	30.20	23	2 p. m.	28.85

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

<sup>a</sup> Same height at 9 p. m. on the 13th.<sup>b</sup> Incomplete.<sup>c</sup> Same height at 9 p. m. on the 23d.<sup>d</sup> Not corrected for temperature.<sup>e</sup> Same height at 2 p. m. on the 9th.<sup>f</sup> Same height at 7 a. m. on the 10th.

## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
Day.	Hour.	Day.	Hour.					
		Inches.			Inches.			Inches.
Pennsylvania	Philadelphia	29.70	1	7 a. m.	30.08	23	2 p. m.	28.8
	Pittsburg, [Marine Hospital]	28.79	5	2 p. m.	29.26	23	7 a. m.	28.26
	Somerset	27.48	9	7 a. m.	27.85	23	7 a. m.	26.84
Maryland	Annapolis	29.89	1	7 a. m.	30.34	23	9 p. m.	28.97
	Baltimore	29.79	1	7 a. m.	a 30.25	23	7 a. m.	28.86
	Frederick	29.59	9	7 a. m.	30.05	23	7 a. m.	28.63
	Leonardtown	29.54	1	2 p. m.	29.89	23	2 p. m.	28.84
Dist. of Columbia	Washington	29.85	9	7 a. m.	31.31	23	7 a. m.	28.89
Virginia	Portsmouth	29.87	1	7 a. m.	30.34	23	7 a. m.	29.18
	Ruthven	29.52	1	7 a. m.	29.92	23	7 a. m.	28.75
North Carolina	Chapel Hill	29.45	1	7 a. m.	a 29.83	22	9 p. m.	28.92
	Davidson College	28.92	1	7 a. m.	29.35	22	9 p. m.	23.39
	Murfreesborough	29.20	1	7 a. m.	a 29.67	23	7 a. m.	28.74
South Carolina	All Saints	29.91	1	2 p. m.	30.30	23	7 a. m.	29.65
	Charleston	30.03	1	7 a. m.	30.39	22	9 p. m.	29.67
	Columbia, [Barton]	29.73	1	6 a. m.	30.09	22	9 p. m.	29.34
	Columbia, [White]	28.78	1	9 p. m.	29.02	23	7 a. m.	28.60
	St. John's (b)	30.09	1	2 p. m.	30.52	22	9 p. m.	29.65
Georgia	Athens	29.22	1	7 a. m.	29.57	22	2 p. m.	28.82
	Atlanta (c)	29.97	5	2 p. m.	30.25	22	2 p. m.	d 29.70
	Augusta	30.18	20	9 p. m.	30.38	4	7 a. m.	e 29.22
	Savannah	30.00	1	7 a. m.	30.32	22	9 p. m.	29.62
	Thomaston	28.97	1	7 a. m.	29.24	22	2 p. m.	28.63
	Thomson	29.46	1	7 a. m.	29.81	3	9 p. m.	29.20
Florida	Atsena	29.78	9	9 p. m.	29.97	30	2 p. m.	29.54
	Jacksonville	30.07	6	7 a. m.	30.29	30	2 p. m.	29.84
	St. Augustine	29.92	9	9 p. m.	f 30.09	28	2 p. m.	29.67
	Salt Ponds (c)	29.70	9	2 p. m.	29.87	30	7 a. m.	29.55
Alabama	Greensborough (g)	29.59	?	?	?	22	7 a. m.	29.37
	Moulton	29.29	5	9 p. m.	29.56	22	7 a. m.	29.01
Mississippi	Columbus	29.78	5	9 p. m.	30.05	2	9 p. m.	29.52
	Natchez	29.48	23	2 p. m.	29.75	2	2 p. m.	29.25
	Paulding	29.68	6	7 a. m.	29.92	2	9 p. m.	29.47
Texas	Austin, [Palm]	29.45	22	7 a. m.	29.81	25	2 p. m.	29.12
	New Braunfels	27.73	22	9 p. m.	27.92	12	9 p. m.	h 27.55
	Northern tier of counties	29.32						
	Sisterdale	28.61	22	7 a. m.	28.96	12	7 a. m.	28.33
	Washington	29.61	23	7 a. m.	29.93	12	2 p. m.	29.34
Tennessee	Webberville	29.64	23	7 a. m.	29.90	12	9 p. m.	29.30
	Glenwood	29.46	6	7 a. m.	29.78	10	9 p. m.	29.12
	La Grange	29.20	5	9 p. m.	29.50	26	2 p. m.	28.96
	Memphis	29.67						
Kentucky	Bardstown	29.34	6	7 a. m.	29.72	10	9 p. m.	29.03
	Danville	28.90	1	7 a. m.	29.24	2	9 p. m.	28.65
	Louisville	29.40	1	7 a. m.	29.75	10	9 p. m.	29.02
	Paris	29.04	1	7 a. m.	29.40	11	7 a. m.	28.70
	Springdale	29.30	11	9 p. m.	i 29.64	15	2 p. m.	28.97
Ohio	Avon	28.92	9	7 a. m.	29.37	14	7 a. m.	28.42
	Bowling Green	29.10	9	7 a. m.	29.56	11	7 a. m.	28.59
	Cincinnati, [Harper]	29.44	9	7 a. m.	29.79	10	9 p. m.	29.03
	Cincinnati, [Phillips]	29.52	1	7 a. m.	29.89	10	9 p. m.	29.10
	Cleveland	28.90	9	7 a. m.	29.34	11	7 a. m.	28.46
	College Hill	28.54	9	7 a. m.	28.83	11	7 a. m.	28.20
	Hillsborough	28.67	4	2 p. m.	29.18	15	2 p. m.	28.28
	Hudson (j)	28.68	9	7 a. m.	29.13	23	7 a. m.	28.29
	Kelley's Island	29.16	9	7 a. m.	29.58	11	7 a. m.	k 28.68
	Montville	28.55	5	7 a. m.	28.99	11	7 a. m.	28.09

*a* Same height at 7 a. m. on the 9th.*b* Aneroid; incomplete.*c* Not corrected for temperature.*d* Same height at 9 p. m. on the 3d and 22d.*e* Same height at 9 p. m. on the 3d.*f* Same height at 7 a. m., 2 p. m., and 9 p. m., on the 1st.*g* For the last half of the month only.*h* Same height at 9 p. m. on the 25th.*i* Same height at 9 p. m. on the 20th.*j* Incomplete.*k* Same height at 7 a. m. on the 11th.



## No. 5.—BAROMETER, CORRECTED TO 32° F., APRIL, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		Inches.			Inches.			Inches.
Ohio.....	New Lisbon (a).....	28.46	9	7 a. m.	28.92	27	2 p. m.	28.00
	Northwood.....	28.66	9	7 a. m.	29.05	10	9 p. m.	28.24
	Portsmouth.....	29.28	9	7 a. m.	29.58	22	2 p. m.	29.03
	Savannah.....	28.73	9	7 a. m.	29.17	11	7 a. m.	28.26
	Troy.....	29.85	9	7 a. m.	30.18	11	7 a. m.	29.42
	Urbana.....	28.76	9	7 a. m.	29.16	14	7 a. m.	28.35
	Westerville.....	28.75	9	7 a. m.	29.18	14	7 a. m.	28.37
Michigan.....	Battle Creek.....	28.99	9	7 a. m.	29.36	11	7 a. m.	28.45
	Detroit.....	28.84	18	7 a. m.	29.30	14	2 p. m.	28.06
	Marquette.....	29.21	1	9 p. m.	29.60	14	7 a. m.	28.39
	New Buffalo.....	29.19	8	9 p. m.	29.55	10	9 p. m.	28.61
	Ottawa Point.....	29.26	9	6 a. m.	b 29.73	11	6 a. m.	28.55
	Thunder Bay Island.....	29.26	9	6 a. m.	29.78	14	9 a. m.	28.56
	Ypsilanti.....	28.92	9	7 a. m.	29.34	11	7 a. m.	28.38
Indiana.....	Aurora.....	29.39	9	6 a. m.	29.71	11	6 a. m.	29.05
	Cannelton.....	29.54	1	7 a. m.	29.87	10	9 p. m.	29.16
	New Harmony.....	29.58	5	2 p. m.	29.91	10	9 p. m.	29.13
	Richmond, [Moore].....	28.85	9	7 a. m.	29.19	11	7 a. m.	28.43
Illinois.....	Batavia, [Mead].....	29.06	8	9 p. m.	29.41	10	9 p. m.	28.51
	Manchester.....	28.72	5	1 p. m.	29.03	10	9 p. m.	28.20
	Marengo (c).....	28.47	28	7 a. m.	28.67	20	2 p. m.	28.24
	Upper Alton.....	29.38	5	7 a. m.	d 29.69	10	9 p. m.	28.89
	West Urbana.....	29.09	7	2 p. m.	e 29.40	10	9 p. m.	28.51
	Wheaton.....	29.08	8	9 p. m.	29.45	10	9 p. m.	28.43
Missouri.....	St. Louis.....	29.42	5	2 p. m.	29.76	10	9 p. m.	28.96
Wisconsin.....	Appleton.....	28.85	8	9 p. m.	29.25	14	7 a. m.	28.18
	Beloit.....	28.91	8	9 p. m.	29.26	10	9 p. m.	28.34
	Kenosha (a).....	29.44	8	2 p. m.	29.88	10	9 p. m.	28.84
	Madison.....	28.89	22	9 p. m.	29.46	10	9 p. m.	28.27
	Manitowoc (a).....	29.60	8	9 p. m.	30.01	14	7 a. m.	28.95
	Milwaukee, [Winkler].....	29.20	8	2 p. m.	29.55	10	9 p. m.	28.61
	Border Plains.....	28.68	8	7 a. m.	29.05	10	9 p. m.	28.08
Iowa.....	Dubuque.....	29.21	8	7 a. m.	29.59	10	9 p. m.	28.57
	Fairfield.....	27.17	8	7 a. m.	27.49	10	9 p. m.	26.62
	Muscatine.....	29.39	8	7 a. m.	29.69	10	9 p. m.	28.75
	Beaver Bay.....	29.16	1	9 p. m.	29.49	14	2 p. m.	28.42
Kansas.....	Lawrence.....	29.00	5	7 a. m.	29.42	10	2 p. m.	28.47
Utah.....	Great Salt Lake City.....	25.72			26.11			25.29
California.....	Sacramento.....	30.00	2	7 a. m.	30.37	29	9 p. m.	29.70
	San Francisco (f).....	29.96	14	7 a. m.	30.25	16	9 p. m.	29.73
Mexico.....	Cordova.....	27.07	17	9 a. m.	27.39	3	3 p. m.	26.89
	Minatitlan (g).....	29.63	17	9 p. m.	29.86	12	2 p. m.	29.45
	Mirador.....	22.83	17	8 p. m.	h 23.11	12	2 p. m.	22.64
	Vera Cruz (i).....	29.93	17	10 a. m.	30.26	3	4 p. m.	29.68
	Nassau, Bahamas.....	30.18	8		30.29	28		30.04
West Indies.....	St. George's, Bermuda.....	29.88			30.19			29.61
	Turk's Island, Bahamas.....	30.09	1	Noon.	80.20	30	Noon.	29.94
	Guatemala.....	25.25	9	10 a. m.	25.38	15	4 p. m.	25.10
Central America.....	Catharina Sophia, Surinam.....	29.90	9	6 a. m.	29.97	30	2 p. m.	29.84
	Catharina Sophia, Surinam (g).....	29.84	9	2 p. m.	29.95	30	6 p. m.	29.72

a Not corrected for temperature.

b Same height at 9 a. m. on the 9th.

c For the last half of the month only.

d Same height at 2 p. m. on the 8th.

e Same height at 9 p. m. on the 7th.

f For the first 20 days of the month only.

g Aneroid.

h Same height at 8 p. m. on the 18th and 20th.

i Incomplete.

## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1859.\*

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			
			DATE.		HEIGHT.	DATE.		HEIGHT.	
			Day.	Hour.	Day.	Hour.			
		Inches.			Inches.			Inches.	
British America	Hamilton	29.69	14	9 a. m.	a 30.00	17	9 a. m.	29.30	
	Moose Factory	29.87							
	St. John's	29.73	13	7 a. m.	30.07	8	9 p. m.	29.10	
	St. Martin	29.83	3	6 a. m.	30.19	28	6 a. m.	29.43	
	Toronto	29.66	14	6 a. m.	29.97	27	2 p. m.	29.22	
Maine	Windsor	30.05	12	7 a. m.	30.43	9	7 a. m.	29.63	
	Wolfville	29.85	12	7 a. m.	30.35	8	9 p. m.	29.41	
	Gardiner	30.02	11	9 p. m.	30.35	8	9 p. m.	29.62	
	Perry	30.03	12	7 a. m.	30.08	8	2 p. m.	29.60	
	Portland	30.01	11	9 p. m.	30.31	8	9 p. m.	29.55	
New Hampshire	Steuben	29.99	11	9 p. m.	30.33	8	9 p. m.	29.60	
	Shelburne	29.87	5	9 p. m.	30.45?	6	7 a. m.	29.41	
Vermont	Burlington	29.67	3	7 a. m.	29.99	27	9 p. m.	29.29	
	Lunenburg	28.79	31	7 a. m.	b 29.08	19	Noon.	28.17	
	Norwich (c)	29.64							
Massachusetts	St. Johnsbury	29.45	31	7 a. m.	29.78	8	2 p. m.	29.07	
	Amherst	29.83	31	7 a. m.	30.14	9	2 p. m.	29.43	
	Bridgewater (c)	29.84	4	7 a. m.	30.12	8	9 p. m.	29.44	
	Cambridge	30.05	31	7 a. m.	30.35	8	2 p. m.	29.53	
	Lawrence	29.91	31	7 a. m.	30.23	28	2 p. m.	29.49	
	Nantucket	30.05	4	2 p. m.	30.35	8	7 a. m.	29.66	
	New Bedford	29.99	4	7 a. m.	30.31	9	7 a. m.	29.62	
	Westfield	29.95	4	7 a. m.	30.25	9	7 a. m.	d 29.58	
	Williamstown	29.32	4	7 a. m.	29.65	22	7 a. m.	28.98	
	Worcester	29.50	31	7 a. m.	29.79	9	7 a. m.	29.11	
	Rhode Island	Providence	29.88	4	Sunrise.	30.19	9	Sunrise.	e 29.49
	Connecticut	Middletown	29.86	4	7 a. m.	30.23	9	2 p. m.	29.43
Pomfret		29.46	31	7 a. m.	29.75	9	7 a. m.	29.08	
Wallingford		29.96	4	7 a. m.	30.28	9	2 p. m.	29.52	
New York	Bellport	29.35	4	2 p. m.	29.63	9	2 p. m.	29.03	
	Buffalo	29.37	14	8 a. m.	29.68	27	2 p. m.	29.01	
	Cazenovia	28.64	3	7 a. m.	28.88	27	2 p. m.	28.32	
	Fishkill Landing	30.31	4	9 p. m.	30.63	9	7 a. m.	29.97	
	Flatbush	30.02	4	7 a. m.	30.79	9	2 p. m.	29.59	
	Fort Edward	29.87	1	7 a. m.	30.53	8	2 p. m.	29.48	
	New York city	30.04	4	2 p. m.	30.37	9	2 p. m.	29.71	
	Oswego	29.26	31	2 p. m.	29.60	27	2 p. m.	28.92	
	Penn Yan	29.54	3	2 p. m.	f 29.77	27	2 p. m.	29.20	
	Rochester, [Dewey]	29.33	14	2 p. m.	29.60	18	2 p. m.	29.02	
	Spencertown	29.36	5	7 a. m.	29.67	8	9 p. m.	28.89	
	New Jersey	Waterford	30.00	4	7 a. m.	30.30	8	9 p. m.	29.63
Lambertville		30.05	4	9 p. m.	30.35	9	9 p. m.	29.73	
Moorestown (c)		29.88	4	9 p. m.	g 30.19	9	2 p. m.	29.46	
Pennsylvania	Newark	29.99	4	7 a. m.	30.33	9	6 p. m.	29.64	
	Berwick (h)	29.33	25	7 a. m.	i 29.58	9	2 p. m.	29.00	
	Cannonsburg	28.82	15	2 p. m.	29.01	9	2 p. m.	j 28.52	
	Carlisle	29.28	4	7 a. m.	29.82	22	2 p. m.	28.92	
	Chambersburg	29.36	4	7 a. m.	29.68	8	2 p. m.	29.01	
	Easton	29.61	4	7 a. m.	29.91	9	2 p. m.	29.16	
	Gettysburg	29.50	4	7 a. m.	29.80	9	2 p. m.	29.11	
	Harrisburg, [Heisely]	29.79	4	7 a. m.	30.11	9	9 p. m.	29.39	
	Harrisburg, [Hickok]	29.78	5	9 p. m.	30.19	8	2 p. m.	29.32	
	Lewisburg	29.57	4	7 a. m.	29.90	9	2 p. m.	29.17	
	Morrisville	30.12	4	7 a. m.	k 30.42	8	2 p. m.	d 29.75	
	Mount Joy (h)	29.72	4	7 a. m.	30.20	9	2 p. m.	29.37	
	Norristown	29.96	4	7 a. m.	30.29	9	2 p. m.	29.56	
	Philadelphia	29.87	4	7 a. m.	30.14	9	2 p. m.	29.51	

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

*a* Same height at 9 a. m. on the 15th.*b* Same height at 7 a. m. on the 3d.*c* Incomplete.*d* Same height at 9 p. m. on the 9th.*e* Same height at 1 p. m. on the 25th.*f* Same height at sunrise on the 15th.*g* Same height at 7 a. m. on the 6th.*h* Not corrected for temperature.*i* Same height at 7 a. m. on the 15th, 24th, and 31st; at 2 p. m. on the

15th and 24th; and at 9 p. m. on the 24th and 30th.

*j* Same height at 2 p. m. on the 16th.*k* Same height at 9 p. m. on the 3d, and at 2 p. m. and 9 p. m. on the 4th



## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania	Pittsburg, [Marine Hospital]	28.93	14	9 p. m.	29.21	9	2 p. m.	28.66
	Somerset	27.66	4	7 a. m.	27.87	10	2 p. m.	27.39
Maryland	Annapolis	30.05	4	7 a. m.	30.38	9	9 p. m.	29.68
	Baltimore ( <i>a</i> )	29.97	4	7 a. m.	30.31	9	2 p. m.	29.59
	Chestertown	30.05	4	2 p. m.	30.38	27	2 p. m.	29.70
	Frederick	29.77	4	7 a. m.	30.10	4	9 p. m.	29.36
	Leonardtown	29.68	4	2 p. m.	29.94	10	7 a. m.	<i>b</i> 29.39
Dist of Columbia	Washington	30.02	4	7 a. m.	30.36	9	9 p. m.	29.62
Virginia	Point Pleasant	29.61	2	7 a. m.	<i>c</i> 29.80	17	7 a. m.	<i>d</i> 29.30
	Portsmouth	30.02	4	2 p. m.	30.35	10	2 p. m.	29.57
	Ruthven	29.66	4	7 a. m.	<i>e</i> 29.91	10	2 p. m.	29.25
North Carolina	Chapel Hill	29.57	25	7 a. m.	29.83	10	2 p. m.	29.14
	Davidson College	29.01	4	7 a. m.	<i>e</i> 29.27	10	2 p. m.	28.63
	Murfreesborough ( <i>f</i> )	29.21	26	7 a. m.	29.48	23	2 p. m.	28.98
South Carolina	All Saints	29.96	4	9 p. m.	<i>g</i> 30.17	10	7 a. m.	29.63
	Charleston	30.08	26	7 a. m.	<i>h</i> 30.28	10	2 p. m.	29.74
	Columbia, [Barton]	29.79	24	9 p. m.	<i>i</i> 30.00	10	2 p. m.	29.44
	Columbia, [White]	28.80	26	7 a. m.	29.10	10	2 p. m.	28.47
	St. John's ( <i>j</i> )	30.17	3	2 p. m.	<i>k</i> 30.37	10	7 a. m.	29.85
Georgia	Athens	29.25	25	7 a. m.	29.53	10	2 p. m.	28.92
	Atlanta ( <i>l</i> )	30.08	13	2 p. m.	<i>m</i> 30.30	9	2 p. m.	29.65
	Augusta	30.17	27	9 p. m.	30.46	21	2 p. m.	29.87
	Savannah	30.03	25	7 a. m.	30.26	10	2 p. m.	29.69
	Thomaston	28.97	26	7 a. m.	29.21	9	2 p. m.	28.63
	Thomson	29.47	25	2 p. m.	29.72	10	2 p. m.	29.17
Florida	Atsena	29.77	30	9 p. m.	29.98	9	9 p. m.	29.47
	Jacksonville	30.06	25	9 p. m.	30.25	10	2 p. m.	29.78
	St. Augustine	29.91	26	9 p. m.	30.08	10	2 p. m.	29.65
	Salt Ponds ( <i>l</i> )	29.63	30	2 p. m.	29.79	1	7 a. m.	29.46
Alabama	Greensborough	29.58	12	7 a. m.	29.86	9	2 p. m.	29.14
	Moulton	29.32	13	7 a. m.	29.57	9	2 p. m.	28.91
Mississippi	Columbus	29.78	28	7 a. m.	30.03	9	2 p. m.	29.30
	Natchez	29.50	28	7 a. m.	<i>n</i> 29.75	9	7 a. m.	29.00
	Paulding	29.68	28	7 a. m.	29.88	9	7 a. m.	29.35
Texas	Austin	29.41	27	7 a. m.	29.79	18	2 p. m.	29.13
	New Braunfels	27.67	27	7 a. m.	27.85	20	2 p. m.	27.58
	Northern tier of counties	29.20						
	Sisterdale	28.57	27	2 p. m.	28.87	18	2 p. m.	28.32
	Washington ( <i>o</i> )	29.68						
	Webberville	29.49	15	2 p. m.	29.77	29	9 p. m.	29.26
Tennessee	Glenwood	29.52	5	7 a. m.	29.73	9	2 p. m.	29.13
	La Grange	29.23	27	7 a. m.	<i>p</i> 29.46	9	2 p. m.	28.80
Kentucky	Bardstown	29.41	23	7 a. m.	29.63	18	2 p. m.	29.08
	Danville	29.03	5	2 p. m.	29.21	9	9 p. m.	28.72
	Louisville	29.49	18	3 p. m.	29.12	14	7 a. m.	<i>q</i> 29.82
	Millersburg	29.16	15	7 a. m.	29.40	9	9 p. m.	28.85
	Springdale	29.27	14	7 a. m.	<i>p</i> 29.59	18	2 p. m.	29.04
Ohio	Avon	29.03	14	7 a. m.	29.39	17	2 p. m.	<i>r</i> 28.73
	Bowling Green	29.22	14	7 a. m.	29.58	17	2 p. m.	28.87
	Cincinnati, [Harper]	29.53	15	7 a. m.	29.78	9	9 p. m.	<i>r</i> 29.22
	Cincinnati, [Phillips]	29.61	15	7 a. m.	29.97	18	2 p. m.	29.35
	Cleveland ( <i>s</i> )	29.05	14	7 a. m.	29.30	17	7 a. m.	28.74
	College Hill	28.70	14	7 a. m.	<i>t</i> 28.90	10	7 a. m.	<i>u</i> 28.45

*a* Incomplete.*b* Same height at 2 p. m. on the 10th.*c* Same height at 7 a. m. on the 3d and 24th; at 2 p. m. on the 2d and 3d; and at 9 p. m. on the 2d, 5th, 6th, and 7th.*d* Same height at 9 p. m. on the 19th.*e* Same height at 7 a. m. on the 5th.*f* For the last 20 days of the month only.*g* Same height at 7 a. m. on the 5th and 25th, and at 9 p. m. on the 25th.*h* Same height at 7 a. m. and 9 p. m. on the 25th.*i* Same height at 9 p. m. on the 25th.*j* Aneroid.*k* Same height at 2 p. m. on the 13th, 25th, and 30th.*l* Not corrected for temperature.*m* Same height at 2 p. m. on the 25th, 26th, and 30th, and at 9 p. m. on the 30th.*n* Same height at 7 a. m., 2 p. m., and 9 p. m. on the 27th.*o* For the last 19 days of the month only.*p* Same height at 2 p. m. on the 14th.*q* Same height at 7 a. m. on the 15th.*r* Same height at 2 p. m. on the 18th.*s* Observations omitted from the 17th to the 27th of the month.*t* Same height at 2 p. m. and 9 p. m. on the 14th, and at 7 a. m. on the 15th.*u* Same height at 7 a. m., 2 p. m. and 9 p. m. on the 17th and 18th.

## No. 6.—BAROMETER, CORRECTED TO 32° F., MAY, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio	Freedom	28.41	14	7 a. m.	28.83	18	2 p. m.	28.00
	Hillsborough	28.76	15	7 a. m.	29.02	9	9 p. m.	28.34
	Hudson	28.83	15	7 a. m.	29.13	17	2 p. m.	28.48
	Kelley's Island	29.27	14	7 a. m.	29.59	17	2 p. m.	<i>a</i> 28.96
	Montville	28.68	14	7 a. m.	28.97	17	2 p. m.	28.36
	New Lisbon ( <i>b</i> )	28.64	14	7 a. m.	28.90	21	2 p. m.	28.35
	Northwood ( <i>c</i> )	28.80						
	Portsmouth	29.42	16	7 a. m.	29.55	2	9 p. m.	<i>d</i> 29.14
	Savannah	28.87	14	2 p. m.	29.17	17	7 a. m.	28.57
	Troy	29.94	14	2 p. m.	30.22	17	9 p. m.	29.68
	Urbana	28.87	14	7 a. m.	29.17	17	2 p. m.	28.58
	Westerville	28.87	14	7 a. m.	29.14	17	2 p. m.	28.55
	Ypsilanti	29.10	14	7 a. m.	29.45	18	2 p. m.	28.77
Michigan	Detroit	28.97	4	7 a. m.	<i>e</i> 29.25	24	2 p. m.	28.34
	Lake George ( <i>f</i> )	29.28			?	27	7 a. m.	28.86
	Marquette	29.32	17	2 p. m.	<i>g</i> 29.73	27	7 a. m.	28.82
	New Buffalo	29.29	14	7 a. m.	29.67	17	9 p. m.	28.93
	Ottawa Point	29.38	14	6 a. m.	<i>h</i> 29.85	27	3 p. m.	28.89
	Thunder Bay Island	29.38	14	6 a. m.	29.84	27	6 a. m.	28.87
	Ypsilanti	29.00	14	7 a. m.	29.39	16	9 p. m.	28.64
	Aurora	29.51	14	6 a. m.	29.80	5	9 p. m.	29.20
	Cannelton	29.62	14	7 a. m.	29.85	18	2 p. m.	29.27
	New Harmony	29.64	14	7 a. m.	29.90	18	2 p. m.	29.27
Indiana	Notre Dame	29.20	14	7 a. m.	29.60	17	9 p. m.	28.87
	Richmond	28.97	14	7 a. m.	29.27	18	2 p. m.	28.64
	Richmond, [Haines]	28.77	5	7 a. m.	29.00	1	7 a. m.	28.20
	Batavia	29.12	14	7 a. m.	29.50	16	9 p. m.	28.79
	Manchester	28.78	14	7 a. m.	29.11	18	7 a. m.	28.48
Illinois	Marengo	28.76	14	2 p. m.	29.32	8	2 p. m.	28.41
	Upper Alton	29.42	13	9 p. m.	29.75	18	7 a. m.	29.12
	West Urbana	29.19	14	2 p. m.	29.50	17	9 p. m.	28.89
	Wheaton	29.18	14	7 a. m.	29.60	17	9 p. m.	28.82
	St. Louis	29.48	14	7 a. m.	29.79	18	7 a. m.	29.16
Missouri	St. Louis	29.48	14	7 a. m.	29.79	18	7 a. m.	29.16
Wisconsin	Appleton	28.94	14	7 a. m.	29.42	27	7 a. m.	28.45
	Beloit	29.09	14	7 a. m.	29.58	8	2 p. m.	28.75
	Delafield ( <i>c</i> )	28.96	14	7 a. m.	29.40	27	7 a. m.	28.49
	Kenosha ( <i>b</i> )	29.53	14	7 a. m.	29.93	27	7 a. m.	29.10
	Madison	29.05	13	9 p. m.	29.43	27	7 a. m.	28.70
	Manitowoc ( <i>b</i> )	29.72	14	7 a. m.	30.15	27	7 a. m.	29.21
	Milwaukee, [Winkler]	29.26	14	7 a. m.	29.70	27	7 a. m.	28.75
	Border Plains	28.70	13	7 a. m.	29.21	24	7 a. m.	28.29
Iowa	Dubuque	29.28	14	9 p. m.	29.76	17	9 p. m.	28.87
	Fairfield	27.09	13	9 p. m.	27.45	17	2 p. m.	26.77
	Muscatine	29.39	15	7 a. m.	29.75	17	2 p. m.	<i>g</i> 29.00
Minnesota	Beaver Bay	29.19	13	9 p. m.	29.57	17	2 p. m.	28.52
Kansas	Lawrence	29.01	13	9 p. m.	29.41	17	2 p. m.	28.70
Utah	Great Salt Lake City	25.66			26.11			25.38
California	Sacramento	29.98	11	7 a. m.	30.17	19	7 a. m.	29.74
Mexico	Cordova	27.06	27	9 p. m.	27.28	8	9 a. m.	26.82
	Minatitlan	29.57	28	2 p. m.	29.75	8	2 p. m.	29.35
	Mirador	22.93	25	7 a. m.	<i>i</i> 23.03	8	7 a. m.	22.60
	Vera Cruz ( <i>c</i> )	29.86	27	11 p. m.	30.14	8	9 a. m.	29.66
	Nassau, Bahamas ( <i>j</i> )	30.06	30		30.20	7		<i>k</i> 29.96
West Indies	St. George's, Bermuda	29.87			30.16			29.60
	Turk's Island, Bahamas	29.97	26	6 a. m.	<i>l</i> 30.06	18	6 a. m.	29.88
	Guatemala	25.23	30	10 p. m.	25.31	8	4 p. m.	25.31
South America	Catharina Sophia, Surinam	29.87	27	6 a. m.	29.97	18	2 p. m.	29.79
	Catharina Sophia, Surinam ( <i>m</i> )	29.71	5	2 p. m.	29.81	31	6 p. m.	29.64

*a* Same height at 2 p. m. on the 18th.*b* Not corrected for temperature.*c* Incomplete.*d* Same height at 9 p. m. on the 9th.*e* Same height at 7 a. m. and 9 p. m. on the 6th.*f* For the last half of the month only.*g* Same height at 9 p. m. on the 17th.*A* Same height at 9 a. m. on the 14th.*i* Same height at 9 p. m. on the 27th.*j* Mean obtained from daily maximum and minimum.*k* Same height on the 14th and 17th.*l* Same height at noon and 6 p. m. on the 25th.*m* Aneroid.



## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches</i>			<i>Inches.</i>
British America—Hamilton .....	29.68	11	9 a. m.	30.00	8	9 a. m.	<i>a</i> 29.37
Moose Factory .....	29.80						
Rigolet .....	29.84	5	Sunrise.	30.15	16	Sunrise.	29.30
St. John's .....	29.73	8	7 a. m.	<i>b</i> 30.00	29	2 p. m.	29.14
St. Martin .....	29.78	11	10 p. m.	30.10	29	2 p. m.	29.43
Toronto .....	29.62	11	6 a. m.	29.95	15	2 p. m.	29.26
Windsor .....	29.95	13	7 a. m.	30.25	16	7 a. m.	29.62
Wolfville ( <i>c</i> ) .....	29.66	13	7 a. m.	30.14	30	2 p. m.	29.20
Maine .....	29.91	12	7 a. m.	30.26	18	7 a. m.	29.43
Gardiner .....	29.92	12	7 a. m.	30.24	18	7 a. m.	29.45
Perry .....	29.92	12	7 a. m.	30.27	?	?	?
Portland .....	29.87	12	7 a. m.	30.22	18	7 a. m.	29.43
Steuben .....	29.85	24	7 a. m.	24.07	18	7 a. m.	23.41
New Hampshire—Mount Washington .....	29.78	12	7 a. m.	30.05	18	7 a. m.	29.39
Shelburne .....	29.60	12	7 a. m.	29.93	15	9 p. m.	29.19
Vermont .....	28.68	12	7 a. m.	<i>d</i> 28.96	9	Noon.	28.06
Lunenburg .....	29.66	12	7 a. m.	29.86	16	7 a. m.	29.36
Norwich .....	29.38	12	7 a. m.	29.73	18	7 a. m.	29.02
St. Johnsbury .....	29.77	12	7 a. m.	30.10	18	7 a. m.	29.43
Massachusetts—Amherst .....	29.75	12	7 a. m.	30.09	16	9 p. m.	29.39
Bridgewater .....	29.93	12	9 p. m.	30.26	21	2 p. m.	29.35
Cambridge .....	29.82	12	7 a. m.	30.16	18	7 a. m.	29.41
Lawrence .....	30.00	12	7 a. m.	<i>e</i> 30.31	18	7 a. m.	29.67
Nantucket .....	29.93	12	9 p. m.	30.24	17	9 p. m.	29.52
New Bedford .....	29.89	12	7 a. m.	30.22	18	7 a. m.	<i>f</i> 29.55
Westfield .....	29.43	12	7 a. m.	29.73	18	7 a. m.	29.06
Worcester .....	29.81	12	Sunrise.	30.16	18	Sunrise.	<i>g</i> 29.40
Rhode Island—Providence .....	29.82	12	7 a. m.	30.16	17	9 p. m.	29.43
Connecticut—Middletown .....	29.39	12	7 a. m.	29.71	17	9 p. m.	29.02
Pomfret .....	29.89	12	7 a. m.	30.23	17	9 p. m.	29.50
Wallingford .....	29.31	12	7 a. m.	29.57	17	9 p. m.	28.91
New York—Bellport .....	29.36	11	8 a. m.	29.70	15	2 p. m.	29.04
Buffalo .....	28.60	12	7 a. m.	28.85	21	7 a. m.	28.30
Cazenovia .....	30.27	12	2 p. m.	<i>h</i> 30.52	18	7 a. m.	<i>i</i> 29.90
Fishkill Landing .....	29.97	12	7 a. m.	30.24	17	9 p. m.	29.50
Flatbush .....	29.99	12	2 p. m.	30.28	17	9 p. m.	29.59
New York city .....	29.28	11	2 p. m.	29.59	15	2 p. m.	28.97
Oswego .....	29.51	12	Sunrise.	29.75	21	Sunrise.	29.20
Penn Yan .....	29.29	26	2 p. m.	<i>j</i> 29.66	15	2 p. m.	28.93
Rochester, [Dewey] .....	29.30	12	7 a. m.	29.65	21	2 p. m.	28.98
Spencertown .....	29.92	12	7 a. m.	30.29	21	2 p. m.	29.56
Waterford .....	30.01	7	7 a. m.	<i>k</i> 30.26	17	9 p. m.	29.65
New Jersey—Lambertville .....	29.94	12	7 a. m.	30.28	21	6 p. m.	29.52
Newark .....	29.34	11	7 a. m.	<i>m</i> 29.58	17	9 p. m.	<i>n</i> 29.00
Pennsylvania—Berwick ( <i>l</i> ) .....	28.83	11	7 a. m.	29.09	21	2 p. m.	28.55
Cannonsburg .....	29.17	7	7 a. m.	29.41	21	9 p. m.	28.81
Carlisle .....	29.36	12	7 a. m.	29.62	21	2 p. m.	29.04
Chambersburg .....	29.62	12	7 a. m.	30.01	8	2 p. m.	<i>o</i> 29.33
Easton .....	29.49	12	7 a. m.	29.76	21	9 p. m.	29.15
Gettysburg .....	29.77	12	7 a. m.	30.05	21	9 p. m.	29.43
Harrisburg, [Heisely] .....	29.60	12	7 a. m.	30.02	21	7 a. m.	29.40
Harrisburg, [Hickok] .....	29.56	11	7 a. m.	29.85	21	2 p. m.	29.21
Lewisburg .....	30.09	12	7 a. m.	30.40	17	9 p. m.	29.72
Morrisville .....	29.71	7	7 a. m.	<i>k</i> 29.94	17	9 p. m.	<i>p</i> 29.38
Mount Joy ( <i>l</i> ) .....							

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

*a* Same height at 9 p. m. on the 20th.*b* Same height at 9 p. m. on the 13th.*c* Incomplete.*d* Same height at noon on the 12th and 27th, and at 7 p. m. on the 27th.*e* Same height at 9 p. m. on the 12th.*f* Same height at 9 p. m. on the 17th.*g* Same height at 10 p. m. on the 17th.*h* Same height at 2 p. m. on the 7th.*i* Same height at 2 p. m. on the 21st.*j* Same height at 9 p. m. on the 25th.*k* Same height at 7 a. m. on the 12th.*l* Not corrected for temperature.*m* Same height at 2 p. m. and 9 p. m. on the 11th.*n* Same height at 7 a. m., 2 p. m., and 9 p. m. on the 21st, and at 9 p. m. on the 20th.*o* Same height at 9 p. m. on the 8th.*p* Same height at 7 a. m. and 2 p. m. on the 21st.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		Inches.			Inches.			Inches.
Pennsylvania	Norristown	29.91	8	7 a. m.	30.18	21	2 p. m.	29.53
	Philadelphia	29.86	7	7 a. m.	30.15	21	2 p. m.	29.52
	Pittsburg, [Marine Hospital]	28.97	4	9 p. m.	29.26	21	2 p. m.	28.67
	Somerset	27.69	5	7 a. m.	27.85	17	2 p. m.	27.43
Maryland	Annapolis	30.03	12	7 a. m.	30.32	21	2 p. m.	a 29.71
	Baltimore (b)	30.01	12	7 a. m.	30.26	?	?	?
	Chestertown	30.03	12	7 a. m.	30.31	17	2 p. m.	c 29.70
	Frederick	29.75	12	7 a. m.	30.04	21	2 p. m.	29.41
	Leonardtown	29.68	12	7 a. m.	d 29.89	17	2 p. m.	29.38
Dist. of Columbia	Washington	30.01	12	7 a. m.	30.31	21	2 p. m.	29.68
Virginia	Point Pleasant	29.45	5	7 a. m.	e 29.80	18	7 a. m.	f 29.00
	Portsmouth	29.63	7	7 a. m.	30.31	17	2 p. m.	29.65
North Carolina	Chapel Hill (g)	29.68	12	7 a. m.	29.85	?	?	?
	Davidson College	29.04	7	7 a. m.	29.27	17	2 p. m.	28.69
	Murfreesborough	29.16	6	7 a. m.	29.53	21	2 p. m.	28.79
South Carolina	All Saints	30.02	7	2 p. m.	30.23	21	2 p. m.	29.69
	Charleston	30.12	29	7 a. m.	30.30	22	2 p. m.	29.82
	Columbia, [Barton]	29.83	7	7 a. m.	30.04	17	9 p. m.	29.37
	Columbia, [White]	28.83	6	7 a. m.	h 29.01	21	2 p. m.	28.57
Georgia	St. John's (i)	30.21	28	2 p. m.	30.45	22	7 a. m.	j 29.88
	Athens	29.39	7	7 a. m.	29.54	21	2 p. m.	28.98
	Atlanta (k)	30.14	28	2 p. m.	30.40	22	7 a. m.	29.85
	Augusta	30.15	7	7 a. m.	30.43	23	7 a. m.	29.87
Florida	Savannah	30.08	7	7 a. m.	30.27	21	2 p. m.	29.76
	Thomaston	29.01	8	7 a. m.	l 30.19	22	2 p. m.	28.72
	Atsena	29.85	28	9 p. m.	30.01	22	7 a. m.	m 29.62
	Jacksonville	30.12	28	9 p. m.	30.28	22	2 p. m.	29.82
Alabama	Micanopy	29.96	?	?	?	22	2 p. m.	29.71
	St. Augustine	29.96	29	9 p. m.	30.08	21	2 p. m.	29.74
	Salt Ponds (k)	29.70	29	2 p. m.	29.84	22	7 a. m.	29.52
	Greensborough	29.64	29	7 a. m.	29.82	17	2 p. m.	29.40
Mississippi	Columbus	29.83	29	7 a. m.	30.03	17	2 p. m.	29.60
	Natchez	29.60	29	7 a. m.	n 29.80	21	7 a. m.	o 29.40
	Paulding	29.73	29	7 a. m.	29.91	17	2 p. m.	29.53
	Austin, [Palm]	29.47	4	7 a. m.	29.71	18	2 p. m.	29.29
Texas	New Braunfels	27.68	4	7 a. m.	27.80	25	9 p. m.	27.55
	Northern tier of counties	29.40						
	Sisterdale	28.67	4	7 a. m.	28.88	12	2 p. m.	28.53
	Washington	29.65	4	7 a. m.	p 29.85	18	2 p. m.	q 29.47
Tennessee	Webberville	29.43	4	7 a. m.	29.66	18	2 p. m.	29.26
	Glenwood	29.57	4	7 a. m.	29.81	17	7 a. m.	29.32
	La Grange	29.27	4	7 a. m.	29.43	17	7 a. m.	r 29.03
	Memphis	29.76	4	7 a. m.	29.99	20	2 p. m.	29.56
Kentucky	Bardstown	29.45	4	9 p. m.	29.67	17	7 a. m.	28.18
	Danville	29.06	5	7 a. m.	29.25	17	7 a. m.	28.80
	Millersburg	29.20	5	7 a. m.	29.45	17	7 a. m.	r 28.96
	Paris	29.22	5	7 a. m.	c 29.49	17	7 a. m.	c 28.96
Ohio	Springdale	29.41	5	7 a. m.	29.69	17	7 a. m.	29.19
	Avon	29.07	11	7 a. m.	29.38	15	2 p. m.	28.82
	Bowling Green	29.25	4	7 a. m.	29.57	20	2 p. m.	28.98
	Cincinnati, [Harper]	29.56	5	7 a. m.	29.83	21	2 p. m.	s 29.36
	Cincinnati, [Phillips]	29.68	5	7 a. m.	29.99	16	9 p. m.	t 29.47

a Same height at 9 p. m. on the 27th.

b For the first 16 days of the month only.

c Same height at 2 p. m. on the 21st.

d Same height at 2 p. m. on the 12th.

e Same height at 9 p. m. on the 5th, and at 7 a. m., 2 p. m., and 9 p. m. on the 6th and 7th.

f Same height at 2 p. m. and 9 p. m. on the 13th, at 7 a. m., 2 p. m., and 9 p. m. on the 16th, and at 7 a. m. and 2 p. m. on the 17th.

g Observations interrupted from the 14th to the 27th.

h Same height at 7 a. m. on the 7th.

i Aneroid.

j Same height at 9 p. m. on the 21st.

k Not corrected for temperature.

l Same height at 9 p. m. on the 28th.

m Same height at 2 p. m. on the 22d and 23d.

n Same height at 2 p. m. and 9 p. m., on the 29th.

o Same height at 9 p. m. on the 17th and 18th.

p Same height at 2 p. m. on the 29th.

q Same height at 9 p. m. on the 17th.

r Same height at 2 p. m. on the 17th.

s Same height at 9 p. m. on the 20th.

t Same height at 2 p. m. on the 17th, at 2 p. m. and 9 p. m. on the 19th, and at 7 a. m., 2 p. m., and 9 p. m. on the 20th.



## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio	Cleveland	29.03	11	7 a. m.	29.31	20	2 p. m.	<i>a</i> 28.78
	College Hill	28.73	4	9 p. m.	<i>b</i> 28.94	21	2 p. m.	<i>c</i> 28.51
	Freedom	28.28	4	9 p. m.	28.86	27	2 p. m.	27.86
	Hillsborough	28.80	5	7 a. m.	29.05	21	7 a. m.	28.50
	Hudson	28.85	11	7 a. m.	29.13	20	9 p. m.	28.57
	Kelley's Island	29.28	4	2 p. m.	29.56	20	2 p. m.	29.04
	Montville	28.71	11	7 a. m.	29.01	13	7 a. m.	28.42
	New Lisbon ( <i>d</i> )	28.66	11	7 a. m.	28.95	20	9 p. m.	28.40
	Northwood	28.82	4	9 p. m.	29.09	?	?	?
	Portsmouth	29.41	4	2 p. m.	29.64	?	?	?
	Savannah	28.89	11	7 a. m.	29.19	20	2 p. m.	<i>e</i> 28.64
	Troy	29.91	5	7 a. m.	30.37	20	2 p. m.	29.65
	Urbana	28.90	5	7 a. m.	29.18	20	9 p. m.	28.67
	Westerville	28.91	5	7 a. m.	<i>f</i> 29.19	21	2 p. m.	28.66
Michigan	Battle Creek	29.11	4	7 a. m.	29.45	20	2 p. m.	28.88
	Detroit	29.06	10	7 a. m.	<i>g</i> 29.25	?	?	?
	Fort Gratiot	29.36	4	3 p. m.	29.73	20	3 p. m.	29.02
	Marquette	29.28	3	2 p. m.	29.79	12	2 p. m.	28.84
	New Buffalo	29.33	4	7 a. m.	29.73	15	7 a. m.	29.09
	Ottawa Point	29.40	4	9 a. m.	29.90	15	3 p. m.	29.02
	St. Mary's	29.35	4	7.45 a. m.	29.82	12	8.35 p. m.	28.94
	Thunder Bay Island	29.36	4	6 a. m.	<i>h</i> 29.82	15	6 a. m.	28.99
	Ypsilanti ( <i>i</i> )	29.02	11	7 a. m.	29.34	20	2 p. m.	28.75
Indiana	Aurora	29.58	11	6 a. m.	<i>j</i> 29.78	17	2 p. m.	29.34
	Cannelton	29.66	4	7 a. m.	29.94	20	2 p. m.	29.41
	New Harmony	29.69	4	7 a. m.	30.02	17	7 a. m.	29.48
	Richmond, [Haines]	28.81	5	7 a. m.	29.10	27	12 m.	28.50
	Richmond, [Moore]	28.98	5	7 a. m.	29.27	20	2 p. m.	<i>a</i> 28.79
Illinois	Batavia, [Capon]	29.07	?	?	?	12	9 p. m.	28.74
	Batavia, [Mead]	29.15	4	7 a. m.	29.53	12	9 p. m.	28.94
	Manchester	28.83	4	7 a. m.	29.27	1	1 p. m.	<i>k</i> 28.64
	Marengo	29.00	4	7 a. m.	29.37	12	9 p. m.	28.80
	Upper Alton	29.50	4	7 a. m.	29.90	18	9 p. m.	29.29
	West Urbana	29.24	4	2 p. m.	29.58	20	9 p. m.	29.06
	Wheaton	29.23	4	7 a. m.	29.67	1	2 p. m.	28.98
	St. Louis	29.54	4	7 a. m.	29.96	18	9 p. m.	29.35
Wisconsin	Appleton	28.98	4	9 p. m.	29.45	2	2 p. m.	28.59
	Beloit	29.20	4	7 a. m.	29.64	7	2 p. m.	28.91
	Delafield	28.96	4	7 a. m.	29.44	?	?	?
	Kenosha ( <i>d</i> )	29.57	4	7 a. m.	29.97	12	9 p. m.	29.34
Iowa	Madison	29.04	28	7 a. m.	29.56	12	2 p. m.	28.73
	Manitowoc	29.73	4	7 a. m.	30.21	7	9 p. m.	29.46
	Milwaukee, [Larkin]	29.18	?	?	?	15	7 a. m.	28.94
	Milwaukee, [Winkler]	29.30	4	7 a. m.	29.74	7	9 p. m.	29.02
	Border Plains	28.74	3	2 p. m.	29.40	14	7 a. m.	28.00
	Dubuque	29.34	4	7 a. m.	29.86	27	7 a. m.	29.03
	Fairfield	27.12	4	7 a. m.	27.55	26	9 p. m.	26.88
	Muscatine	29.43	4	7 a. m.	29.84	12	9 p. m.	<i>l</i> 29.15
Minnesota	Beaver Bay	29.16	3	9 p. m.	29.74	12	2 p. m.	28.63
Kansas	Lawrence	29.10	4	7 a. m.	<i>l</i> 29.51	14	2 p. m.	28.85
Utah	Great Salt Lake City	25.71			26.07			25.42
California	Sacramento	29.84	4	7 a. m.	30.21	25	9 p. m.	29.60
Mexico	Cordova	27.10	5	9 a. m.	27.31	26	3 p. m.	26.88
	Mirador	22.87	?	?	<i>m</i> 23.03	26	2 p. m.	22.68
	Vera Cruz ( <i>i</i> )	29.85	2	10 p. m.	30.12	25	3 p. m.	29.73

*a* Same height at 9 p. m. on the 20th.*b* Same height at 7 a. m. and 2 p. m. on the 5th.*c* Same height at 9 p. m. on the 21st.*d* Not corrected for temperature.*e* Same height at 2 p. m. on the 21st.*f* Same height at 9 p. m. on the 11th.*g* Same height at 7 a. m. on the 11th.*h* Same height at 9 a. m. on the 4th.*i* Incomplete.*j* Same height at 2 p. m. on the 4th.*k* Same height at 9 p. m. on the 12th.*l* Same height at 9 p. m. on the 3d.*m* From 2d to 5th.

## No. 7.—BAROMETER, CORRECTED TO 32° F., JUNE, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches</i>				<i>Inches.</i>
West Indies..... Nassau, Bahamas.....	30. 17	28	-----	20	-----
St. George's, Bermuda.....	30. 09	-----	-----	-----	-----
Turk's Island, Bahamas.....	30. 06	28	Noon.	5	6 a. m.
Central America...Guatemala.....	25. 23	30	10 a. m.	22	4 p. m.
South America...Catharina Sophia, Surinam.....	29. 90	6	6 a. m.	21	2 p. m.
Catharina Sophia, Surinam (c).....	29. 66	28	2 p. m.	21	6 a. m.

*a* Same height at 6 p. m. on the 28th, and at 6 a. m., noon, and 6 p. m. on the 29th.

*b* Same height at noon and 6 p. m. on the 5th, and at 6 a. m., noon, and 6 p. m. on the 6th.

*c* Aneroid.

*d* Same height at 2 p. m. on the 29th.

*e* Same height at 6 p. m. on the 21st.



## No. 8.--BAROMETER, CORRECTED TO 32° F., JULY, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America--Hamilton .....	29.72	5	9 a. m.	30.12	2	9 a. m.	29.35
Montreal .....	29.92	5	7 a. m.	30.41	2	2 p. m.	29.35
Moose Factory .....	29.85						
St. John's .....	29.56	6	2 p. m.	30.25	22	7 a. m.	<i>a</i> 28.93
St. Martin .....	29.81	5	10 p. m.	30.29	22	2 p. m.	29.33
Toronto .....	29.65	5	9½ a. m.	30.14	2	2 p. m.	29.16
Windsor .....	29.94	5	9 p. m.	30.36	23	2 p. m.	29.49
Maine .....							
Gardiner .....	29.89	5	2 p. m.	30.33	22	9 p. m.	29.43
Perry .....	29.88	5	7 a. m.	30.36	20	2 p. m.	29.40
Portland .....	29.87	5	2 p. m.	30.39	22	9 p. m.	29.44
Steuben .....	29.86	5	2 p. m.	30.32	20	2 p. m.	29.38
New Hampshire--Mount Washington .....	23.90	5	2 p. m.	24.21	27	7 a. m.	23.45
Shelburne .....	29.78	5	7 a. m.	30.17	20	2 p. m.	29.40
Vermont .....							
Burlington .....	29.61	5	7 a. m.	30.07	22	2 p. m.	29.17
Lunenburg .....	28.81	6	7 a. m.	<i>b</i> 29.21	27	7 a. m.	28.27
Norwich (c) .....	29.63						
St. Johnsbury .....	29.38	5	7 a. m.	29.81	22	2 p. m.	28.97
Massachusetts--Amherst .....	29.75	5	7 a. m.	30.16	20	2 p. m.	29.26
Cambridge .....	29.92	5	9 p. m.	30.34	20	2 p. m.	<i>d</i> 29.51
Lawrence .....	29.79	5	7 a. m.	30.24	20	2 p. m.	29.37
Nantucket .....	29.97	5	2 p. m.	30.32	20	7 a. m.	29.59
New Bedford .....	29.91	5	9 p. m.	30.27	20	2 p. m.	29.50
Westfield .....	29.88	5	9 p. m.	30.26	20	2 p. m.	29.51
Williamstown .....	29.28	5	7 a. m.	29.70	22	9 p. m.	28.90
Worcester .....	29.41	5	9 p. m.	29.78	20	2 p. m.	28.99
Rhode Island--Providence .....	29.80	5	6 a. m.	30.18	20	2 p. m.	29.36
Connecticut--Middletown .....	29.83	30	9 p. m.	30.28	22	9 p. m.	29.43
Pomfret .....	29.39	5	7 a. m.	29.77	20	2 p. m.	29.01
Wallington .....	29.88	5	7 a. m.	30.27	20	2 p. m.	29.50
New York--Bellport .....	29.29	5	2 p. m.	29.56	20	2 p. m.	28.98
Buffalo .....	29.36	5	8 a. m.	29.83	2	2 p. m.	28.99
Cazenovia .....	28.62	5	7 a. m.	29.01	22	2 p. m.	28.22
Fishkill Landing .....	30.27	5	7 a. m.	<i>b</i> 30.60	23	2 p. m.	29.93
Flatbush .....	29.94	5	7 a. m.	30.28	20	2 p. m.	29.61
New York city .....	29.98	5	2 p. m.	30.36	20	7 a. m.	29.62
Oswego .....	29.30	5	7 a. m.	29.68	2	2 p. m.	28.88
Penn Yan .....	29.53	5	Sunrise	<i>e</i> 29.90	22	2 p. m.	29.15
Rochester, [Dewey] .....	29.32	5	7 a. m.	29.75	19	2 p. m.	29.01
Spencertown .....	29.31	5	2 p. m.	29.75	22	9 p. m.	28.94
Waterford .....	29.93	5	7 a. m.	30.33	22	9 p. m.	29.56
New Jersey--Lambertville .....	30.00	5	9 p. m.	30.34	22	9 p. m.	29.72
Newark .....	29.96	5	7 a. m.	30.30	20	9 p. m.	29.63
Pennsylvania--Berwick (f) .....	29.33	5	7 a. m.	<i>e</i> 29.75	22	9 p. m.	<i>a</i> 29.00
Cannonsburg .....	28.84	5	2 p. m.	29.18	22	9 p. m.	28.53
Carlisle .....	29.15	5	2 p. m.	29.53	22	9 p. m.	<i>g</i> 28.84
Chambersburg .....	29.37	5	7 a. m.	29.73	22	2 p. m.	29.04
Easton .....	29.68	5	7 a. m.	30.07	20	2 p. m.	29.35
Gettysburg .....	29.47	5	7 a. m.	29.84	22	9 p. m.	29.13
Harrisburg, [Heisely] .....	29.75	5	7 a. m.	<i>h</i> 30.13	22	9 p. m.	29.43
Harrisburg, [Hickok] .....	29.70	6	7 a. m.	30.10	20	2 p. m.	29.38
Lewisburg .....	29.55	5	7 a. m.	29.97	22	2 p. m.	29.22
Morrisville .....	30.02	5	2 p. m.	30.45	20	2 p. m.	29.62
Mount Joy (f) .....	29.70	5	2 p. m.	<i>i</i> 30.20	22	9 p. m.	29.39
Norristown .....	29.90	5	7 a. m.	30.30	22	2 p. m.	29.51
Philadelphia .....	29.85	5	7 a. m.	30.21	22	9 p. m.	29.55
Pittsburg, [Marine Hospital] .....	28.96	6	7 a. m.	29.32	20	7 a. m.	<i>a</i> 28.65

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

*a* Same height at 2 p. m. on the 22d  
*b* Same height at 2 and 9 p. m. on the 5th.  
*c* Incomplete.  
*d* Same height at 9 p. m. on the 22d.  
*e* Same height at 2 p. m. on the 5th

*f* Not corrected for temperature.  
*g* Same height at 2 p. m. on the 3d.  
*h* Same height at 2 p. m. on the 25th.  
*i* Same height at 9 p. m. on the 5th.

## No. 8.--BAROMETER, CORRECTED TO 32° F., JULY, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania . . . Somerset . . . . .	27.71	5	7 a. m.	27.97	22	9 p. m.	27.46
Maryland . . . . . Annapolis . . . . .	30.00	5	2 p. m.	30.36	22	9 p. m.	29.68
Chestertown . . . . .	30.00	5	7 a. m.	<i>a</i> 30.35	22	9 p. m.	29.68
Frederick . . . . .	29.73	5	7 a. m.	30.12	22	9 p. m.	29.40
Leonardtown . . . . .	29.68	5	2 p. m.	<i>b</i> 29.94	20	7 a. m.	<i>c</i> 29.45
Dist. of Columbia . . . Washington . . . . .	29.98	5	7 a. m.	30.39	22	9 p. m.	29.64
Virginia . . . . . Portsmouth . . . . .	29.99	7	7 a. m.	30.31	19	9 p. m.	29.67
North Carolina . . . Chapel Hill . . . . .	29.56	6	2 p. m.	29.89	19	9 p. m.	29.32
Murfreesborough ( <i>d</i> ) . . . . .	29.06			?	19	9 p. m.	28.76
South Carolina . . . All Saints . . . . .	29.96	6	7 a. m.	30.23	20	2 p. m.	28.72
Charleston . . . . .	30.06	6	2 p. m.	30.32	19	9 p. m.	29.86
Columbia, [Barton] . . . . .	29.80	7	5 a. m.	30.10	19	9 p. m.	29.58
Columbia, [White] . . . . .	28.74	7	7 a. m.	<i>e</i> 29.01	19	7 a. m.	28.55
St. John's ( <i>f</i> ) . . . . .	30.17	6	2 p. m.	30.44	20	7 a. m.	29.96
Georgia . . . . . Athens . . . . .	29.28	7	7 a. m.	29.61	20	2 p. m.	29.08
Atlanta ( <i>g</i> ) . . . . .	30.10	6	7 a. m.	<i>h</i> 30.30	15	9 p. m.	29.90
Augusta . . . . .	30.15	6	9 p. m.	30.36	10	7 a. m.	<i>i</i> 29.98
Savannah . . . . .	30.03	6	7 a. m.	30.32	20	2 p. m.	29.84
Thomasston . . . . .	29.94	12	7 a. m.	<i>j</i> 29.08	19	2 p. m.	<i>e</i> 28.82
Florida . . . . . Atsena . . . . .	29.85	6	9 p. m.	30.00	7	7 a. m.	29.69
Jacksonville . . . . .	30.09	7	2 p. m.	30.29	19	2 p. m.	29.96
Micnopy . . . . .	29.97	6	9 p. m.	30.17	28	2 p. m.	29.84
St. Augustine . . . . .	29.92	6	9 p. m.	30.08	7	7 a. m.	29.82
Salt Ponds ( <i>g</i> ) . . . . .	29.73	22	2 p. m.	29.82	9	7 a. m.	<i>k</i> 29.64
Alabama . . . . . Greensborough . . . . .	29.64	6	7 a. m.	29.88	20	2 p. m.	29.50
Mississippi . . . . . Columbus . . . . .	29.82	6	7 a. m.	30.10	20	2 p. m.	29.65
Natchez . . . . .	29.62	7	7 a. m.	<i>l</i> 29.80	31	9 p. m.	29.49
Paulding . . . . .	29.73	7	7 a. m.	29.92	31	9 p. m.	29.60
Texas . . . . . Austin, [Palm] . . . . .	29.49	7	7 a. m.	29.69	10	2 p. m.	29.29
New Braunfels . . . . .	27.65	4	7 a. m.	<i>m</i> 27.75	28	2 p. m.	<i>n</i> 27.53
Northern tier of counties . . . . .	29.57						
Sistendale . . . . .	28.68	7	7 a. m.	28.86	10	2 p. m.	28.50
Washington . . . . .	29.66	6	2 p. m.	29.84	10	2 p. m.	29.36
Webberville . . . . .	29.46	7	7 a. m.	29.62	10	2 p. m.	29.29
Tennessee . . . . . Glenwood . . . . .	29.55	6	7 a. m.	29.80	20	2 p. m.	29.37
Memphis . . . . .	29.76	6	7 a. m.	30.03	31	2 p. m.	29.61
Kentucky . . . . . Bardstown . . . . .	29.42	6	7 a. m.	29.71	24	2 p. m.	29.22
Danville . . . . .	29.05	6	7 a. m.	<i>o</i> 29.29	20	7 a. m.	<i>p</i> 28.90
Paris . . . . .	29.21	7	7 a. m.	29.52	19	2 p. m.	28.98
Springdale . . . . .	29.40	6	7 a. m.	<i>a</i> 29.69	24	2 p. m.	29.22
Ohio . . . . . Avon . . . . .	29.09	5	7 a. m.	29.46	2	9 p. m.	28.80
Bowling Green . . . . .	29.26	5	7 a. m.	29.62	22	2 p. m.	29.02
Cincinnati, [Harper] . . . . .	29.55	5	7 a. m.	<i>q</i> 29.85	20	2 p. m.	29.32
Cincinnati, [Phillips] . . . . .	29.67	6	7 a. m.	<i>r</i> 29.97	19	2 p. m.	29.44
Cleveland . . . . .	29.13	5	2 p. m.	29.44	2	2 p. m.	28.87
College Hill . . . . .	28.97	5	9 p. m.	29.00	22	9 p. m.	28.56
Freedom . . . . .	28.31	9	2 p. m.	28.88	14	2 p. m.	<i>s</i> 27.75
Hillsborough . . . . .	28.80	6	7 a. m.	29.13	19	9 p. m.	28.54
Hudson ( <i>d</i> ) . . . . .	28.80	5	7 a. m.	29.22	22	2 p. m.	28.57
Kelley's Island . . . . .	29.29	5	7 a. m.	29.63	2	2 p. m.	29.04
Montville . . . . .	28.72	5	7 a. m.	29.09	22	2 p. m.	28.43
New Lisbon ( <i>g</i> ) . . . . .	28.69	5	7 a. m.	<i>a</i> 29.00	22	2 p. m.	28.44
Northwood . . . . .	28.85	5	7 a. m.	29.13	2	2 p. m.	28.56

*a* Same height at 2 p. m. on the 5th.*b* Same height at 9 p. m. on the 5th.*c* Same height at 2 p. m. on the 20th.*d* Incomplete.*e* Same height at 7 a. m. on the 7th, and at 9 p. m. on the 6th and 7th.*f* Aneroid.*g* Not corrected for temperature.*h* Same height at 2 p. m. on the 5th and 6th.*i* Same height at 2 p. m. on the 4th.*j* Same height at 7 a. m. on the 13th.*k* Same height at 7 a. m. on the 31st.*l* Same height at 2 and 9 p. m. on the 6th, and at 2 p. m. on the 7th.*m* Same height at 9 p. m. on the 1st.*n* Same height at 2 p. m. on the 31st.*o* Same height at 2 p. m. on the 26th.*p* Same height at 9 p. m. on the 22d and 24th.*q* Same height at 7 a. m. on the 6th.*r* Same height at 2 and 9 p. m. on the 6th, and at 7 a. m. and 2 p. m. on the 7th.*s* Same height at 2 p. m. on the 15th.



## No. 8.—BAROMETER, CORRECTED TO 32° F., JULY, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	Inches.				Inches.
Ohio.....					
Portsmouth.....	29.29	5	7 a. m.	22	2 p. m.
Savannah.....	28.92	5	7 a. m.	2	2 p. m.
Troy.....	29.88	4	7 a. m.	2	7 a. m.
Urbana.....	28.92	5	7 a. m.	2	2 p. m.
Westerville.....	28.92	6	7 a. m.	22	2 p. m.
Michigan.....					
Battle Creek.....	29.14	5	7 a. m.	2	7 a. m.
Detroit (b).....	29.47				
Fort Gratiot.....	29.38	5	9 a. m.	2	3 p. m.
Lake George.....	29.40	4	7 a. m.	3	7 a. m.
Marquette.....	29.36	4	7 a. m.	2	7 a. m.
Monroe Piers.....	29.58	5	9 a. m.	2	6 p. m.
New Buffalo.....	29.37	5	7 a. m.	2	7 a. m.
Ottawa Point.....	29.41	4	9 a. m.	2	9 a. m.
Thunder Bay Island.....	29.40	4	6 a. m.	2	9 a. m.
Ypsilanti.....	29.04	5	7 a. m.	2	2 p. m.
Indiana.....					
Aurora.....	29.59	6	6 a. m.	22	9 p. m.
Cannelton.....	29.65	6	7 a. m.	24	2 p. m.
New Harmony.....	29.69	6	7 a. m.	24	2 p. m.
Richmond, [Haines].....	28.87	5	7 a. m.	22	7 a. m.
Illinois.....					
Batavia, [Mead].....	29.18	5	7 a. m.	2	7 a. m.
Manchester.....	28.85	6	7 a. m.	1	9 p. m.
Marengo.....	29.02	5	7 a. m.	2	7 a. m.
Upper Alton.....	29.51	6	7 a. m.	24	7 a. m.
West Urbana.....	29.26	5	2 p. m.	31	2 p. m.
Wheaton.....	29.25	5	7 a. m.	2	2 p. m.
Missouri.....					
St. Louis.....	29.56	6	7 a. m.	24	7 a. m.
Wisconsin.....					
Appleton.....	28.99	3	9 p. m.	1	9 p. m.
Beloit.....	29.24	4	7 a. m.	2	7 a. m.
Kenosha (f).....	29.62	5	7 a. m.	2	7 a. m.
Madison.....	29.06	5	2 p. m.	1	7 a. m.
Manitowoc (f).....	29.79	4	7 a. m.	1	9 p. m.
Milwaukee, [Larkin].....	29.21	4	7 a. m.	2	7 a. m.
Milwaukee, [Winkler].....	29.33	4	7 a. m.	2	7 a. m.
Iowa.....					
Border Plains.....	28.81	6	7 a. m.	1	2 p. m.
Dubuque.....	29.38	5	7 a. m.	1	9 p. m.
Fairfield.....	27.10	4	7 a. m.	1	7 a. m.
Muscatine.....	29.52	6	7 a. m.	2	7 a. m.
Minnesota.....					
Beaver Bay.....	29.22	3	9 p. m.	1	9 p. m.
Kansas.....					
Lawrence.....	29.13	6	7 a. m.	23	9 p. m.
Utah.....					
Great Salt Lake City.....	25.09	?	?	?	?
California.....					
Sacramento.....	29.92	26	7 a. m.	1	9 p. m.
Mexico.....					
Cordova.....	27.17	25	9 p. m.	10	3 p. m.
Mirador.....	22.99	25	8 p. m.	2	2 p. m.
Vera Cruz (k).....	30.03	25	7 a. m.	2	4 p. m.
West Indies.....					
Nassau, Bahamas (k).....	30.18				
St. George's, Bermuda.....	29.95				
Central America.....					
Guatemala.....	25.27	13	10 a. m.	28	4 p. m.
South America.....					
Catharina Sophia, Surinam.....	29.91	?	?	?	?
Catharina Sophia, Surinam (m).....	29.79	?	?	?	?

a Same height at 9 p. m. on the 19th.

b Incomplete.

c Same height at 9 a. m. on the 4th.

d Same height at 2 and 9 p. m. on the 5th, and 7 a. m., 2 and 9 p. m. on the 6th.

e Same height at 2 and 9 p. m. on the 23d, and 7 a. m., 2 and 9 p. m. on the 31st.

f Not corrected for temperature.

g Same height at 2 p. m. on the 4th.

h Same height at 9 p. m. on the 1st.

i Same height at 7 a. m. on the 5th.

j Same height at 2 p. m. on the 1st.

k Imperfect.

l Same height at 2 p. m. on the 31st.

m Aneroid.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1859.\*

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			
			DATE.		HEIGHT.	DATE.		HEIGHT.	
		Inches.	Day.	Hour.	Inches.	Day.	Hour.	Inches.	
British America	Hamilton	29.67	■	9 a. m.	29.85	4	9 a. m.	29.39	
	Montreal	29.89	9	7 a. m.	30.18	4	2 p. m.	29.59	
	Moose Factory	29.77							
	St. John's	29.63	23	7 a. m.	29.99	6	2 p. m.	a 29.28	
	St. Martin	29.76	9	10 p. m.	30.01	4	2 p. m.	29.48	
	Toronto	29.60	■	8 a. m.	29.81	4	6 a. m.	29.31	
	Windsor	29.91	9	2 p. m.	30.14	18	9 p. m.	29.53	
	Wolfville	29.44	17	7 a. m.	29.82	16	2 p. m.	29.05	
Maine	Gardiner	29.87	23	7 a. m.	30.15	19	2 p. m.	29.60	
	Perry	29.88	23	7 a. m.	30.17	7	9 p. m.	29.63	
	Portland	29.88	23	7 a. m.	30.15	19	2 p. m.	29.58	
	Steuben	29.90	24	7 a. m.	30.19	19	2 p. m.	29.57	
New Hampshire	Mount Washington	23.69	10	2 p. m.	24.17	29	7 a. m.	23.53	
	Shelburne	29.78	17	7 a. m.	b 30.00	4	9 p. m.	29.50	
Vermont	Burlington	29.59	■	7 a. m.	29.85	31	2 p. m.	29.34	
	Lunenburg	28.80	17	7 a. m.	c 28.99	7	2 p. m.	28.51	
Massachusetts	St. Johnsbury	29.38	■	7 a. m.	29.63	7	2 p. m.	29.09	
	Amherst	29.73	23	7 a. m.	29.98	31	2 p. m.	29.48	
	Cambridge	29.83	■	7 a. m.	30.15	6	7 a. m.	29.39	
	Lawrence	29.77	23	9 p. m.	30.08	19	2 p. m.	29.53	
	Nantucket	29.96	23	7 a. m.	b 30.18	25	2 p. m.	29.63	
	New Bedford	29.90	10	7 a. m.	30.10	25	2 p. m.	29.60	
	Westfield	29.87	22	9 p. m.	30.10	31	2 p. m.	29.63	
	Williamstown	29.26	9	7 a. m.	29.50	31	2 p. m.	29.01	
	Worcester	29.40	10	7 a. m.	29.61	5	2 p. m.	29.14	
	Rhode Island	Providence	29.80	10	2 p. m.	30.03	25	2 p. m.	29.51
Connecticut	Middletown	29.79	10	7 a. m.	30.01	25	2 p. m.	29.56	
	Pomfret	29.37	23	7 a. m.	29.60	25	2 p. m.	29.13	
	Wallingford	29.87	9	7 a. m.	d 30.08	19	2 p. m.	29.63	
New York	Bellport	29.26	10	7 a. m.	29.44	25	2 p. m.	29.08	
	Buffalo	29.33	■	8 a. m.	29.53	4	8 a. m.	29.06	
	Cazenovia	28.59	?	?	?	4	2 p. m.	28.37	
	Fishkill Landing	30.25	11	7 a. m.	30.47	5	9 p. m.	30.07	
	Flav bush	29.92	10	7 a. m.	30.13	25	7 a. m.	29.65	
	New York city	29.97	10	7 a. m.	30.17	25	7 a. m.	29.73	
	Oswego	29.27	9	7 a. m.	29.46	4	7 a. m.	29.04	
	Penn Yan	29.49	9	2 p. m.	e 29.69	4	Sunrise	f 29.29	
	Rohcester, [Dewey]	29.22	9	7 a. m.	29.41	4	7 a. m.	29.00	
	Spencertown	29.30	17	7 a. m.	29.54	25	2 p. m.	29.09	
	Waterford	29.91	9	7 a. m.	30.15	4	2 p. m.	29.66	
	New Jersey	Lambertville	29.99	9	9 p. m.	30.16	25	7 a. m.	29.82
		Newark	29.91	10	7 a. m.	30.14	1	7 a. m.	29.66
	Pennsylvania	Berwick (g)	29.33	9	7 a. m.	h 29.50	4	2 p. m.	i 29.16
		Cannonsburg	28.81	21	7 a. m.	28.96	4	2 p. m.	28.63
Carlisle		29.14	?	?	?	?	?	?	
Chambersburg		29.35	10	7 a. m.	29.53	15	9 p. m.	29.16	
Easton		29.66	10	7 a. m.	29.86	31	2 p. m.	29.49	
Gettysburg		29.44	10	7 a. m.	29.63	4	2 p. m.	29.26	
Harrisburg, [H. isely]		29.72	10	7 a. m.	29.92	4	2 p. m.	29.56	
Harrisburg, [Hickok]		29.68	10	7 a. m.	29.89	4	2 p. m.	29.49	
Lewisburg		29.53	10	7 a. m.	29.72	4	2 p. m.	29.33	
Morrisville		30.00	20	9 p. m.	j 30.17	25	7 a. m.	29.80	
Mount Joy (g)		29.67	10	7 a. m.	29.88	25	7 a. m.	k 29.50	
Norristown		29.89	9	9 p. m.	30.10	25	7 a. m.	29.68	
Philadelphia		29.83	9	9 p. m.	30.00	4	2 p. m.	29.67	
Pittsburg, [Marine Hospital]		28.93	9	7 a. m.	29.10	4	2 p. m.	28.75	
Somerset		27.67	0	7 a. m.	27.80	31	2 p. m.	27.56	

\* For changes in hours of observation, &amp;c., see notes to table of thermometer for this month.

<sup>a</sup> Same height at 9 p. m. on the 6th.<sup>b</sup> Same height at 9 p. m. on the 23d.<sup>c</sup> Same height at 7 a. m. on the 21st.<sup>d</sup> Same height at 9 p. m. on the 23d, and at 7 a. m. and 9 p. m. on the 9th.<sup>e</sup> Same height at sunset on the 9th.<sup>f</sup> Same height at 2 p. m. on the 4th.<sup>g</sup> Not corrected for temperature.<sup>h</sup> Same height at 7 a. m. and 2 p. m. on the 9th, and at 7 a. m., 2 p. m., and 9 p. m. on the 10th.<sup>i</sup> Same height at 9 p. m. on the 4th.<sup>j</sup> Same height at 7 a. m. and 2 p. m. on the 10th, and 9 p. m. on the 9th.<sup>k</sup> Same height at 2 p. m. on the 19th.



## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Maryland.....Annapolis.....	29.99	10	7 a. m.	30.19	14	2 p. m.	<i>a</i> 29.84
Baltimore.....	29.90	10	7 a. m.	30.11	13	2 p. m.	<i>b</i> 29.74
Frederick.....	29.71	10	7 a. m.	29.91	4	2 p. m.	29.51
Leonardtown.....	29.67	10	2 p. m.	<i>c</i> 29.80	15	7 a. m.	<i>d</i> 29.55
Dist. of Columbia. Washington.....	29.95	10	7 a. m.	30.13	13	2 p. m.	29.79
Virginia.....Portsmouth.....	29.97	10	7 a. m.	30.15	14	9 p. m.	<i>e</i> 29.82
North Carolina.....Chapel Hill.....	29.54	10	7 a. m.	29.69	14	2 p. m.	29.34
Murreesborough.....	29.07	30	7 a. m.	30.22	5	2 p. m.	<i>f</i> 28.95
South Carolina.....All Saints.....	29.93	3	2 p. m.	<i>g</i> 30.07	14	2 p. m.	29.72
Charleston.....	30.04	9	9 p. m.	30.19	14	2 p. m.	29.84
Columbia, [White].....	28.65	4	9 p. m.	28.78	24	2 p. m.	28.51
St. John's ( <i>h</i> ).....	30.09	3	2 p. m.	30.28	24	2 p. m.	29.86
Georgia.....Athens ( <i>i</i> ).....	29.25	?	?	?	14	2 p. m.	29.05
Atlanta ( <i>j</i> ).....	30.04	3	2 p. m.	<i>k</i> 30.20	24	7 a. m.	<i>l</i> 29.90
Augusta.....	30.03	1	7 a. m.	30.28	13	7 a. m.	29.84
Savannah.....	30.01	4	7 a. m.	30.15	14	2 p. m.	29.80
Thomaston.....	28.91	4	7 a. m.	29.07	15	2 p. m.	28.75
Florida.....Atsena.....	29.76	4	7 a. m.	<i>m</i> 29.92	23	9 p. m.	29.60
Jacksonville.....	30.03	5	7 a. m.	30.19	14	2 p. m.	29.86
Micanopy.....	29.90	3	9 p. m.	<i>n</i> 30.05	24	7 a. m.	29.71
St. Augustine.....	29.87	5	9 p. m.	30.01	24	7 a. m.	29.66
Salt Ponds ( <i>j</i> ).....	29.66	4	2 p. m.	<i>o</i> 29.77	12	7 a. m.	29.55
Alabama.....Greensborough.....	29.55	4	7 a. m.	<i>p</i> 29.66	14	2 p. m.	29.44
Mississippi.....Columbus.....	29.74	26	7 a. m.	29.85	14	2 p. m.	29.60
Natchez.....	29.52	26	2 p. m.	<i>q</i> 29.65	12	7 a. m.	<i>r</i> 29.40
Paulding.....	29.63	25	7 a. m.	29.72	15	2 p. m.	29.52
Texas.....Austin, [Palm].....	29.38	29	7 a. m.	29.55	12	2 p. m.	29.22
New Braunfels ( <i>j</i> ).....	27.48	19	7 a. m.	27.70	12	2 p. m.	<i>s</i> 27.48
Sisterdale.....	28.58	29	7 a. m.	28.76	12	9 p. m.	28.42
Washington.....	29.62	5	2 p. m.	<i>t</i> 29.70	12	2 p. m.	29.37
Webberville.....	29.38	29	7 a. m.	29.50	13	2 p. m.	29.27
Tennessee.....Glenwood.....	29.50	30	7 a. m.	29.66	13	2 p. m.	29.39
Memphis.....	29.69	30	7 a. m.	29.86	10	9 p. m.	29.54
Kentucky.....Bardstown.....	29.36	30	7 a. m.	29.50	13	2 p. m.	29.26
Lexington.....	28.94	9	7 a. m.	29.09	13	3 p. m.	28.82
Paris.....	29.15	9	7 a. m.	29.46	14	2 p. m.	29.25
Springdale.....	29.35	30	7 a. m.	29.52	12	9 p. m.	29.24
Ohio.....Avon.....	29.06	29	7 a. m.	29.22	3	2 p. m.	28.76
Bowling Green.....	29.20	29	7 a. m.	29.39	3	9 p. m.	29.00
Cincinnati, [Harper].....	29.18	6	7 a. m.	29.39	1	2 p. m.	<i>u</i> 29.05
Cincinnati, [Phillips].....	29.61	20	7 a. m.	29.78	4	7 a. m.	<i>v</i> 29.46
Cleveland.....	28.99	29	9 p. m.	29.15	4	7 a. m.	28.80
College Hill.....	28.67	29	2 p. m.	<i>w</i> 28.81	4	9 p. m.	28.56
Elkrun.....	28.43	29	7 a. m.	28.60	4	7 a. m.	28.28
Hillsborough.....	28.75	29	7 a. m.	<i>w</i> 28.92	1	7 a. m.	28.59
Hudson.....	28.77	29	7 a. m.	28.95	24	2 p. m.	28.63
Kelley's Island.....	29.23	29	7 a. m.	29.41	4	7 a. m.	29.06
Montville.....	28.67	29	7 a. m.	28.85	12	2 p. m.	28.45
New Lisbon ( <i>j</i> ).....	28.90	9	7 a. m.	29.05	24	2 p. m.	28.78
Northwood.....	28.78	29	7 a. m.	28.95	4	7 a. m.	28.74

*a* Same height at 7 a. m. on the 25th, and 2 p. m. on the 19th.*b* Same height at 2 p. m. on the 14th and 19th.*c* Same height at 9 p. m. on the 10th.*d* Same height at 7 a. m., 2 p. m., and 9 p. m. on the 14th.*e* Same height at 9 p. m. on the 24th.*f* Same height at 2 p. m. on the 13th and 14th.*g* Same height at 9 p. m. on the 3d and 4th.*h* Aneroid. Incomplete.*i* Incomplete.*j* Not corrected for temperature.*k* Same height at 2 p. m. on the 4th.*l* Same height at 9 p. m. on the 14th and 23d.*m* Same height at 9 p. m. on the 3d.*n* Same height at 9 p. m. on the 4th.*o* Same height at 2 p. m. on the 5th.*p* Same height at 7 a. m. on the 5th.*q* Same height at 7 a. m. on the 4th and 5th.*r* Same height at 7 a. m. on the 13th and 15th, and 2 p. m. on the 11th, 12th, 14th, and 15th, and 9 p. m. on the 11th, 12th, and 14th.*s* Same height at 2 p. m. on the 7th, and 9 p. m. on the 14th.*t* Same height at 7 a. m. on the 30th.*u* Same height at 9 p. m. on the 23d.*v* Same height at 2 p. m. on the 1st, 4th, 12th, and 22d, and at 9 p. m. on the 3d.*w* Same height at 9 p. m. on the 29th.

## No. 9.—BAROMETER, CORRECTED TO 32° F., AUGUST, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio.....							
Portsmouth.....	29.26	9	7 a. m.	29.37	4	2 p. m.	29.17
Savannah.....	28.84	9	7 a. m.	29.01	4	2 p. m.	28.71
Troy.....	29.80	30	7 a. m.	<i>a</i> 29.95	5	2 p. m.	29.57
Urbana ( <i>b</i> ).....	28.86	29	7 a. m.	29.02	?	?	?
Westerville.....	28.86	29	7 a. m.	29.02	4	7 a. m.	28.71
Michigan.....							
Battle Creek.....	29.09	29	7 a. m.	29.29	3	9 p. m.	28.90
Detroit.....	29.48	29	7 a. m.	29.71	24	2 p. m.	29.29
Fort Gratiot ( <i>b</i> ).....	29.33	29	9 a. m.	29.56	24	3 p. m.	29.16
Lake George.....	29.31	28	7 a. m.	29.63	23	2 p. m.	29.10
Marquette.....	29.30	28	7 a. m.	<i>c</i> 29.60	22	2 p. m.	29.05
Monroe Piers.....	29.39	29	6 a. m.	29.64	4	6 a. m.	29.20
New Buffalo.....	29.29	19	2 p. m.	29.68	3	9 p. m.	29.05
Ontonagon.....	29.31	28	9 a. m.	29.69	22	9 a. m.	29.03
Ottawa Point.....	29.37	29	6 a. m.	<i>d</i> 29.61	24	3 p. m.	29.17
Thunder Bay Island.....	29.35	29	6 a. m.	29.63	24	6 a. m.	29.23
Ypsilanti.....	28.98	29	7 a. m.	29.18	3	9 p. m.	28.80
Indiana.....							
Aurora.....	29.53	7	6 a. m.	29.69	12	2 p. m.	29.43
Cannelton.....	29.59	29	7 a. m.	29.76	23	2 p. m.	29.46
New Harmony.....	29.62	30	7 a. m.	29.81	3	9 p. m.	29.48
Richmond, [Haines].....	28.80	16	9 p. m.	<i>e</i> 28.98	4	7 a. m.	28.60
Illinois.....							
Batavia, [Meal].....	29.11	29	7 a. m.	29.34	22	2 p. m.	28.97
Manchester.....	28.79	29	7 a. m.	<i>f</i> 28.99	3	9 p. m.	28.59
Marengo.....	28.96	29	7 a. m.	29.20	22	2 p. m.	28.80
Upper Alton.....	29.47	29	7 a. m.	29.69	3	9 p. m.	29.26
West Urbana.....	29.20	23	9 p. m.	29.43	26	9 p. m.	28.97
Wheaton.....	29.19	29	7 a. m.	29.44	3	2 p. m.	29.00
Missouri.....							
St. Louis.....	29.49	29	7 a. m.	29.73	3	9 p. m.	29.29
Wisconsin.....							
Appleton.....	28.94	29	7 a. m.	<i>g</i> 29.22	23	2 p. m.	<i>h</i> 28.70
Beloit.....	29.16	29	7 a. m.	29.43	22	2 p. m.	28.99
Kenosha ( <i>i</i> ).....	29.52	29	7 a. m.	29.72	23	7 a. m.	29.30
Manitowoc ( <i>i</i> ).....	29.74	29	7 a. m.	29.99	22	2 p. m.	29.51
Milwaukee, [Larkin].....	29.15	29	7 a. m.	29.38	22	2 p. m.	28.95
Milwaukee, [Winkler].....	29.27	29	7 a. m.	29.52	22	2 p. m.	29.07
Superior.....	29.30	28	6 a. m.	<i>j</i> 29.61	22	6 a. m.	28.99
Iowa.....							
Border Plains.....	29.74	29	7 a. m.	29.00	7	2 p. m.	28.49
Dubuque.....	29.31	29	7 a. m.	29.64	22	2 p. m.	29.14
Fairfield.....	27.05	29	7 a. m.	27.30	3	7 a. m.	<i>k</i> 26.90
Muscatine.....	29.46	29	9 p. m.	29.78	3	7 a. m.	<i>l</i> 29.30
Minnesota.....							
Beaver Bay, [Clarke].....	29.16	29	7 a. m.	29.43	22	2 p. m.	28.92
Utah.....							
Great Salt Lake City.....	25.68			25.87			25.48
California.....							
Sacramento.....	29.89	30	7 a. m.	30.08	14	9 p. m.	29.73
San Francisco.....	29.84	30	7 a. m.	30.02	14	9 p. m.	29.70
Mexico.....							
Cordova.....	27.11	29	9 a. m.	27.22	12	3 p. m.	26.93
Mirador.....	22.91	29	7 a. m.	<i>m</i> 23.03	12	2 p. m.	22.76
Vera Cruz ( <i>n</i> ).....	29.95	29	11 p. m.	30.09	11	5 p. m.	29.82
West Indies.....							
Nassau, Bahamas ( <i>n</i> ).....	30.12						
St. George's, Bermuda.....	30.03			30.22			29.74
Central America.....							
Guatemala.....	25.25	29	10 p. m.	25.33	11	4 p. m.	25.13
South America.....							
Catharina Sophia, Surinam.....	29.89	23	6 a. m.	30.00	12	2 p. m.	29.83
Catharina Sophia, Surinam ( <i>o</i> ).....	29.71	23	6 a. m.	29.87	12	6 p. m.	<i>p</i> 29.64

*a* Same height at 2 p. m. on the 9th.  
*b* Incomplete.  
*c* Same height at 2 p. m. on the 28th.  
*d* Same height at 9 a. m. on the 29th.  
*e* Same height at 7 a. m., 2 p. m., and 9 p. m. on the 17th.  
*f* Same height at 1 p. m. on the 29th.  
*g* Same height at 9 p. m. on the 27th.  
*h* Same height at 9 p. m. on the 22d.

*i* Not corrected for temperature.  
*j* Same height at 9 a. m., 3 p. m., and 6 p. m. on the 28th.  
*k* Same height at 7 a. m. on the 4th.  
*l* Same height at 2 p. m. and 9 p. m. on the 3d.  
*m* Same height at — p. m. on the 29th.  
*n* Imperfect.  
*o* Aneroid.  
*p* Same height at 6 a. m. on the 12th, 13th, 14th, and 17th.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.70	6	9 a. m.	30.06	12	9 p. m.	29.16
Montreal .....	29.97	30	7 a. m.	30.37	12	9 p. m.	29.25
St. John's .....	29.59	22	9 p. m.	30.00	14	9 p. m.	29.14
St. Martin .....	29.77	29	10 p. m.	30.20	12	2 p. m.	29.14
Toronto .....	29.67	15	8 a. m.	30.05	12	4 p. m.	29.04
Windsor .....	29.94	21	9 p. m.	30.32	14	7 a. m.	29.25
Wolfville .....	29.60	22	7 a. m.	30.11	13	2 p. m.	28.99
Maine .....	29.91	30	7 a. m.	30.40	13	2 p. m.	29.29
Gardiner .....	29.92	30	7 a. m.	30.36	?	?	?
Perry .....	29.92	30	7 a. m.	30.37	13	2 p. m.	29.27
Portland .....	29.30	10	7 a. m.	a 29.65	13	2 p. m.	28.75
New Hampshire .. Claremont .....	29.72						
Mount Washington (b) .....	29.78	30	7 a. m.	30.19	13	2 p. m.	29.24
Shelburne .....	29.65	30	7 a. m.	30.01	13	7 a. m.	29.01
Vermont .....	28.74	21	2 p. m.	29.43	13	9 p. m.	27.93
Burlington .....	29.31	30	7 a. m.	29.79	14	7 a. m.	28.73
St. Johnsbury .....	29.78	30	7 a. m.	30.19	13	2 p. m.	29.15
Massachusetts .. Amherst .....	30.00	30	7 a. m.	c 30.35	13	2 p. m.	29.30
Cambridge .....	29.82	30	7 a. m.	30.31	13	2 p. m.	29.24
Lawrence .....	29.99	30	7 a. m.	30.37	13	2 p. m.	29.47
Nantucket .....	29.92	30	7 a. m.	30.34	13	2 p. m.	29.38
New Bedford .....	29.90	30	7 a. m.	30.28	13	2 p. m.	29.37
Westfield .....	29.28	30	7 a. m.	29.69	13	2 p. m.	28.74
Williamstown .....	29.45	30	7 a. m.	29.83	13	2 p. m.	28.87
Worcester .....	29.80	30	6 a. m.	30.21	13	2 p. m.	29.21
Rhode Island .. Providence .....	29.84	30	7 a. m.	30.23	13	2 p. m.	29.28
Connecticut .....	29.40	30	7 a. m.	29.80	13	2 p. m.	28.85
Middletown .....	29.91	30	7 a. m.	30.32	12	2 p. m.	29.41
Pomfret .....	29.30	30	7 a. m.	29.61	13	2 p. m.	28.85
New York .....	29.36	15	8 a. m.	29.74	12	9 p. m.	28.75
Buffalo .....	28.61	6	9 p. m.	d 28.93	13	7 a. m.	28.11
Cazenovia .....	30.27	30	7 a. m.	e 30.60	13	2 p. m.	29.75
Fishkill Landing .....	29.96	30	7 a. m.	30.30	13	2 p. m.	29.40
Flatbush .....	30.02	30	2 p. m.	30.41	13	2 p. m.	29.54
New York .....	29.28	15	2 p. m.	29.67	12	9 p. m.	28.77
Oswego .....	29.52	9	Sunrise.	f 29.84	13	Sunrise.	g 29.03
Penn Yan .....	29.27	15	7 a. m.	29.61	13	7 a. m.	h 28.83
Rochester, [Dewey] .....	29.35	30	7 a. m.	29.73	13	2 p. m.	28.78
Spencertown .....	29.95	30	7 a. m.	30.31	13	7 a. m.	i 29.41
Waterford .....	30.01	30	7 a. m.	30.34	17	2 p. m.	29.54
New Jersey .....	29.95	30	7 a. m.	30.34	13	7 a. m.	29.49
Lambertville .....	29.38	?	?	?	?	?	?
Newark .....	28.82	9	7 a. m.	29.15	13	7 a. m.	28.48
Pennsylvania .. Berwick (j) .....	29.20	30	7 a. m.	29.51	13	2 p. m.	28.72
Cannonsburg .....	29.37	30	7 a. m.	29.69	13	2 p. m.	28.94
Carlisle .....	29.68	30	7 a. m.	30.03	13	2 p. m.	29.18
Chambersburg .....	29.50	8	7 a. m.	29.84	13	2 p. m.	29.04
Easton .....	29.78	30	7 a. m.	30.10	12	9 p. m.	29.27
Gettysburg .....	29.73	30	7 a. m.	30.08	13	2 p. m.	29.25
Harrisburg, [Helsely] .....	29.57	8	7 a. m.	29.92	13	2 p. m.	29.09
Harrisburg, [Hickok] .....	30.03	30	7 a. m.	30.35	13	2 p. m.	29.52
Lewisburg .....	29.68	8	7 a. m.	30.00	17	2 p. m.	29.23
Morrisville .....	29.40	9	7 a. m.	29.75	13	2 p. m.	28.88
Mount Joy (k) .....	29.94	30	7 a. m.	30.33	17	2 p. m.	29.29
Nazareth .....	29.86	30	7 a. m.	30.18	17	2 p. m.	29.34
Norristown .....	28.96	8	7 a. m.	29.25	12	9 p. m.	28.60
Philadelphia .....							
Pittsburg, [Marine Hospital] .....							

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

a Same height at 7 a. m. on the 16th and 30th.

b For the first 14 days only.

c Same height at 7 a. m. on the 16th, and 9 p. m. on the 29th.

d Same height at 7 a. m. on the 8th and 9th.

e Same height at 2 and 9 p. m. on the 9th, and at 7 a. m. on the 15th.

f Same height at 2 p. m. on the 6th and 15th.

g Same height at sunset on the 12th.

h Same height at 2 and 9 p. m. on the 12th.

i Same height at 2 p. m. on the 14th.

j For the last 20 days only. Not corrected for temperature.

k Not corrected for temperature.

## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
Pennsylvania . . . . . Somerset . . . . .	27.68	9	7 a. m.	13	2 p. m.
Maryland . . . . . Annapolis . . . . .	30.02	9	7 a. m.	17	2 p. m.
Frederick . . . . .	29.75	9	7 a. m.	13	2 p. m.
Leonardtown . . . . .	29.67	9	2 p. m.	17	2 p. m.
Dist. of Columbia . . . . . Washington . . . . .	29.99	9	7 a. m.	17	7 a. m.
Virginia . . . . . Portsmouth . . . . .	30.01	9	2 p. m.	17	2 p. m.
North Carolina . . . . . Chapel Hill . . . . .	29.56	9	7 a. m.	17	7 a. m.
Murfreesborough . . . . .	29.16	9	7 a. m.	17	7 a. m.
South Carolina . . . . . All Saints . . . . .	29.96	9	7 a. m.	12	2 p. m.
Charleston . . . . .	30.05	9	2 p. m.	20	2 p. m.
St. John's (d) . . . . .	30.13	9	9 p. m.	20	2 p. m.
Georgia . . . . . Athens . . . . .	29.28	9	7 a. m.	16	2 p. m.
Atlanta (f) . . . . .	30.05	8	2 p. m.	16	2 p. m.
Augusta . . . . .	30.07	10	9 p. m.	16	9 p. m.
Savannah . . . . .	30.02	9	7 a. m.	20	2 p. m.
Thomaston . . . . .	28.94	9	7 a. m.	20	2 p. m.
Florida . . . . . Atsena . . . . .	29.80	9	9 p. m.	20	2 p. m.
Jacksonville . . . . .	30.08	7	7 a. m.	20	2 p. m.
Micanopy . . . . .	29.93	5	9 p. m.	20	2 p. m.
St. Augustine . . . . .	29.91	8	9 p. m.	20	9 p. m.
Salt Ponds (f) . . . . .	29.66	6	2 p. m.	20	7 a. m.
Warrington . . . . .	29.95	9	9 p. m.	15	9 p. m.
Mississippi . . . . . Columbus . . . . .	29.82	6	7 a. m.	19	2 p. m.
Natchez . . . . .	29.60	5	9 p. m.	19	2 p. m.
Paulding . . . . .	29.70	6	7 a. m.	15	9 p. m.
Texas . . . . . Austin, [Palm] . . . . .	29.51	6	7 a. m.	?	?
New Braunfels (f) . . . . .	27.67	6	7 a. m.	3	2 p. m.
Sisterdale . . . . .	28.66	6	7 a. m.	22	2 p. m.
Washington . . . . .	29.62	7	7 a. m.	15	2 p. m.
Webberville . . . . .	29.45	6	7 a. m.	15	9 p. m.
Tennessee . . . . . Glenwood . . . . .	29.55	6	7 a. m.	19	2 p. m.
Memphis . . . . .	29.77	6	7 a. m.	19	2 p. m.
Kentucky . . . . . Bardstown . . . . .	29.43	6	2 p. m.	19	2 p. m.
Danville . . . . .	29.05	7	2 p. m.	19	9 p. m.
Lexington . . . . .	29.00	6	7 a. m.	19	9 p. m.
Paris . . . . .	29.18	6	7 a. m.	20	7 a. m.
Springdale . . . . .	29.41	6	7 a. m.	19	9 p. m.
Ohio . . . . . Avon . . . . .	29.07	6	7 a. m.	12	9 p. m.
Bowling Green . . . . .	29.25	6	7 a. m.	19	9 p. m.
Cincinnati, [Harper] . . . . .	29.20	7	7 a. m.	19	2 p. m.
Cincinnati, [Phillips] . . . . .	29.39	7	7 a. m.	20	2 p. m.
Cleveland . . . . .	29.02	6	7 a. m.	12	2 p. m.
College Hill . . . . .	28.76	7	9 a. m.	20	9 a. m.
Elk Run . . . . .	28.47	6	7 a. m.	13	7 a. m.
Freedom . . . . .	28.33	15	7 a. m.	12	2 p. m.
Hillsborough . . . . .	28.50	6	7 a. m.	20	2 p. m.
Hudson . . . . .	28.83	7	7 a. m.	13	7 a. m.
Kelley's Island . . . . .	29.27	6	7 a. m.	19	2 p. m.
Montville . . . . .	28.72	6	7 a. m.	12	2 p. m.
New Lisbon (f) . . . . .	28.91	6	7 a. m.	13	7 a. m.
Northwood . . . . .	28.83	6	7 a. m.	21	7 a. m.
Portsmouth . . . . .	29.29	7	7 a. m.	20	7 a. m.
Savannah . . . . .	28.88	6	7 a. m.	12	9 p. m.
Troy . . . . .	29.86	6	7 a. m.	19	7 a. m.

a Same height at 7 a. m. on the 30th.

b Same height at 9 p. m. on the 9th.

c Same height at 2 p. m. on the 17th.

d Aneroid.

e Same height at 2 p. m. on the 7th, 8th, and 10th.

f Not corrected for temperature.

g Same height at 2 p. m. on the 9th and 10th.

h Same height at 7 a. m. on the 21st.

i Same height at 7 a. m. on the 10th.

j Same height at 9 p. m. on the 6th.

k Same height at 7 a. m. on the 9th.

l Same height at 7 a. m., 2 p. m., and 9 p. m. on the 6th, and at 7 a. m. and 2 p. m. on the 7th.

m Same height at 2 p. m. on the 16th.

n Same height at 9 p. m. on the 5th.

o Same height at 2 and 9 p. m. on the 6th, and at 2 p. m. on the 7th.

p Same height at 7 a. m., 2 p. m., and 9 p. m. on the 19th.

q Same height at 2 and 9 p. m. on the 19th and 20th.

r Same height at 7 a. m. on the 8th.

s Same height at 9 p. m. on the 12th.

t Same height at 7 a. m. on the 20th.



## No. 10.—BAROMETER, CORRECTED TO 32° F., SEPTEMBER, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio.....	Urbana .....	28.91	6	7 a. m.	29.24	20	7 a. m.	<i>a</i> 28.57
	Westerville .....	28.89	6	7 a. m.	29.22	20	7 a. m.	<i>b</i> 28.56
Michigan .....	Battle Creek .....	29.12	6	7 a. m.	29.49	19	7 a. m.	<i>c</i> 28.72
	Detroit .....	29.54	11	7 a. m.	29.90	12	2 p. m.	29.11
	Grand Haven .....	29.42	6	7 a. m.	29.82	12	9 p. m.	28.95
	Lake George .....	29.39	6	2 p. m.	29.76	12	2 p. m.	28.70
	Marquette .....	29.34	6	7 a. m.	29.73	12	2 p. m.	28.76
	Monroe Piers .....	29.44	6	9 a. m.	29.86	12	6 p. m.	29.01
	New Buffalo .....	29.32	6	7 a. m.	29.72	19	7 a. m.	28.89
	Ontonagon .....	29.39	6	9 a. m.	29.75	12	9 a. m.	28.81
	Ottawa Point .....	29.41	6	9 a. m.	29.84	12	3 p. m.	28.79
	Thunder Bay Island .....	29.41	6	9 a. m.	29.84	12	3 p. m.	28.77
	Ypsilanti .....	29.03	6	7 a. m.	29.36	20	8½ p. m.	28.22
Indiana .....	Aurora .....	29.56	6	6 a. m.	29.87	19	9 p. m.	29.19
	Cannelton .....	29.64	6	7 a. m.	29.97	19	2 p. m.	29.30
	Michigan City .....	29.40	6	9 a. m.	29.78	26	6 p. m.	29.17
	New Harmony .....	29.66	6	7 a. m.	30.01	19	2 p. m.	29.31
Illinois .....	Batavia, [Mead] .....	29.15	6	7 a. m.	29.52	19	7 a. m.	28.72
	Manchester .....	28.85	6	7 a. m.	29.18	18	9 p. m.	28.51
	Marengo .....	29.01	6	2 p. m.	29.39	19	7 a. m.	28.57
	Upper Alton .....	29.51	7	7 a. m.	29.80	18	9 p. m.	29.17
	West Urbana .....	29.13	5	7 a. m.	<i>d</i> 29.50	19	2 p. m.	28.77
	Wheaton .....	29.22	6	7 a. m.	29.63	19	7 a. m.	28.72
Missouri .....	St. Louis .....	29.54	6	7 a. m.	29.90	18	9 p. m.	29.21
Wisconsin .....	Appleton .....	28.97	6	9 p. m.	29.35	19	7 a. m.	28.54
	Beloit .....	29.20	6	7 a. m.	29.60	19	7 a. m.	28.70
	Kenosha ( <i>e</i> ) .....	29.54	6	7 a. m.	29.90	19	7 a. m.	29.07
	Manitowoc ( <i>e</i> ) .....	29.74	6	7 a. m.	30.15	12	2 p. m.	29.26
	Milwaukee, [Larkin] .....	29.17	6	7 a. m.	29.58	19	7 a. m.	28.67
	Milwaukee, [Winkler] .....	29.32	6	7 a. m.	29.71	19	7 a. m.	28.80
	Superior .....	29.31	6	6 a. m.	29.74	30	6 a. m.	28.75
Iowa .....	Border Plains .....	29.73	6	7 a. m.	29.17	17	2 p. m.	28.40
	Dubuque .....	29.35	6	7 a. m.	29.77	19	7 a. m.	28.54
	Fairfield .....	27.14	5	7 a. m.	27.46	26	2 p. m.	26.89
	Muscatine .....	29.54	5	7 a. m.	29.93	19	7 a. m.	29.18
Minnesota .....	Beaver Bay .....	29.19	6	7 a. m.	29.61	30	7 a. m.	28.66
Utah .....	Great Salt Lake City .....	25.79						
California .....	Sacramento .....	29.93	30	7 a. m.	30.13	22	9 p. m.	29.72
	San Francisco .....	29.87	7	7 a. m.	30.03	22	9 p. m.	29.64
	Santa Clara .....	29.77	28	7 a. m.	29.95	23	2 p. m.	29.56
Mexico .....	Cordova .....	27.12	6	9 a. m.	27.30	14	3 p. m.	27.03
	Mirador .....	22.95	6	7 a. m.	23.11	16	2 p. m.	22.87
West Indies .....	St. George's, Bermuda .....	29.96	?	?	30.15	?	?	29.80
Central America .....	Guatemala .....	25.23	1	10 p. m.	25.31	12	4 p. m.	25.10
South America .....	Catharina Sophia, Surinam .....	29.87	1	6 a. m.	29.92	3	2 p. m.	29.81
	Catharina Sophia, Surinam ( <i>f</i> ) .....	29.64	30	6 p. m.	29.77	17	6 p. m.	29.54

*a* Same height at 2 and 9 p. m. on the 19th.*b* Same height at 2 p. m. on the 19th.*c* Same height at 9 p. m. on the 12th.*d* Same height at 7 a. m. on the 6th.*e* Not corrected for temperature.*f* Aneroid.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.66	16	9 a. m.	29.96	18	9 a. m.	29.28
Montreal .....	29.86	16	7 a. m.	30.42	27	2 p. m.	29.39
St. John's .....	29.39	6	7 a. m.	<i>a</i> 29.80	28	7 a. m.	28.83
St. Martin .....	29.80	12	6 a. m.	30.16	18	2 p. m.	29.24
Toronto .....	29.61	16	6 a. m.	29.96	18	6 a. m.	29.02
Windsor .....	29.75	17	2 p. m.	30.23	27	9 p. m.	29.14
Wolfville .....	29.53	17	7 a. m.	30.22	2	2 p. m.	29.14
Maine .....							
Gardiner .....	29.83	16	9 p. m.	30.32	27	2 p. m.	29.26
Perry .....	29.77	12	2 p. m.	30.18	27	9 p. m.	29.15
Portland .....	29.81	16	9 p. m.	30.31	27	2 p. m.	29.26
Steuben .....	29.78	16	9 p. m.	30.26	27	2 p. m.	29.19
New Hampshire .. Claremont .....	29.21	16	9 p. m.	29.62	27	2 p. m.	28.75
Shelburne ( <i>b</i> ) .....	29.64	?	?	?	?	?	?
Vermont .....							
Burlington .....	29.54	12	7 a. m.	29.98	27	2 p. m.	29.09
Lunenburg .....	29.13	16	9 p. m.	29.93	27	9 p. m.	28.72
St. Johnsbury .....	29.28	16	9 p. m.	29.72	27	2 p. m.	28.79
Massachusetts .....							
Amherst .....	29.69	16	9 p. m.	30.15	27	2 p. m.	29.20
Bridgewater .....	29.68	16	9 p. m.	30.14	27	7 a. m.	29.25
Cambridge .....	29.87	16	9 p. m.	30.36	27	2 p. m.	29.35
Lawrence .....	29.75	16	9 p. m.	30.21	27	2 p. m.	29.21
Nantucket .....	29.91	1	7 a. m.	30.34	27	2 p. m.	29.38
New Bedford .....	29.85	16	9 p. m.	30.33	27	2 p. m.	29.33
Westfield .....	29.83	16	9 p. m.	30.28	27	7 a. m.	29.41
Williamstown .....	29.21	16	9 p. m.	29.64	27	7 a. m.	28.77
Worcester .....	29.35	16	9 p. m.	29.81	27	2 p. m.	28.82
Rhode Island .....							
Providence .....	29.74	16	10 p. m.	30.21	27	2 p. m.	29.23
Connecticut .....							
Middletown .....	29.72	16	9 p. m.	30.17	27	2 p. m.	29.31
Pomfret .....	29.31	16	9 p. m.	29.76	27	2 p. m.	28.79
Wallingford .....	29.83	16	9 p. m.	30.29	27	2 p. m.	29.35
New York .....							
Bellport .....	29.26	16	9 p. m.	29.61	27	7 a. m.	28.88
Buffalo .....	29.34	?	?	?	18	8 a. m.	29.18
Cazenovia .....	28.54	16	7 a. m.	28.90	27	7 a. m.	28.16
Charlotte .....	29.69	16	6 a. m.	30.09	18	6 a. m.	29.22
Flatbush .....	29.92	16	9 p. m.	30.30	27	2 p. m.	29.44
New York city .....	29.98	16	2 p. m.	30.38	27	7 a. m.	29.52
Oswego .....	29.33	16	2 p. m.	29.58	18	7 a. m.	28.77
Penn Yan .....	29.44	16	2 p. m.	29.74	27	Sunrise	29.04
Rochester, [Dewey] .....	29.28	16	7 a. m.	29.63	18	7 a. m.	28.89
Sackett's Harbor .....	29.69	16	9 a. m.	30.13	27	3 p. m.	29.34
Spencertown .....	29.26	16	7 a. m.	29.69	27	2 p. m.	28.80
Waterford .....	29.90	16	7 a. m.	30.29	27	7 a. m.	29.47
New Jersey .....							
Lambertville .....	29.98	16	9 p. m.	30.34	27	7 a. m.	29.54
Newark .....	29.92	17	7 a. m.	30.34	27	7 a. m.	29.53
Pennsylvania .....							
Altoona ( <i>c</i> ) .....	29.47	23	7 a. m.	<i>d</i> 29.80	14	7 a. m.	<i>e</i> 29.10
Berwick ( <i>c</i> ) .....	29.40	7	7 a. m.	<i>f</i> 29.67	26	7 a. m.	28.84
Cannonsburg .....	28.85	16	7 a. m.	29.10	26	9 p. m.	28.39
Carlisle ( <i>g</i> ) .....	29.23						
Chambersburg .....	29.34	16	7 a. m.	29.69	25	9 p. m.	29.01
Easton .....	29.62	16	7 a. m.	<i>h</i> 30.02	27	7 a. m.	29.23
Gettysburg .....	29.47	16	9 p. m.	29.52	27	7 a. m.	29.06
Harrisburg, [Heisely] .....	29.77	16	7 a. m.	30.11	27	7 a. m.	29.36
Harrisburg, [Hickok] .....	29.71	16	7 a. m.	30.09	27	7 a. m.	29.33
Lewisburg .....	29.55	16	7 a. m.	29.94	27	7 a. m.	29.16
Morrisville .....	30.04	16	2 p. m.	<i>i</i> 30.42	27	7 a. m.	29.57
Mount Joy ( <i>e</i> ) .....	29.66	16	2 p. m.	30.00	27	7 a. m.	29.18
Nazareth .....	29.36	16	7 a. m.	29.75	27	7 a. m.	28.95
Norristown .....	29.90	17	7 a. m.	30.26	27	7 a. m.	29.45

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

*a* Same height at 7 a. m., 2 p. m., and 9 p. m. on the 5th.*b* Incomplete.*c* Not corrected for temperature.*d* Same height at 7 a. m. and 2 p. m. on the 24th, and at 2 p. m. on 25th.*e* Same height at 9 p. m. on the 17th.*f* Same height at 2 p. m. and 9 p. m. on the 7th.*g* For the first 21 days of the month only.*h* Same height at 2 p. m. on the 16th.*i* Same height at 9 p. m. on the 16th.



## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania	Philadelphia	29.84	16	9 p. m.	30.19	27	7 a. m.	29.47
	Pittsburg, [Marine Hospital]	28.98	16	7 a. m.	29.28	26	9 p. m.	28.47
	Sewickleyville	29.08	24	7 a. m.	29.34	26	2 p. m.	<i>a</i> 28.56
	Somerset	27.65	16	7 a. m.	27.91	26	9 p. m.	27.19
Maryland	Annapolis	30.03	16	7 a. m.	<i>b</i> 30.38	26	9 p. m.	29.60
	Chestertown	29.96	16	2 p. m.	30.38	27	7 a. m.	29.59
	Frederick	29.75	16	7 a. m.	30.12	26	9 p. m.	29.29
Dist. of Columbia	Washington	30.01	16	2 p. m.	30.38	26	9 p. m.	29.51
Virginia	Portsmouth	30.02	16	7 a. m.	30.41	26	2 p. m.	29.32
North Carolina	Chapel Hill	29.59	16	9 p. m.	29.91	26	9 p. m.	29.04
	Davidson College	29.21	16	9 p. m.	29.51	26	9 p. m.	28.68
	Murfreesborough	29.27	16	7 a. m.	29.61	26	9 p. m.	28.90
South Carolina	All Saints	29.99	16	2 p. m.	<i>c</i> 30.27	27	7 a. m.	29.54
	Charleston	30.09	16	9 p. m.	30.37	26	9 p. m.	29.62
	St. John's ( <i>d</i> )	30.12	16	2 p. m.	30.43	27	7 a. m.	29.66
Georgia	Atlanta ( <i>e</i> )	30.01	11	2 p. m.	<i>f</i> 30.20	28	2 p. m.	29.63
	Augusta	30.27	31	7 a. m.	30.45	18	2 p. m.	30.07
	Savannah	30.05	30	7 a. m.	30.31	27	9 p. m.	29.60
	Thomaston	29.00	30	9 p. m.	29.25	27	7 a. m.	<i>g</i> 28.66
Florida	Atsena	29.73	17	7 a. m.	<i>h</i> 29.89	28	2 p. m.	29.22
	Jacksonville	30.06	30	7 a. m.	30.31	27	2 p. m.	29.69
	Micanopy	29.93	30	7 a. m.	30.14	28	2 p. m.	28.53
	St. Augustine	29.91	17	7 a. m.	30.12?	27	9 p. m.	29.61
	Salt Ponds ( <i>e</i> )	28.58	7	2 p. m.	<i>i</i> 29.71	28	7 a. m.	29.32
	Warrington	30.03	30	7 a. m.	30.33	27	2 p. m.	29.67
Alabama	Greensborough ( <i>j</i> )	29.69	?	?	?	?	?	?
Mississippi	Columbus	29.90	30	7 a. m.	30.21	26	9 p. m.	29.53
	Hernando	29.61	29	9 p. m.	29.98	26	2 p. m.	<i>a</i> 29.26
	Natchez	29.64	30	7 a. m.	<i>k</i> 29.90	27	2 p. m.	<i>a</i> 29.35
Texas	Austin, [Palu]	29.55	30	7 a. m.	29.92	16	2 p. m.	29.20
	Bonham	29.49	30	7 a. m.	29.84	16	2 p. m.	29.05
	New Braunfels	27.79	30	7 a. m.	27.99	16	9 p. m.	27.63
	Sisterdale	28.73	30	7 a. m.	29.04	16	2 p. m.	28.42
	Washington	29.72	30	7 a. m.	30.05	16	2 p. m.	29.29
	Webberville	29.55	30	9 p. m.	29.82	26	2 p. m.	29.29
Tennessee	Glenwood	29.63	30	7 a. m.	29.92	26	2 p. m.	29.11
	Memphis	29.86	30	7 a. m.	30.21	26	2 p. m.	29.45
Kentucky	Bardstown	29.51	29	9 p. m.	29.78	26	2 p. m.	29.00
	Danville	29.10	30	7 a. m.	29.34	26	2 p. m.	28.61
	Lexington	29.05	30	7 a. m.	29.30	26	2 p. m.	28.49
	Paris	29.24	30	7 a. m.	29.54	26	2 p. m.	28.67
	Springdale	29.46	30	7 a. m.	29.75	26	2 p. m.	28.88
Ohio	Avon	29.09	30	2 p. m.	29.35	26	2 p. m.	28.58
	Bowling Green	29.27	30	7 a. m.	30.55	26	2 p. m.	28.75
	Brecksville	29.27	15	2 p. m.	29.67	4	7 a. m.	<i>l</i> 28.90
	Cincinnati, [Harper]	29.29	30	7 a. m.	29.58	26	2 p. m.	28.73
	Cincinnati, [Phillips]	29.46	30	7 a. m.	29.77	26	2 p. m.	28.88
	Cleveland	29.04	11	9 p. m.	<i>m</i> 29.25	26	2 p. m.	28.61
	College Hill	28.72	30	2 p. m.	<i>n</i> 28.93	26	9 p. m.	28.00
	Elk Run	28.51	16	7 a. m.	28.80	26	9 p. m.	28.05
	Freedom	28.50	30	7 a. m.	<i>o</i> 28.86	3	2 p. m.	28.07
	Hillsborough	28.34	30	7 a. m.	28.59	26	2 p. m.	27.71
	Hudson	28.84	16	7 a. m.	29.10	26	2 p. m.	28.34
	Kelley's Island	29.29	30	7 a. m.	29.54	26	2 p. m.	28.86
	Montville	28.73	31	7 a. m.	28.99	26	2 p. m.	28.21
	New Lisbon ( <i>e</i> )	28.92	16	7 a. m.	29.16	26	2 p. m.	<i>a</i> 28.46

*a* Same height at 9 p. m. on the 26th.*b* Same height at 2 p. m. and 9 p. m. on the 16th.*c* Same height at 9 p. m. on the 16th.*d* Aneroid.*e* Not corrected for temperature.*f* Same height at 2 p. m. on the 12th.*g* Same height at 2 p. m. on the 27th.*h* Same height at 2 p. m. on the 17th.*i* Same height at 2 p. m. on the 17th and 18th.*j* Incomplete.*k* Same height at 9 p. m. on the 28th.*l* Same height at 9 p. m. on the 3d.*m* Same height at 7 a. m., 2 p. m., and 9 p. m. on the 30th.*n* Same height at 9 p. m. on the 30th.*o* Same height at 7 a. m. on the 31st.

## No. 11.—BAROMETER, CORRECTED TO 32° F., OCTOBER, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio	Portsmouth	29.36	30	7 a. m.	29.55	26	2 p. m.	28.87
	Ripley	29.46	30	7 a. m.	29.75	26	9 p. m.	28.99
	Savannah	28.90	30	7 a. m.	29.13	26	2 p. m.	28.36
	Troy	29.90	30	7 a. m.	30.18	26	2 p. m.	29.31
	Urbana	28.94	30	7 a. m.	29.21	26	2 p. m.	28.35
	Westerville	28.91	30	7 a. m.	29.16	26	2 p. m.	28.33
Michigan	Battle Creek	29.14	30	7 a. m.	29.45	17	9 p. m.	28.66
	Detroit	29.57	5	7 a. m.	29.80	27	7 a. m.	29.36
	Grand Haven	29.44	30	2 p. m.	<i>a</i> 29.70	17	9 p. m.	28.91
	Marquette	29.31	30	7 a. m.	29.67	12	9 p. m.	28.58
	Monroe, [Bowlsby]	29.26	30	7 a. m.	29.59	?	?	?
	Monroe Piers	29.46	30	9 a. m.	29.77	26	3 p. m.	28.95
	New Buffalo	29.35	30	7 a. m.	29.64	26	7 a. m.	28.86
	Ontonagon ( <i>b</i> )	29.39	29	3 p. m.	29.77	5	3 p. m.	28.97
	Ottawa Point	29.40	30	9 a. m.	29.71	17	6 p. m.	29.02
	Thunder Bay Island	29.37	30	9 a. m.	29.69	18	6 a. m.	<i>c</i> 28.98
	Ypsilanti	29.02	30	7 a. m.	29.26	26	2 p. m.	28.58
Indiana	Aurora	29.59	30	6 a. m.	29.85	26	9 a. m.	29.10
	Cannelton	29.72	30	7 a. m.	30.05	26	2 p. m.	29.18
	Michigan City	29.46	20	3 p. m.	29.69	22	9 a. m.	29.08
	New Harmony	29.75	50	7 a. m.	<i>d</i> 30.03	27	2 p. m.	29.25
	Richmond, [Haines]	28.84	11	2 p. m.	<i>e</i> 29.10	26	2 p. m.	28.30
Illinois	Batavia, [Mead]	29.20	30	7 a. m.	<i>f</i> 29.48	17	2 p. m.	28.75
	Manchester	28.91	30	7 a. m.	29.22	17	1 p. m.	28.48
	Marengo	29.03	30	7 a. m.	29.31	17	9 p. m.	28.67
	West Urbana	29.17	30	7 a. m.	29.46	26	2 p. m.	28.73
	Wheaton	29.26	30	7 a. m.	29.59	17	2 p. m.	28.75
Missouri	St. Louis, [Engelman]	29.51	30	7 a. m.	29.99	17	2 p. m.	29.15
Wisconsin	Appleton	29.00	20	7 a. m.	29.40	17	2 p. m.	28.53
	Beloit	29.23	30	7 a. m.	29.56	17	7 a. m.	28.82
	Delafield	29.04	31	7 a. m.	29.43	17	2 p. m.	28.56
	Kenosha ( <i>g</i> )	29.52	30	7 a. m.	29.81	16	2 p. m.	<i>h</i> 29.07
	Manitowoc ( <i>g</i> )	29.75	30	7 a. m.	30.09	17	2 p. m.	29.28
	Milwaukee, [Larkin]	29.21	30	7 a. m.	29.50	26	7 a. m.	<i>i</i> 28.77
	Milwaukee, [Winkler]	29.31	30	7 a. m.	29.65	17	2 p. m.	28.83
	Superior City	29.34	30	6 a. m.	29.76	16	3 p. m.	28.78
Iowa	Dubuque	29.39	30	7 a. m.	29.75	17	7 a. m.	28.90
	Fairfield	27.26	30	7 a. m.	27.59	16	9 p. m.	26.77
	Muscatine	29.56	30	7 a. m.	29.87	17	7 a. m.	29.21
Minnesota	Beaver Bay	29.22	30	7 a. m.	29.62	16	2 p. m.	28.68
Utah	Great Salt Lake City	29.61	?	?	26.20	?	?	25.48
California	Sacramento	29.94	18	7 a. m.	30.18	15	9 p. m.	29.69
	San Francisco	29.86	18	7 a. m.	30.08	15	9 p. m.	29.67
	Santa Clara	29.78	18	7 a. m.	29.95	16	2 p. m.	<i>i</i> 29.63
Mexico	Cordova	27.14	30	9 a. m.	27.37	21	3 p. m.	26.97
	Mirador	22.96	30	8 p. m.	23.15	22	2 p. m.	22.75
West Indies	St. George's, Bermuda	29.86	?	?	30.20	?	?	29.49
	Turk's Island, Bahamas	29.85	17	6 p. m.	29.97	27	6 a. m.	<i>j</i> 29.74
Central America	Guatemala	25.21	30	10 a. m.	25.32	26	4 p. m.	25.06
South America	Catharina Sophia, Surinam	29.85	28	6 a. m.	29.91	21	2 p. m.	29.79
	Catharina Sophia, Surinam ( <i>k</i> )	29.79	3	6 p. m.	29.95	25	6 a. m.	<i>l</i> 29.69

*a* Same height at 9 p. m. on the 30th.*b* No observations on the 19th, 30th, and 31st.*c* Same height at 3 p. m. and 6 p. m. on the 13th.*d* Same height at 9 p. m. on the 29th.*e* Same height at 2 p. m. and 9 p. m. on the 11th.*f* Same height at 2 p. m. on the 30th.*g* Not corrected for temperature.*h* Same height at 7 a. m. on the 26th.*i* Same height at 2 p. m. on the 26th.*j* Same height at 6 p. m. on the 26th.*k* Aneroid.*l* Same height at 6 p. m. on the 24th.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1859.\*

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.68	6	9 a. m.	30.20	19	9 a. m.	29.18
Montreal .....	30.03	7	7 a. m.	30.60	13	2 p. m.	29.28
St. John's .....	29.60	17	7 a. m.	30.26	11	9 p. m.	28.99
St. Martin .....	29.94	7	6 a. m.	30.44	13	2 p. m.	29.18
Toronto .....	29.67	6	10 a. m.	30.25	26	½ a. m.	28.88
Windsor .....	30.04	16	9 p. m.	30.57	11	2 p. m.	29.28
Wolfville .....	29.80	17	7 a. m.	30.41	13	9 p. m.	29.16
Maine .....	30.04	7	7 a. m.	30.52	13	9 p. m.	29.21
Gardiner .....	30.03	7	2 p. m.	30.60	13	9 p. m.	29.07
Perry .....	30.03	7	7 a. m.	30.56	13	9 p. m.	29.17
Portland .....	30.02	7	9 p. m.	30.62	13	9 p. m.	29.19
Steuben .....	29.39	7	7 a. m.	29.89	13	2 p. m.	28.61
New Hampshire .. Claremont .....	29.82	?	?	?	?	?	?
Shelburne (a) .....	29.70	6	9 p. m.	30.26	13	7 a. m.	28.94
Vermont .....	28.81	15	2 p. m.	29.65	13	2 p. m.	28.08
Burlington .....	29.44	7	7 a. m.	30.01	13	2 p. m.	28.63
Lunenburg .....	29.86	7	7 a. m.	30.41	19	2 p. m.	29.24
St. Johnsbury .....	29.85	7	7 a. m.	30.36	13	9 p. m.	29.08
Massachusetts .. Amherst .....	30.06	7	7 a. m.	30.63	13	2 p. m.	<i>b</i> 29.37
Bridgewater .....	29.94	7	7 a. m.	30.43	13	9 p. m.	29.16
Cambridge .....	29.95	7	7 a. m.	30.63	13	9 p. m.	29.47
Lawrence .....	30.04	7	7 a. m.	<i>c</i> 30.54	13	9 p. m.	29.37
Nantucket .....	29.98	7	7 a. m.	30.53	13	2 p. m.	29.33
New Bedford .....	29.37	6	9 p. m.	29.82	13	2 p. m.	28.65
Westfield .....	29.51	7	7 a. m.	30.07	13	2 p. m.	28.84
Williamstown .....	29.93	7	Sunrise.	30.43	13	2 p. m.	29.26
Worcester .....	29.93	7	7 a. m.	30.43	13	2 p. m.	29.21
Rhode Island .. Providence .....	29.48	7	7 a. m.	29.99	13	9 p. m.	28.83
Connecticut .....	30.01	7	7 a. m.	30.52	13	2 p. m.	29.27
Middletown .....	29.39	7	7 a. m.	29.76	13	2 p. m.	28.84
New York .....	29.38	6	8 a. m.	29.90	12	2 p. m.	28.71
Bellport .....	28.61	11	9 p. m.	29.38	19	2 p. m.	27.97
Buffalo .....	29.77	6	3 p. m.	30.33	19	3 p. m.	29.09
Cazenovia .....	30.04	17	7 a. m.	30.54	13	2 p. m.	29.28
Charlotte .....	30.11	7	2 p. m.	30.59	13	2 p. m.	29.35
Flatbush .....	29.36	6	2 p. m.	29.84	19	2 p. m.	28.69
New York city .....	29.51	6	Sunset.	29.98	19	2 p. m.	28.85
Oswego .....	29.34	6	7 a. m.	29.83	19	2 p. m.	28.66
Penn Yan. .....	29.78	6	9 a. m.	30.37	13	6 a. m.	29.16
Rochester, [Dewey] .....	29.41	7	7 a. m.	29.89	13	2 p. m.	28.70
Sackett's Harbor .....	30.03	7	7 a. m.	30.53	13	2 p. m.	29.34
Spencertown .....	30.11	7	2 p. m.	<i>d</i> 30.52	13	2 p. m.	29.50
Waterford .....	30.08	7	7 a. m.	30.60	19	6 p. m.	29.48
New Jersey .....	29.62	6	9 p. m.	30.00	13	7 a. m.	<i>f</i> 29.00
Lambertville .....	29.34	6	7 a. m.	<i>g</i> 29.84	13	7 a. m.	28.75
Newark .....	28.88	24	7 a. m.	29.28	19	7 a. m.	28.30
Pennsylvania .. Altoona (e) .....	29.45	7	7 a. m.	29.85	19	7 a. m.	28.80
Berwick (e) .....	29.79	7	7 a. m.	30.22	19	2 p. m.	29.15
Cannonsburg .....	29.59	7	7 a. m.	30.01	19	7 a. m.	28.94
Chambersburg .....	29.88	7	7 a. m.	30.29	19	2 p. m.	29.25
Easton .....	29.82	7	7 a. m.	30.28	13	7 a. m.	<i>h</i> 29.20
Gettysburg .....	29.65	7	7 a. m.	30.10	19	2 p. m.	29.00
Harrisburg, [Heisely] .....	30.18	6	9 p. m.	<i>i</i> 30.55	13	2 p. m.	29.55
Harrisburg, [Hickok] .....	29.75	7	2 p. m.	30.16	13	7 a. m.	29.16
Lewisburg .....	29.51	7	7 a. m.	29.95	10	9 p. m.	29.01
Morrisville .....	30.05	7	7 a. m.	30.48	19	2 p. m.	29.35
Mount Joy (e) .....	29.96	7	7 a. m.	30.34	13	2 p. m.	29.44
Nazareth (a) .....							
Norristown .....							
Philadelphia .....							

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

*a* Incomplete.*b* Same height at 9 p. m. on the 13th.*c* Same height at 2 p. m. on the 7th.*d* Same height at 9 p. m. on the 7th.*e* Not corrected for temperature.*f* Same height at 2 p. m. on the 13th.*g* Same height at 7 a. m. and 2 p. m. on the 7th.*h* Same height at 7 a. m. and 2 p. m. on the 18th.*i* Same height at 7 a. m., 2 p. m., and 9 p. m. on the 7th.

## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania . . . . .							
Pittsburg, [Marine Hospital] . . . . .	29.01	24	7 a. m.	29.38	19	7 a. m.	28.43
Sewickleyville . . . . .	29.13	■	7 a. m.	29.54	19	7 a. m.	28.53
Somerset . . . . .	27.70	7	7 a. m.	28.00	19	7 a. m.	27.21
Maryland . . . . .							
Annapolis . . . . .	30.14	7	7 a. m.	30.52	19	7 a. m.	29.58
Chestertown . . . . .	30.12	7	7 a. m.	30.49	19	7 a. m.	29.54
Frederick . . . . .	29.86	7	7 a. m.	30.27	19	7 a. m.	29.21
Dist. of Columbia . . . . .							
Washington . . . . .	30.12	7	7 a. m.	30.50	19	7 a. m.	29.52
Virginia . . . . .							
Portsmouth . . . . .	30.15	7	9 p. m.	30.46	13	2 p. m.	29.52
North Carolina . . . . .							
Chapel Hill . . . . .	29.68	■	7 a. m.	30.06	13	7 a. m.	29.18
Davidson College . . . . .	29.29	4	7 a. m.	29.67	18	9 p. m.	28.78
Murfreesborough . . . . .	29.37	?	?	?	13	7 a. m.	28.90
South Carolina . . . . .							
All Saints . . . . .	30.08	3	2 p. m.	30.52	13	2 p. m.	29.67
Charleston . . . . .	30.18	4	7 a. m.	30.55	13	7 a. m.	29.80
St. John's (a) . . . . .	30.25	3	2 p. m.	30.66	13	2 p. m.	29.87
Georgia . . . . .							
Atlanta (b) . . . . .	30.09	3	2 p. m.	30.40	18	2 p. m.	29.63
Augusta . . . . .	30.31	3	9 p. m.	30.63	21	9 p. m.	30.05
Thomaston . . . . .	29.09	4	7 a. m.	29.39	11	2 p. m.	28.82
Florida . . . . .							
Atsena . . . . .	29.88	3	9 p. m.	30.06	18	2 p. m.	29.55
Jacksonville . . . . .	30.20	3	7 a. m.	30.48	18	2 p. m.	29.81
Micanopy . . . . .	30.06	15	7 a. m.	c 30.30	18	2 p. m.	29.74
St. Augustine . . . . .	30.02	3	2 p. m.	30.27	18	2 p. m.	29.71
Salt Ponds (b) . . . . .	29.71	25	2 p. m.	29.90	13	2 p. m.	29.50
Warrington . . . . .	30.11	14	7 a. m.	30.41	18	7 a. m.	29.75
Alabama . . . . .							
Greensborough (d) . . . . .	29.74	?	?	?	18	7 a. m.	29.25
Mississippi . . . . .							
Columbus . . . . .	29.92	14	7 a. m.	30.26	18	7 a. m.	29.42
Hernando . . . . .	29.59	14	7 a. m.	29.88	18	7 a. m.	29.08
Natchez . . . . .	29.66	13	9 p. m.	e 29.95	21	7 a. m.	f 29.30
Texas . . . . .							
Austin, [Palm] . . . . .	29.57	13	7 a. m.	30.19	11	2 p. m.	29.15
Bonham . . . . .	29.46	13	9 p. m.	29.98	11	2 p. m.	28.91
New Braunfels . . . . .	27.81	13	7 a. m.	28.12	11	9 p. m.	27.60
Sisterdale . . . . .	28.72	13	7 a. m.	29.30	20	2 p. m.	27.93
Washington . . . . .	29.72	13	7 a. m.	30.23	20	2 p. m.	29.40
Webberville . . . . .	29.53	14	7 a. m.	29.90	11	2 p. m.	29.26
Tennessee . . . . .							
Glenwood . . . . .	29.62	24	7 a. m.	29.99	18	2 p. m.	29.05
Memphis . . . . .	29.81	13	9 p. m.	30.10	18	7 a. m.	29.32
Kentucky . . . . .							
Bardstown . . . . .	29.51	24	7 a. m.	29.83	18	9 p. m.	29.05
Danville . . . . .	29.10	24	7 a. m.	29.41	18	2 p. m.	28.60
Lexington . . . . .	29.05	24	7 a. m.	29.41	18	2 p. m.	g 28.54
Paris . . . . .	29.25	24	7 a. m.	29.64	18	9 p. m.	28.74
Springdale . . . . .	29.47	24	7 a. m.	29.86	18	2 p. m.	28.94
Ohio . . . . .							
Avon . . . . .	29.09	24	7 a. m.	29.58	19	7 a. m.	28.52
Bowling Green . . . . .	29.26	23	9 p. m.	29.79	25	9 p. m.	28.66
Brecksville . . . . .	29.28	24	7 a. m.	29.77	12	9 p. m.	28.69
Cincinnati, [Harper] . . . . .	29.28	24	7 a. m.	29.71	12	2 p. m.	28.74
Cincinnati, [Phillips] . . . . .	29.46	24	7 a. m.	29.89	18	9 p. m.	h 28.88
Cleveland . . . . .	29.05	24	7 a. m.	29.46	19	7 a. m.	28.51
College Hill . . . . .	28.72	24	9 a. m.	29.35	12	9 a. m.	28.25
Elk Run . . . . .	28.55	24	7 a. m.	28.98	19	7 a. m.	27.96
Freedom . . . . .	28.50	24	7 a. m.	29.05	12	2 p. m.	27.91
Hillsborough . . . . .	28.39	24	7 a. m.	29.28	12	2 p. m.	27.92
Hudson . . . . .	28.84	24	7 a. m.	29.32	19	7 a. m.	28.23
Kelley's Island . . . . .	29.31	24	2 p. m.	29.82	25	9 p. m.	28.78
Montville . . . . .	28.73	■	7 a. m.	29.20	19	7 a. m.	28.13
New Lisbon (b) . . . . .	28.95	24	7 a. m.	29.34	19	7 a. m.	28.39
Northwood . . . . .	28.83	24	7 a. m.	29.30	12	2 p. m.	28.38
Portsmouth . . . . .	29.36	24	7 a. m.	29.67	18	9 p. m.	28.93
Ripley . . . . .	29.48	■	7 a. m.	29.78	18	9 p. m.	28.91
Savannah . . . . .	28.90	24	7 a. m.	29.37	12	2 p. m.	28.38

a Aneroid.

b Not corrected for temperature.

c Same height at 9 p. m. on the 14th.

d Incomplete.

e Same height at 7 a. m. and 2 p. m. on the 14th.

f Same height at 3 p. m. on the 11th and 9 p. m. on the 20th.

g Same height at 9 p. m. on the 18th.

h Same height at 7 a. m. and 2 p. m. on the 12th.



## No. 12.—BAROMETER, CORRECTED TO 32° F., NOVEMBER, 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.		
			DATE.		HEIGHT.	DATE.		HEIGHT.
			Day.	Hour.		Day.	Hour.	
		<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Ohio.....	Troy .....	29.87	24	7 a. m.	30.30	12	2 p. m.	29.21
	Urbana .....	28.93	24	7 a. m.	30.37	12	2 p. m.	28.39
	Westerville.....	28.93	24	7 a. m.	29.36	12	2 p. m.	28.42
Michigan.....	Battle Creek.....	29.11	24	7 a. m.	29.63	25	9 p. m.	28.52
	Detroit .....	29.59	24	7 a. m.	29.99	10	7 a. m.	29.23
	Grand Haven.....	29.42	24	7 a. m.	29.97	25	9 p. m.	28.70
	Marquette.....	29.30	5	9 p. m.	29.87	25	9 p. m.	28.48
	Monroe, [Bowlsby] .....	29.29	24	7 a. m.	29.80	25	9 p. m.	28.60
	Monroe Piers .....	29.45	24	6 a. m.	30.00	12	3 p. m.	28.89
	New Buffalo.....	29.31	23	9 p. m.	29.81	25	1 p. m.	28.70
	Ontonagon.....	29.39	5	3 p. m.	29.99	25	3 p. m.	28.69
	Ottawa Point .....	29.39	11	9 a. m.	30.13	25	6 p. m.	28.69
	Thunder Bay Island .....	29.37	6	9 a. m.	29.97	25	6 p. m.	28.56
	Ypsilanti .....	29.01	25	2 p. m.	29.56	12	2 p. m.	28.59
Indiana .....	Aurora.....	29.57	24	6 a. m.	29.94	18	9 p. m.	29.09
	Cannelton.....	29.70	24	7 a. m.	<i>a</i> 29.98	18	2 p. m.	29.16
	Michigan City .....	29.46	25	3 p. m.	29.89	31	6 a. m.	29.17
	New Harmony.....	29.72	23	9 p. m.	30.11	11	9 p. m.	29.22
	Richmond, [Haines] .....	28.81	4	7 a. m.	<i>b</i> 29.25			
Illinois.....	Batavia, [Mead].....	29.18	23	9 p. m.	29.61	25	2 p. m.	28.62
	Elgin.....	29.19	24	7 a. m.	29.67	25	2 p. m.	28.53
	Lebanon ( <i>c</i> ).....	29.47	23	7 a. m.	29.84	11	9 p. m.	29.05
	Manchester.....	28.86	23	9 p. m.	29.25	11	1 p. m.	<i>d</i> 28.38
	Marengo.....	29.00	23	9 p. m.	<i>e</i> 29.40	25	2 p. m.	28.24
	West Urbana.....	29.15	24	7 a. m.	29.56	25	2 p. m.	28.69
	Wheaton.....	29.21	23	9 p. m.	29.73	25	2 p. m.	28.55
	St. Louis.....	29.50	23	9 p. m.	29.97	11	2 p. m.	29.06
Wisconsin.....	Appleton.....	28.95	23	9 p. m.	29.53	25	9 p. m.	28.47
	Beloit.....	29.19	23	2 p. m.	<i>a</i> 29.70	25	2 p. m.	28.54
	Delafield.....	29.02	23	9 p. m.	29.54	25	2 p. m.	28.28
	Kenosha ( <i>f</i> ).....	29.44	23	9 p. m.	29.99	25	2 p. m.	28.94
	Manitowoc ( <i>f</i> ).....	29.71	23	9 p. m.	30.29	25	2 p. m.	28.94
	Milwaukee, [Larkin].....	29.16	24	7 a. m.	29.69	25	2 p. m.	28.43
	Milwaukee, [Winkler] .....	29.28	24	7 a. m.	29.79	25	2 p. m.	28.55
	Superior City .....	29.31	23	3 p. m.	29.85	25	3 p. m.	28.62
	Dubuque.....	29.34	23	9 p. m.	29.87	25	2 p. m.	28.49
	Fairfield.....	27.26	23	9 p. m.	27.61	25	2 p. m.	26.72
	Muscatine.....	29.48	23	2 p. m.	<i>a</i> 29.96	25	7 a. m.	<i>g</i> 29.07
Minnesota.....	Beaver Bay, [Clarke].....	29.18	23	9 p. m.	29.73	25	2 p. m.	28.49
Washington Ter.....	Vancouver.....	30.09	17	9 p. m.	30.44	19	2 p. m.	29.40
Utah.....	Great Salt Lake City.....	25.71?	?	?	26.41	?	?	25.31
California.....	Sacramento.....	30.04	13	7 a. m.	30.33	21	9 p. m.	29.79
	San Francisco.....	29.93	13	7 a. m.	30.20	25	7 a. m.	29.62
	Santa Clara.....	29.85	13	9 p. m.	<i>h</i> 30.06	26	2 p. m.	<i>i</i> 29.62
Mexico.....	Cordova.....	27.21	14	9 p. m.	27.48	12	3 p. m.	26.98
	Mirador.....	23.04	14	All day.	23.27	11	2 p. m.	22.83
West Indies.....	St. George's, Bermuda .....	29.99	?	?	30.33	?	?	29.74
	Turk's Island, Bahamas.....	29.92	27	6 a. m.	<i>j</i> 30.04	1	6 a. m.	<i>k</i> 29.82
Central America.....	Guatemala.....	25.26	14	10 p. m.	25.43	11	4 p. m.	25.09
South America.....	Catharina Sophia, Surinam .....	29.89	14	6 a. m.	29.97	3	6 p. m.	29.81
	Catharina Sophia, Surinam ( <i>l</i> ) .....	29.71	1	2 p. m.	<i>m</i> 29.79	16	6 p. m.	29.63

*a* Same height at 9 p. m. on the 23d.*b* Same height at 7 a. m., 2 p. m., and 9 p. m. on the 3d.*c* Incomplete.*d* Same height at 1 p. m. on the 25th.*e* Same height at 7 a. m. on the 24th.*f* Not corrected for temperature.*g* Same height at 2 p. m. on the 11th.*h* Same height at 2 and 9 p. m. on the 8th.*i* Same height at 2 and 9 p. m. on the 25th.*j* Same height at noon and 6 p. m. on the 26th and 27th.*k* Same height at noon and 6 p. m. on the 1st.*l* Aneroid.*m* Same height at 6 a. m. on the 28th and 29th, and 6 p. m. on the 27th and 29th.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1859\*.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
British America .. Hamilton .....	29.58	3	9 a. m.	30.17	11	9 p. m.	29.10
Montreal .....	30.04	3	9 p. m.	30.82	20	9 p. m.	29.45
St. John's .....	29.57	5	7 a. m.	30.51	28	2 p. m.	28.68
St. Martin .....	29.97	3	10 p. m.	30.72	20	10 p. m.	29.41
Toronto .....	29.71	3	11 a. m.	30.39	20	4 p. m.	29.20
Windsor .....	29.93	4	7 a. m.	30.78	21	7 a. m.	29.01
Wolfville .....	29.85	4	7 a. m.	30.78	21	7 a. m.	29.20
Maine .....	30.02	4	7 a. m.	30.81	21	7 a. m.	29.42
Gardiner (a) .....	29.96	4	7 a. m.	30.80	21	7 a. m.	29.10
Perry .....	29.98	3	9 p. m.	30.71	20	9 p. m.	29.31
Portland .....	29.93	4	7 a. m.	30.77	21	7 a. m.	29.24
Steuben .....	29.33	3	9 p. m.	29.93	12	7 a. m.	28.76
New Hampshire .. Claremont .....	30.01	3	9 p. m.	30.51	20	9 p. m.	29.46
Manchester .....	29.82	?	?	?	?	?	?
Shelburne (b) .....	29.69	3	9 p. m.	30.42	20	9 p. m.	29.08
Vermont .....	28.72	28	2 p. m.	29.51	26	7 a. m.	28.04
Burlington .....	29.44	3	9 p. m.	30.09	20	9 p. m.	28.80
Lunenburg .....	29.82	3	9 p. m.	30.43	20	9 p. m.	29.11
Massachusetts .. Amherst .....	29.80	30	2 p. m.	30.39	20	9 p. m.	29.15
Bridgewater .....	29.93	4	7 a. m.	30.55	12	7 a. m.	29.45
Cambridge .....	29.89	3	9 p. m.	30.57	12	7 a. m.	c 29.37
Lawrence .....	30.05	3	9 p. m.	30.58	20	9 p. m.	29.36
Nantucket .....	29.96	3	9 p. m.	30.53	20	9 p. m.	29.19
New Bedford .....	29.94	3	9 p. m.	30.55	12	7 a. m.	29.41
Westfield .....	29.33	3	9 p. m.	29.90	12	7 a. m.	28.78
Williamstown .....	29.47	3	9 p. m.	30.06	20	9 p. m.	28.74
Worcester .....	29.85	3	10 p. m.	30.45	20	10 p. m.	29.11
Rhode Island .. Providence .....	29.87	3	9 p. m.	30.42	12	7 a. m.	29.34
Connecticut .....	29.40	11	9 p. m.	29.98	20	9 p. m.	28.68
Middletown .....	29.95	3	9 p. m.	30.52	20	9 p. m.	29.27
Pomfret .....	29.36	3	9 p. m.	29.73	20	9 p. m.	28.87
New York .....	29.39	3	7 a. m.	30.01	20	2 p. m.	28.88
Buffalo .....	28.56	3	2 p. m.	29.10	20	9 p. m.	28.03
Cazenovia .....	29.76	3	9 a. m.	30.45	20	6 p. m.	29.21
Charlotte .....	30.31	3	9 p. m.	30.85	20	9 p. m.	29.75
Fishkill Landing .....	29.99	3	9 p. m.	30.45	20	9 p. m.	29.39
Flatbush .....	30.08	3	9 p. m.	30.53	20	9 p. m.	29.45
New York city .....	29.34	3	2 p. m.	29.93	26	2 p. m.	28.44
Oswego .....	29.43	3	2 p. m.	30.02	20	2 p. m.	28.44
Penn Yan .....	29.36	3	7 a. m.	29.98	20	9 p. m.	28.91
Rochester, [Dewey] .....	29.76	3	9 a. m.	30.48	20	6 p. m.	29.21
Sackett's Harbor .....	29.36	3	9 p. m.	29.93	13	7 a. m.	28.87
Spencertown .....	30.02	3	9 p. m.	30.58	20	9 p. m.	29.37
Waterford .....	30.04	3	9 p. m.	30.51	20	9 p. m.	29.52
New Jersey .....	30.00	3	6 p. m.	30.57	20	6 p. m.	29.45
Lambertville .....	29.44	8	9 p. m.	d 29.80	4	7 a. m.	e 29.00
Pennsylvania .. Altoona .....	29.37	3	7 a. m.	f 29.75	20	2 p. m.	g 28.75
Berwick (a) .....	28.81	3	7 a. m.	29.24	17	2 p. m.	h 28.30
Cannonsburg .....	29.38	3	2 p. m.	29.39	20	2 p. m.	28.82
Chambersburg .....	29.70	3	9 p. m.	30.17	20	2 p. m.	29.11
Easton .....	29.54	3	2 p. m.	29.99	17	9 p. m.	29.11
Gettysburg .....	29.82	3	9 p. m.	30.26	20	2 p. m.	29.24
Harrisburg, [Heisely] .....	29.76	3	2 p. m.	30.20	20	2 p. m.	29.18
Harrisburg, [Hickok] .....	29.60	3	2 p. m.	30.06	20	2 p. m.	29.02
Lewisburg .....	30.15	3	2 p. m.	i 30.52	20	9 p. m.	29.58
Morrisville .....	29.67	3	2 p. m.	i 30.12	20	2 p. m.	29.12
Mount Joy (a) .....	29.98	3	9 p. m.	30.43	20	2 p. m.	29.37
Norristown .....							

\* For changes in hours of observation, &amp;c., see table of the thermometer for this month.

a Not corrected for temperature.

b Incomplete.

c Same height at 7 a. m. on the 31st.

d Same height at 7 a. m. and 2 p. m. on the 9th, 10th, and 25th, and at 9 p. m. on the 8th.

e Same height at 7 a. m. and 2 p. m. on the 17th.

f Same height at 2 p. m. and 9 p. m. on the 3d.

g Same height at 9 p. m. on the 20th.

h Same height at 9 p. m. on the 17th.

i Same height at 9 p. m. on the 3d.



## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.		
		DATE.		HEIGHT.	DATE.		HEIGHT.
		Day.	Hour.		Day.	Hour.	
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>
Pennsylvania ----- Philadelphia -----	29.93	3	9 p. m.	30.29	20	2 p. m.	29.39
Pittsburg, [Marine Hospital] -----	28.97	3	7 a. m.	29.42	17	9 p. m.	28.46
Sewickleyville -----	29.10	3	7 a. m.	29.56	17	2 p. m.	<sup>a</sup> 28.59
Somerset -----	27.59	3	2 p. m.	27.91	20	2 p. m.	27.16
Maryland ----- Annapolis -----	30.08	3	2 p. m.	30.48	20	2 p. m.	29.51
Chestertown (b) -----	30.08	3	7 a. m.	30.52	?	?	?
Frederick -----	29.79	3	2 p. m.	30.20	20	2 p. m.	29.41
St. Mary's City -----	29.93	3	2 p. m.	30.37	17	2 p. m.	29.35
Dist. of Columbia. Washington -----	30.06	9	7 a. m.	30.46	20	2 p. m.	29.46
Virginia ----- Crack Whip -----	28.38	3	2 p. m.	28.74	20	2 p. m.	27.86
Portsmouth -----	30.02	11	9 p. m.	30.81?	17	2 p. m.	29.41
North Carolina. Chapel Hill (b) -----	29.63	8	9 p. m.	29.97	?	?	?
Davidson College -----	29.22	9	7 a. m.	29.62	17	7 a. m.	28.67
Murfreesborough -----	29.39	9	7 a. m.	29.87	17	2 p. m.	28.85
South Carolina. All Saints -----	30.06	9	7 a. m.	30.42	17	7 a. m.	29.50
Charleston -----	30.12	9	7 a. m.	30.54	17	7 a. m.	29.65
St. John's (c) -----	30.15	9	7 a. m.	30.43	17	7 a. m.	29.71
Georgia ----- Atlanta (d) -----	29.98	9	2 p. m.	30.27	19	9 p. m.	29.75
Augusta -----	30.14	17	2 p. m.	30.44	30	9 p. m.	29.95
Thomaston -----	28.98	9	7 a. m.	29.33	17	7 a. m.	28.50
Florida ----- Atsena -----	29.78	9	9 p. m.	30.00	16	9 p. m.	29.36
Jacksonville -----	30.17	9	7 a. m.	30.60	16	9 p. m.	29.67
Micanopy -----	30.02	9	9 p. m.	30.32	16	9 p. m.	29.56
St. Augustine -----	29.99	10	7 a. m.	30.24	16	9 p. m.	29.60
Salt Ponds (d) -----	29.72	10	2 p. m.	<sup>e</sup> 29.88	16	2 p. m.	29.54
Warrington -----	30.08	9	7 a. m.	30.48	16	9 p. m.	29.59
Mississippi. Columbus -----	29.92	9	7 a. m.	30.36	16	9 p. m.	29.42
Hernando -----	29.62	9	7 a. m.	<sup>f</sup> 30.05	17	2 p. m.	29.21
Natchez -----	29.58	9	7 a. m.	<sup>g</sup> 30.10	16	2 p. m.	29.20
Paulding (b) -----	29.98	?	?	?	?	?	?
Texas ----- Austin, [Palm] -----	29.63	8	7 a. m.	30.08	28	9 p. m.	29.27
Bonham -----	29.53	9	7 a. m.	29.94	28	9 p. m.	29.17
New Braunfels -----	27.88	10	2 p. m.	28.13	1	7 a. m.	27.68
Sisterdale -----	29.76	9	9 p. m.	29.21	18	2 p. m.	28.41
Washington -----	29.79	9	7 a. m.	30.24	28	9 p. m.	29.47
Webberville -----	29.63	9	7 a. m.	29.94	28	9 p. m.	29.29
Tennessee ----- Glenwood -----	29.64	8	7 a. m.	30.06	17	7 a. m.	29.07
Memphis -----	29.86	8	7 a. m.	30.26	29	2 p. m.	29.48
Kentucky ----- Bardstown -----	29.50	8	2 p. m.	29.87	17	2 p. m.	28.91
Danville -----	29.06	10	7 a. m.	<sup>f</sup> 29.41	17	2 p. m.	28.47
Paris -----	29.24	10	7 a. m.	29.60	17	2 p. m.	28.56
Springdale -----	29.47	10	7 a. m.	29.88	17	2 p. m.	28.75
Ohio ----- Avon -----	29.09	3	7 a. m.	29.56	17	9 p. m.	28.54
Bowling Green -----	29.27	3	7 a. m.	29.75	17	9 p. m.	28.66
Brecksville -----	29.34	3	2 p. m.	29.76	17	2 p. m.	28.88
Cincinnati, [Harper] -----	29.27	10	7 a. m.	29.67	17	2 p. m.	28.57
Cincinnati, [Phillips] -----	29.47	10	7 a. m.	29.90	17	2 p. m.	28.71
Cleveland -----	29.06	3	7 a. m.	29.37	17	9 p. m.	28.57
College Hill -----	28.68	9	7 a. m.	<sup>g</sup> 29.07	20	7 a. m.	<sup>e</sup> 28.40
Elk Run -----	28.51	3	7 a. m.	28.99	17	9 p. m.	28.00
Freedom -----	28.61	3	7 a. m.	29.18	17	9 p. m.	28.05
Hillsborough -----	28.80	10	7 a. m.	29.19	17	2 p. m.	28.15
Hudson -----	28.82	3	7 a. m.	29.30	17	9 p. m.	28.28
Kelley's Island -----	29.30	3	7 a. m.	29.75	17	9 p. m.	28.81
Montville -----	28.69	3	7 a. m.	29.18	17	9 p. m.	28.15
New Lisbon (d) -----	28.87	8	9 p. m.	29.25	17	9 p. m.	28.42
Northwood -----	28.82	3	7 a. m.	29.22	17	9 p. m.	28.20
Portsmouth -----	29.34	8	9 p. m.	29.65	17	2 p. m.	28.86

<sup>a</sup> Same height at 9 p. m. on the 17th.<sup>b</sup> Incomplete.<sup>c</sup> Aneroid.<sup>d</sup> Not corrected for temperature.<sup>e</sup> Same height at 9 p. m. on the 25th.<sup>f</sup> Same height at 2 p. m. on the 8th.<sup>g</sup> Same height at 2 p. m. on the 9th.

## No. 13.—BAROMETER, CORRECTED TO 32° F., DECEMBER, 1859.

NAME OF STATION.	MEAN.	MAXIMUM.		MINIMUM.	
		DATE.		DATE.	
		Day.	Hour.	Day.	Hour.
	<i>Inches.</i>				<i>Inches.</i>
Ohio.....					
Ripley.....	29.47	8	7 a. m.	17	9 p. m.
Savannah.....	28.88	3	7 a. m.	17	9 p. m.
Troy.....	29.88	8	7 a. m.	17	9 p. m.
Urbana.....	28.91	4	7 a. m.	17	2 p. m.
Westerville.....	28.90	3	7 a. m.	17	2 p. m.
Michigan.....					
Battle Creek (c).....	29.18	3	7 a. m.	?	?
Detroit.....	29.54	3	7 a. m.	18	2 p. m.
Grand Haven.....	29.45	3	7 a. m.	17	9 p. m.
Marquette.....	29.31	28	7 a. m.	25	2 p. m.
Monroe, [Bowlsby].....	29.26	3	7 a. m.	17	9 p. m.
Monroe Piers.....	29.47	3	6 a. m.	18	6 a. m.
New Buffalo (c).....	29.32	3	7 a. m.	18	7 a. m.
Ontonagon (d).....	29.33	27	9 p. m.	25	7 a. m.
Ottawa Point.....	29.38	3	9 a. m.	25	6 p. m.
Thunder Bay Island.....	29.38	3	9 a. m.	11	6 p. m.
Ypsilanti.....	28.99	3	7 a. m.	18	7 a. m.
Indiana.....					
Aurora.....	29.55	10	6 p. m.	17	2 p. m.
Cannelton.....	29.73	8	7 a. m.	17	2 p. m.
Michigan City.....	29.48	10	9 a. m.	18	9 a. m.
New Harmony.....	29.77	2	9 p. m.	17	2 p. m.
Illinois.....					
Batavia, [Mead].....	29.28	3	7 a. m.	17	9 p. m.
Elgin.....	29.24	2	9 p. m.	25	2 p. m.
Lebanon.....	29.56	10	7 a. m.	17	7 a. m.
Manchester.....	28.95	2	9 p. m.	25	2 p. m.
Marengo.....	29.25	3	7 a. m.	25	9 p. m.
West Urbana.....	29.16	2	9 p. m.	17	9 p. m.
Wheaton.....	29.27	2	9 p. m.	17	9 p. m.
Missouri.....					
St. Louis.....	29.66	2	9 p. m.	17	2 p. m.
Wisconsin.....					
Appleton.....	29.03	3	7 a. m.	e 29.59	25 2 p. m.
Beloit.....	29.26	2	9 p. m.	29.76	25 9 p. m.
Delafield.....	29.07	3	7 a. m.	f 29.58	25 2 p. m.
Kenosha (g).....	29.51	3	7 a. m.	29.95	18 7 a. m.
Manitowoc (g).....	29.76	3	7 a. m.	30.29	25 9 p. m.
Milwaukee, [Larkin].....	29.21	3	9 p. m.	29.72	25 2 p. m.
Milwaukee, [Winkler].....	29.36	3	7 a. m.	e 29.81	25 2 p. m.
Superior City.....	29.42	2	9 a. m.	30.00	25 6 a. m.
Iowa.....					
Dubuque.....	29.43	2	9 p. m.	29.98	25 2 p. m.
Fairfield.....	27.43	2	7 a. m.	e 27.92	25 2 p. m.
Muscatine.....	29.56	3	7 a. m.	29.94	25 2 p. m.
Minnesota.....					
Beaver Bay, [Clarke].....	29.27	2	7 a. m.	29.89	25 7 a. m.
Utah.....					
Great Salt Lake City.....	26.19	?	?	26.39	?
California.....					
Sacramento.....	30.17	7	7 a. m.	30.37	24 7 a. m.
San Francisco.....	30.03	7	7 a. m.	30.23	25 2 p. m.
Santa Clara.....	29.95	7	7 a. m.	30.12	26 9 p. m.
Mexico.....					
Cordova.....	27.20	9	9 p. m.	27.50	18 3 p. m.
Mirador.....	23.07	10	2 p. m.	23.28	29 2 p. m.
West Indies.....					
St. George's, Bermuda.....	29.93	?	?	30.32	?
Turk's Island, Bahamas.....	29.91	1	6 a. m.	i 30.03	7 6 a. m.
Central America.....					
Guatemala.....	25.26	10	10 a. m.	25.41	16 4 p. m.
South America.....					
Catharina Sophia, Surinam.....	29.88	28	6 a. m.	29.97	5 6 p. m.
Catharina Sophia, Surinam (k).....	29.75	1	6 p. m.	29.84	5 6 p. m.

a Same height at 7 a. m. on the 10th.

b Same height at 9 p. m. on the 17th.

c Incomplete.

d No observations on the 1st, 2d, and 3d.

e Same height at 9 p. m. on the 2d.

f Same height at 2 p. m. on the 9th.

g Not corrected for temperature.

h Same height at 2 p. m. on the 25th.

i Same height at noon and 6 p. m. on the 1st.

j Same height at 6 a. m. on the 8th and 18th, at noon on the 7th and 17th, and at 6 p. m. on the 6th, 7th, and 17th.

k Aneroid.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
	°	°	°	°		°		°		°	°		
BRITISH AMERICA—													
Fort Simpson (a).....	-----	-----	-----	-19.04	23	b 0	23	- 0.50	29	-45	1	-38.50	-----
Hamilton (c).....	26.45	-----	27.90	27.18	20	48	20	43.00	10	-20	9	-11.50	-----
Montreal.....	9.29	15.73	12.74	12.59	20	39	26	33.67	10	-30 d	10	-27.67	5.9
Moose Factory (e).....	-17.95	- 4.27	-10.42	-10.86	-----	36	-----	-----	-----	-50	-----	-----	-----
Red River Settlement.....	- 4.58	5.63	- 4.39	- 1.11	19	f 35	19	23.33	7	-39	7	-31.00	4.2
Rigolet (g).....	- 5.84	-----	- 2.77	- 4.30	8	36	21	32.50	24	-28	13	-24.50	-----
St. John's.....	22.97	25.74	23.78	24.16	22	57	22	52.33	25	1	3	4.33	8.2
St. Martin (h).....	5.71	17.66	11.35	11.57	5	39	21	36.33	10	-44	10	-28.70	-----
Stanbridge.....	13.48	20.71	16.06	16.75	20	46	20	38.67	10	-36	10	-30.00	6.5
Toronto (h).....	24.54	28.75	26.20	26.50	20	41	20	37.98	10	-26	10	- 8.65	7.2
Windsor.....	19.08	24.54	20.83	21.48	21	55	21	50.80	13	- 9	11	- 1.33	6.4
Wolfville.....	19.97	25.34	19.04	21.45	21	57	21	52.67	11	- 7.5	11	- 1.00	7.7
MAINE—													
Cornish.....	13.00	21.41	16.09	16.83	21	44	21	40.33	11	-32	11	-18.67	5.4
Cornishville.....	16.13	23.55	19.13	19.60	21	43	21	41.33	11	-23	10	-13.00d	5.3
Dexter.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.7
Gardiner.....	8.61	19.66	12.71	13.66	21	41	21	38.00	11	-32	11	-19.67	5.9
Perry.....	14.63	20.02	16.85	17.17	7	43	7	38.17	11	-22	11	-12.67	6.2
Portland.....	16.32	24.09	19.65	20.02	21	42	21	40.67	11	-23	11	-14.00	6.1
Steuben.....	15.48	23.13	18.65	19.09	7	i 44	21	42.67	11	-21	10	-11.00	6.6
NEW HAMPSHIRE—													
Shelburne.....	9.68	25.65	15.10	16.81	29	47	?	?	11	-38	11	-20.33	6.3
Stratford.....	11.48	21.29	13.22	15.36	20	42	21	34.00	11	-36	10	-24.00	6.1
VERMONT—													
Brandon.....	17.36	26.12	19.63	21.04	20	46	21	37.67	10	-27	10	-23.67	6.4
Burlington.....	17.00	22.69	18.77	19.49	20	b 42	20	38.67	10	-31	10	-26.83	6.1
Craftsbury.....	12.68	21.10	15.45	16.41	20	39	21	35.00	11	-35	10	-26.00	5.0
Rupert.....	19.55	27.94	27.94	23.48	21	50	21	37.67	10	-24	10	-18.00	5.3
St. Johnsbury.....	9.45	22.30	13.23	14.99	21	41	21	36.67	11	-40	11	-29.33	6.0
Woodstock.....	11.80	19.10	16.90	13.10	21	41	21	38.10	11	-39	11	-25.00	6.5
MASSACHUSETTS—													
Amherst.....	18.69	27.49	23.00	23.06	21	42	21	40.10	11	-19	11	-12.50	5.2
Bridgewater (j).....	23.76	31.96	23.18	29.97	21	54	21	51.00	11	-13	10	- 4.18	5.5
Cambridge.....	21.64	30.13	25.48	25.75	21	54	21	48.33	11	-17	10	- 5.50	5.6
Danvers.....	20.56	30.90	24.10	25.19	21	52	21	46.33	11	-16	11	- 3.33	5.8
Florida.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.3
Lawrence.....	19.71	28.42	23.81	23.98	21	52	21	46.33	11	-17	10	- 7.00	5.5
Mendon.....	21.71	30.55	24.52	25.59	20	i 50	21	47.00	11	-18	10	- 7.67d	5.3
Nantucket.....	32.87	37.58	32.90	34.45	21	50	21	48.83	10	9	10	15.17	6.5
New Bedford.....	25.97	32.97	28.02	28.99	21	51	21	49.50	11	-12	10	- 2.50	6.2
Richmond.....	18.32	27.72	22.20	22.74	21	45	21	38.33	10	-22	10	-18.83	6.3
Westfield.....	18.65	27.29	22.71	22.88	21	42	21	39.33	11	-21	11	-14.67	6.0
Weymouth.....	23.97	-----	27.10	25.53	21	51	21	46.50	11	-13	11	- 5.50	3.5
Williamstown.....	20.97	26.06	23.68	23.57	21	44	21	38.33	10	-22	10	-21.00	6.4
Worcester.....	23.40	30.76	25.54	26.57	21	50	7	41.00	11	-15	11	- 5.17	5.6
RHODE ISLAND—													
Providence (k).....	28.00	32.60	27.20	29.27	21	54	21	?	11	-11	11	- 5.33	4.9
CONNECTICUT—													
Columbia.....	22.13	34.55	22.97	26.55	19	56	21	42.67	11	-14	10	- 7.00	5.2
Middletown.....	21.31	31.46	24.36	25.71	21	49	21	43.80	11	-17	11	-10.20	4.9
Pomfret.....	20.69	27.89	23.38	23.99	21	48	21	43.93	11	-16	10	-10.17	5.5
Saybrook.....	24.67	31.27	27.03	27.66	21	47	21	43.00	11	-10	10	- 5.00	5.2
Wallingford.....	20.56	31.29	23.85	25.23	20	i 46	21	41.83	11	-17	11	-10.17	4.9
NEW YORK—													
Bellport.....	28.11	33.06	29.92	30.36	7	i 47	7	44.33	10	0	10	3.00	4.2
Beverly.....	22.43	29.50	25.04	25.66	21	44	21	40.33	10	-16	10	-15.00	5.9

a Register thermometer. No observations on 14th and 19th. j

b Same temperature on the 26th.

c Observations taken at 9 a. m. and 9 p. m.

d Same temperature on the 11th.

e Observations taken at sunrise, 2 p. m., and 10 p. m.

f Same temperature on the 23d.

g Observations taken at sunrise and sunset.

h Observations taken at 6 a. m., 2 p. m., and 10 p. m.

i Same temperature on the 21st.

j Observations taken at 7 a. m., 2 p. m., and 7 p. m.

k Observations taken at sunrise, 1 p. m., and 10 p. m.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK--Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Buffalo (a).....	28.45	31.52	28.82	29.60	20	49	20	44.00	10	-10	10	-1.33	6.4
Flatbush.....	25.35	33.36	27.86	28.86	20	48	21	44.10	10	-8	10	-5.10	5.9
Fort Edward.....	17.61	27.33	22.29	22.41	21	45	15	38.67	11	-24	10	-17.67	6.7
Houseville.....	19.13	26.39	20.97	22.16	20	47	20	40.33	10	-29	10	-24.00	7.6
Nichols.....	22.77	33.16	25.87	27.27	20	51	28	43.67	10	-18	10	-13.00	7.1
Oswego.....	22.81	30.16	24.65	25.87	20	49	20	41.00	10	-18	10	-15.00	7.6
Penn Yan (c).....	23.81	34.00	28.45	28.75	20	55	28	45.00	10	-15	10	-9.00	2.6
Rochester, [Dewey].....	24.90	31.19	27.26	27.77	20	51	20	45.00	10	-10	10	-0.67	8.0
Wampsville.....	21.26	27.42	22.71	23.80	20	50	20	42.00	10	-28	10	-22.00	7.8
Waterford.....	20.85	29.48	23.39	24.57	21	48	21	40.67	10	-20	10	-17.00	6.0
NEW JERSEY--													
Freehold.....	25.58	37.67	27.37	30.20	21	61	21	53.00	10	-6	10	-3.00	---
Lambertville.....	24.24	37.75	30.24	30.74	28	57	28	49.53	10	-7	10	-3.37	4.1
Moorestown (d).....		39.66	32.38	36.02	20	56		?	10	-11	10	-1.33	4.7
Newark (f).....				29.88	21	55	21	49.25	11	-12	11	-2.38	---
PENNSYLVANIA--													
Bellefonte.....	25.16	35.97	28.48	29.87	20	51	13	41.33	10	-11	10	-1.00	5.8
Berwick.....	26.03	35.39	29.87	30.43	21	56	28	44.33	10	-10	10	-5.00	4.6
Cannonsburg.....	28.58	36.84	32.35	32.59	20	55	28	47.67	8	6	11	8.33	6.1
Carlisle.....	22.52	35.19	29.40	29.04	21	50	21	42.33	10	-1	10	0.33	5.4
Chambersburg.....	26.26	35.97	29.90	30.71	13	52	28	42.00	10	2	10	5.33	6.0
Chronedale.....	29.04	38.58	31.69	33.10	28	56	28	53.67	10	11	10	3.00	5.0
Easton (g).....	24.74	31.80	26.45	27.66	21	54	28	41.33	10	-9	11	-5.83	5.6
Fleming.....	22.94	36.19	26.22	28.45	20	52	13	44.00	10	-11	10	-2.00	6.0
Gettysburg.....	24.45	36.84	28.29	29.86	28	55	21	45.33	10	-2	10	0.00	5.1
Harrisburg, [Heisely].....	29.48	35.93	32.37	32.61	21	58	21	47.00	10	4	10	4.33	5.6
Harrisburg, [Hickok].....	27.33	35.06	30.80	31.06	21	56	21	44.67	10	-1	10	0.17	5.8
Lewisburg.....	23.96	32.85	27.62	28.14	21	50	12	41.47	10	-9	10	-5.23	6.6
Linden (i).....	22.00	32.00	27.65	27.22	20	48		?	10	-12	10	-6.50	7.2
Morrisville.....	25.42	37.06	28.68	30.39	21	59	21	51.33	10	-4	10	-2.33	4.0
Mount Joy.....	27.08	38.33	31.09	32.17	21	57	28	46.67	10	0.5	10	1.50	5.1
Murrysville.....	25.00	34.50	27.73	29.08	14	54	14	45.00	10	-7	10	2.35	6.3
Norristown.....	28.50	37.48	32.30	32.76	21	55	21	50.20	10	-2	10	-1.33	5.9
North Whitehall (k).....	24.84	34.23	30.77	29.95	21	52	22	32.00	10	-10	10	-4.67	?
Philadelphia.....	27.04	34.78	30.54	30.79	21	54	28	53.00	10	11	10	2.00	5.6
Pittsburg, [Marine Hosp].....	27.96	35.22	31.38	31.52	28	54	14	44.67	10	2	10	6.67	5.9
Pocopson.....	27.10	37.83	30.58	31.84	21	59	28	51.00	10	-1	10	0.33	5.5
Shamokin.....	23.54	30.29	27.22	27.02	21	54	28	46.00	10	-8	10	-4.67	5.3
Somerset.....	24.03	35.94	27.65	29.21	20	54	28	48.00	10	-8	10	3.00	7.1
Tarentum.....	25.23	37.03	30.20	30.82	14	56	14	48.00	10	-4	10	5.00	5.8
West Haverford.....	29.90	39.03		34.46	21	58	21	56.00	10	-2	10	1.00	5.0
Westtown.....	27.45	36.41	29.77	31.21	21	54	28	51.40	10	-11	10	-1.70	5.3
Worthington (l).....	24.53	37.53	31.83	31.30	28	55	28	49.67	10	-10	10	5.00	---
MARYLAND--													
Annapolis.....	29.90	40.10	36.00	35.33	28	57	28	51.33	10	7	10	8.00	5.4
Baltimore.....	31.35	40.04	34.61	35.33	28	60	28	55.33	10	3	10	5.67	5.8
Bladensburg (d).....	29.19	43.12	31.42	34.58	28	61	28	55.33	10	11	10	6.33	5.5
Chestertown.....	30.13	38.85	32.70	33.89	28	58	28	53.50	10	0.5	10	2.33	5.8
Frederick.....	28.51	37.41	31.26	32.39	21	53	21	45.50	10	5.8	10	7.40	5.3
Leitersburg.....	25.71	37.90	29.42	31.01	21	56	20	46.00	10	11	10	2.33	5.0
Leonardtown.....	33.09	43.45	35.48	37.34	21	63	28	57.33	10	6	10	9.33	5.0
Sykesville.....	29.69	40.97	30.77	33.81	28	59	28	53.67	10	-2	10	1.00	4.7
DISTRICT OF COLUMBIA--													
Washington.....	31.94	41.29	35.68	36.30	28	59	28	55.00	10	11	10	8.67	4.5

- a Observations taken at 8 a. m., 2 p. m., and 9 p. m.  
b Same temperature on the 21st.  
c Observations taken at sunrise, 2 p. m., and sunset.  
d Incomplete.  
e Same temperature on the 22th.  
f Daily maximum and minimum.

- g Observations taken at 8 a. m., 2 p. m., and 10 p. m.  
h Same temperature on the 28th and 29th.  
i Incomplete. Observations taken at 7 a. m., 1 p. m., and 9 p. m.  
j Same temperature on the 20th.  
k Observations taken at sunrise, noon, and sunset.  
l Observations taken morning, noon, and evening.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—	°	°	°	°		°		°		°		°	
Crichton's Store (a) .....	37.83	44.72	46.37	42.97	21	69	21	65.00	11	b 18	23	20.67	5.
Cross Creek .....	21.73	36.28	25.77	27.93	20	60	20	46.00	10	— 8	10	4.00	---
Hartwood .....	32.87	42.54	36.42	37.28	27	62	27	56.00	10	9	10	10.33	---
Lewinsville .....	35.05	43.98	36.82	38.62	30	64	29	56.67	10	8	10	10.50	4.4
Lewisburg .....	25.00	41.84	30.81	32.55	28	62	28	45.33	23	— 2	8	9.00	4.6
Meadow Dale .....	23.94	38.16	32.36	31.49	13	c 52	21	45.00	23	— 4	8	6.67	4.4
Montross .....	31.71	41.39	35.77	36.31	21	62	28	56.67	10	8	10	10.00	5.6
Point Pleasant .....	26.48	38.94	31.55	32.32	27	d 50	27	42.33	23	4	7	e 15.00	6.1
Poplar Grove .....	29.06	44.52	31.81	35.14	20	68	14	50.00	23	6	8	b 15.00	5.3
Portsmouth .....	38.82	48.50	40.44	42.59	21	72.5	21	65.83	10	15.5	10	19.83	3.8
Rose Hill .....						66				15			---
Rougemont .....	30.35	45.55	35.23	37.04	29	64	28	56.00	23	5	10	11.67	4.7
Smithfield .....	34.33	46.69	37.63	39.55	21	67	21	63.50	10	11	10	16.67	5.5
Stribling Springs .....	22.34	40.18	22.77	28.43	20	60	21	45.67	23	— 4	23	5.33	3.3
Westwood .....	33.90	45.23	38.25	39.13	21	67	28	58.00	10	13	10	15.67	---
Winchester .....	29.68	41.29	32.16	24.38	28	60	28	50.00	10	6	10	10.00	3.8
NORTH CAROLINA—													
Chapel Hill .....	34.65	49.19	39.10	40.98	21	69	21	61.00	23	13	23	18.67	5.4
Davidson College .....	35.38	49.67	40.35	41.80	21	f 66	---	?	23	12	23	18.53	4.6
Green Plains .....	33.74	47.42	37.19	39.45	21	66	21	63.00	22	b 12	22	16.67	---
Murfreesborough .....	37.10	47.39	42.52	42.34	21	69	21	65.33	11	15	23	20.33	4.2
SOUTH CAROLINA—													
Aiken .....	39.29	50.86	42.00	44.05	29	68	29	61.33	24	18	23	23.33	4.9
All Saints .....	42.56	53.53	46.22	47.44	29	69	21	64.67	24	22	23	27.67	4.7
Charleston .....	46.29	55.29	50.74	50.77	29	70	21	65.67	24	25	23	30.67	---
Columbia, [Barton] .....	39.18	52.29	43.88	45.12	21	71	29	67.00	22	18	23	24.83	5.9
Columbia, [White] .....	37.06	49.19	40.58	42.28	21	71	21	65.00	8	g 23	24	24.33	3.3
St. John's (h) .....	41.00	---	46.32	41.83	21	73	---	?	25	19	---	?	5.8
GEORGIA—													
Athens .....	37.47	49.58	42.15	43.07	15	64	28	59.50	23	14	23	23.00	4.7
Atlanta .....	37.46	46.61	44.42	42.83	20	62	14	d 58.67	23	16	23	25.33	4.1
Augusta .....	43.47	57.65	49.45	50.19	21	74	29	66.00	23	26	23	33.17	5.2
Savannah .....	45.64	56.19	50.90	50.91	21	73	21	66.93	24	26	23	32.17	5.7
Thomaston .....													4.9
Whitemarsh Island .....	45.90	56.33	51.39	51.21	29	71	21	65.67	24	26	23	33.33	5.6
Zebulon .....	42.26	51.10	46.03	46.46	21	66	20	62.83	23	21	23	29.16	4.9
FLORIDA—													
Alligator .....	46.61	62.33	54.52	54.40	20	i 78	21	71.67	23	27	23	31.00	4.8
Atsena .....	50.61	58.42	56.19	55.07	20	j 68	21	64.33	9	k 36	23	40.67	3.8
Belair (h) .....	44.06	61.13	53.65	52.95	20	l 74	21	66.00	23	24	23	32.00	4.0
Gainesville .....	49.65	62.63	55.23	55.84	21	f 77	21	71.33	9	30	23	37.33	4.6
Jacksonville .....	49.55	61.58	53.87	54.52	21	76	21	66.67	9	b 30	23	33.67	5.2
Micanopy .....	47.52	65.54	52.63	55.23	28	80	21	72.33	9	25	23	35.67	5.6
St. Augustine .....	55.94	63.19	56.87	58.67	30	79	14	70.33	9	35	23	40.67	5.1
Salt Ponds (m) .....	67.10	72.19	---	69.64	1	e 82	1	80.00	10	n 55	10	56.00	4.2
Seville .....	51.32	---	---	---	27	d 70	---	?	24	33	---	?	---
ALABAMA—													
Carlowville .....	38.13	48.39	42.35	42.96	1	o 60	1	55.33	22	15	22	22.00	4.0
Greene Springs .....	38.21	51.40	42.18	43.91	20	68	29	60.17	23	14	23	22.83	4.0
Greensborough (h) .....	38.04	52.61	43.70	44.78	29	69	?	?	23	14	23	24.00	4.3
Montgomery .....	39.29	54.97	46.03	46.76	20	70	29	62.67	23	17	23	26.50	4.0
Selma .....	40.65	52.48	46.94	46.69	20	69	28	61.00	23	18	23	26.00	4.8
MISSISSIPPI—													
Columbus .....	36.27	49.59	42.32	42.73	29	65	20	57.83	23	13	23	22.53	4.0
Natchez .....	40.19	55.10	49.16	48.15	20	70	20	63.33	23	18	23	27.33	4.4
Paulding .....	40.93	54.58	48.16	47.89	29	70	20	64.33	23	16	23	26.50	4.7

a Observations taken at 9 a. m., noon, and 4 p. m.

b Same temperature on the 23d.

c Same temperature on the 20th.

d Same temperature on the 28th.

e Same temperature on the 8th.

f Same temperature on the 29th.

g Same temperature on the 24th.

h Incomplete.

i Same temperature on the 21st and 30th.

j Same temperature on the 26th and 27th.

k Same temperature on the 23d and 24th.

l Same temperature on the 27th and 29th.

m Thermometer  $2\frac{1}{2}$  to  $2\frac{3}{4}$  degrees too high.

n Same temperature on the 11th.

o Same temperature on the 20th and 26th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	W'n temp.	Date.	Temp.	Date.	Mean temp.	
LOUISIANA—	□	□	■	○		○		□		○		■	
Black River.....	41.77	57.35	49.06	49.39	20	71	6	a 64.00	23	b 22	20	30.00	5.2
New Orleans (c).....	52.26	56.26	57.81	55.44	20	73	27	68.33	23	34	23	37.67	---
TEXAS—													
Austin, [Palm].....	42.23	58.52	46.90	49.22	6	73	20	62.33	8	24	7	30.33	4.1
Austin, [Van Nostrand].....	40.19	59.29	47.91	49.13	6	74	20	62.11	8	d 22	7	32.53	4.9
Larissa.....	41.77	56.48	48.24	48.83	20	68	20	63.00	23	20	---	?	3.4
New Braunfels.....	40.86	58.48	46.52	48.62	20	70	20	62.58	23	23	7	30.18	0.7
Roundtop.....	46.00	62.00	57.00	55.00	---	70	---	---	---	25	---	---	---
Sisterdale.....	36.50	57.00	41.70	45.07	---	---	---	---	---	---	---	---	3.9
Union Hill.....	42.03	57.71	49.00	49.58	20	69	20	60.00	23	22	7	29.33	4.9
Washington.....	43.60	60.14	47.74	50.49	20	74	20	66.67	7	e 25	7	29.67	4.4
ARKANSAS—													
Washington (f).....	38.23	53.35	---	45.79	27	68	20	62.50	23	18	23	28.00	---
TENNESSEE—													
Glenwood.....	30.63	43.15	36.22	36.67	20	58	20	55.17	22	7	22	11.73	5.0
La Grange.....	34.79	48.17	40.39	41.12	20	58½	27	56.00	23	13	23	22.67	4.0
Memphis.....	35.00	46.48	41.35	40.94	27	61	20	57.67	23	13	22	d 22.23	3.2
KENTUCKY—													
Bardstown.....	28.95	40.03	33.10	34.03	27	67	20	52.67	8	1	22	10.00	5.0
Danville.....	30.78	43.78	35.42	36.56	20	g 60	20	55.33	23	3	22	d 12.00	4.2
Louisville (h).....	28.16	39.13	33.32	33.54	20	55	20	52.00	8	i 4	22	7.33	4.3
Paris.....	27.93	37.52	32.16	32.54	20	58	20	51.33	22	2	22	7.00	5.5
Springdale (j).....	25.87	39.56	35.11	33.51	27	54	20	50.50	8	— 1	22	6.67	4.8
OHIO—													
Avon.....	27.57	34.96	30.78	31.10	27	57	14	47.33	8	0.5	8	4.73	6.4
Bellefontaine.....	18.33	30.75	25.33	24.80	27	47	14	42.33	8	— 10	8	— 4.00	5.6
Bowling Green.....	25.38	34.32	27.71	29.14	14	49	14	44.80	10	— 14	8	1.50	5.9
Cincinnati, [Harper].....	29.84	45.45	34.39	36.56	15	k 65	20	52.67	8	3	22	9.67	4.2
Cincinnati, [Phillips].....	31.81	38.06	38.45	36.11	20	60	20	55.33	23	7	22	9.33	---
Cleveland.....	25.63	33.63	29.11	29.46	20	54	20	48.33	8	1	8	4.00	7.5
Collingwood.....	25.32	33.65	29.71	29.56	19	50	20	44.00	8	— 8 l	8	1.00	---
Hillsborough.....	26.13	34.10	30.35	30.19	20	56	20	52.80	8	— 1	22	5.00	4.9
Hiram.....	25.48	32.35	27.35	28.39	20	50	20	45.67	8	0	8	1.67	7.3
Hudson (m).....	26.05	33.57	29.36	29.66	20	54	20	47.03	8	4	8	7.93	6.1
Jackson, [Monroe county].....	25.02	35.69	30.35	30.35	20	56	20	45.33	23	— 0.5	23	8.17	5.0
Lancaster, [Davis].....	26.68	34.49	29.53	30.23	21	56	14	52.33	24	0	8	6.30	5.2
Lancaster, [Dayton] (n).....	28.64	41.22	32.28	34.05	20	63	?	?	8	15	22	11.67	5.5
Madison, [Atkins].....	25.69	33.24	28.69	29.21	20	56	14	50.00	10	— 3	9	1.33	7.3
Madison, [King].....	26.00	34.19	28.87	29.69	20	54	20	48.33	10	4	9	10.67	7.4
Montville.....	25.31	32.13	28.52	28.65	20	54	20	47.33	10	— 1	8	4.00	6.4
New Lisbon.....	28.05	40.42	32.96	33.81	20	55	14	53.67	10	— 3	8	l 6.00	4.7
Northwood.....	---	---	---	---	---	---	---	---	---	---	---	---	5.2
Portsmouth.....	27.29	40.90	31.26	33.15	20	64	20	51.00	8	d 4	8	12.67	3.6
Ripley.....	27.23	---	31.65	29.44	20	60	20	50.00	8	d 1	22	8.33	5.7
Rockport.....	30.23	38.74	34.23	34.40	20	55	20	50.00	9	4	7	12.00	---
Savannah.....	24.26	34.42	28.32	29.00	20	55	20	49.67	8	— 10 l	8	— 1.00	6.5
Troy.....	24.32	33.35	30.42	29.36	14	50	14	47.33	8	— 6	8	o 4.00	---
Urbana.....	23.48	34.19	27.55	28.41	14	p 50	20	48.00	8	— 6	8	o 3.00	5.6
Welchfield.....	24.19	33.45	27.19	28.28	20	55	20	46.67	10	0	8	4.67	6.3
Westerville.....	26.53	35.77	31.19	31.16	20	56	20	49.50	8	0	21	6.50	5.6
Windham.....	25.52	32.81	28.90	29.08	28	50	20	44.00	10	2	8	5.00	---
MICHIGAN—													
Battle Creek.....	22.94	32.81	26.03	27.26	19	q 45	13	40.00	10	— 24	10	2.67	6.1
Detroit.....	26.03	32.48	27.68	28.73	20	48	20	41.67	11	— 11	9	4.00	6.5
Grand Rapids.....	23.58	29.93	24.84	26.12	19	50	19	40.67	8	— 7	8	4.00	7.6

a Same temperature on the 20th and 29th.

b Same temperature on the 24th.

c Observations taken at 9 a. m., noon, and 3 p. m.

d Same temperature on the 23d.

e Same temperature on the 8th.

f Observations taken at sunrise and 3 p. m.

g Same temperature on the 27th.

h Observations taken at 7 a. m., 3 p. m., and 9 p. m.

i Same temperature on the 22d and 2 d.

j Observations taken at 7 a. m., 2 p. m., and 6 p. m.

k Same temperature on the 29th.

l Same temperature on the 10th.

m The records of thermometer at this place are 0.85 too high.

n Incomplete.

o Same temperature on the 22d.

p Same temperature on the 20th and 27th.

q Same temperature on the 20th.



## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°		°		°		°		°	
Lansing (a).....	24.42	30.52	26.10	27.01	20	45	13	40.00	8	5	8	7.67	4.7
Marquette.....	15.98	22.54	16.56	18.36	19	40	19	34.16	22	—9	21	—5.86	7.2
Monroe, [Whelpley].....													7.2
New Buffalo (d).....	24.55				14	43			8	0			7.6
Ottawa Point (f).....	21.65	27.48	25.00	24.06	12	39	20	36.75	10	—12	10	—1.75	7.5
Port Huron.....	24.11	32.70	27.55	28.12	20	45	20	41.33	10	—13	10	5.00	6.6
Thunder Bay Island (g).....	21.27	24.45	23.32	22.82	20	38	20	36.25	10	—4	9	—3.25	8.0
Ypsilanti.....	22.49	31.23	26.66	26.79	20	46	20	42.17	10	—17	10	4.33	7.0
INDIANA—													
Aurora (i).....	27.16	37.90	31.26	32.11	20	56	20	50.67	8	0	22	1.33	—
Cannelton.....	30.67	39.46	34.14	34.76	27	56	27	51.83	22	7	22	7.60	4.3
Logansport.....	25.26	36.12	28.68	30.02	19	53	20	47.67	8	—10	8	1.33	6.7
Mishawaka.....													5.4
New Harmony.....	29.16	39.16	32.68	33.67	27	53	27	48.33	22	4	22	7.33	5.0
Richmond, [Austin] (j).....	25.27	35.24		30.25	14	52	14	48.00	8	—10	8	2.00	5.7
Richmond, [Moore].....	24.89	35.03	30.35	30.09	20	51	14	47.00	8	—5	22	2.50	5.1
ILLINOIS—													
Augusta.....	22.35	33.45	26.71	27.50	27	54	19	44.33	22	—9	8	—2.00	3.3
Aurora.....	20.06	30.22	22.84	24.37	11	47	13	39.67	8	—17	22	—2.00	4.9
Batavia, [Capon].....	20.45	32.77	20.03	24.42	19	52	19	40.67	8	—16	8	0.00	5.5
Batavia, [Mead].....	18.70	28.87	20.77	22.78	19	45	19	37.33	8	—18	22	—4.00	5.3
Brighton.....	24.34	38.39	30.29	31.01	3	60	26	45.33	22	—6	22	—0.67	3.3
Carthage (k).....	19.00	31.13	23.45	24.53	19	53	27	41.33	8	—10	8	—6.67	—
Edgington.....	21.61	32.77	25.87	26.75	19	52	19	43.67	8	—8	7	1.00	4.4
Elgin.....	19.64	28.39	22.16	23.40	19	46	19	39.33	8	—13	22	—3.33	5.6
Jacksonville (m).....	24.32	35.26	30.19	29.92	19	52	19	46.33	22	—8	22	0.33	—
Manchester (n).....	22.84	36.16	25.58	24.19	27	55	27	43.00	7	0	7	—0.33	4.6
Marengo.....	20.81	28.16	23.39	24.12	19	45	19	38.33	8	—10	22	—1.33	5.4
Ottawa.....	20.61	30.10	24.07	24.91	19	47	19	39.33	8	—15	22	—2.67	5.3
Pekin.....	20.10	32.39	23.97	25.49	27	49	12	41.00	8	—14	22	—3.67	5.1
Peoria.....	23.67	33.67	27.63	28.32	27	49	27	43.17	8	—9.5	22	2.00	4.6
Riley.....	18.26	27.79	20.55	22.19	19	45	19	37.67	8	—16	21	—3.33	4.2
Sandwich.....	18.10	30.84	25.61	24.85	19	54	19	42.00	8	—21	8	—5.67	4.4
Upper Alton.....	24.29	37.40	28.19	29.63	28	58	28	46.50	23	—6	23	1.33	2.6
Waynesville.....	19.96	30.77	28.13	26.29	19	46	19	43.33	8	—20	22	—4.33	5.6
West Salem.....	27.48	40.00	31.23	32.90	20	54	20	49.00	22	1	22	4.33	5.0
West Urbana.....	22.97	32.55	26.13	27.22	27	48	27	41.33	8	—12	22	—0.67	4.9
Wheaton.....	20.25	28.62	22.97	23.95	19	43	12	38.50	8	—11	8	—5.00	5.8
Winnebago.....	19.02	27.95	22.55	23.17	19	48	19	40.06	8	—10	22	—3.50	4.8
MISSOURI—													
St. Louis.....	28.76	39.26	32.26	33.43	27	58	27	46.83	22	—1	22	5.67	—
WISCONSIN—													
Appleton.....	16.33	25.45	19.26	20.35	19	43	19	37.67	8	—15	22	—6.00	5.4
Bay City.....	8.74	18.61	10.32	12.56	19	42	19	31.33	8	—22	7	—12.33	5.3
Bayfield.....	11.09	17.09	12.16	13.45	19	36	19	31.33	8	—14	21	—11.33	6.3
Beloit.....	19.74	29.45	21.77	23.65	19	48	12	37.67	22	—11	22	—3.33	3.7
Kenosha.....	22.69	30.48	24.26	25.81	20	42	13	38.83	13	—10	8	3.00	4.6
Madison.....	17.58	24.21	20.41	20.73	19	42	19	38.00	22	—12	22	—5.33	5.0
Manitowoc.....	19.77	29.87	24.74	24.79	19	48	19	40.33	8	—10	22	—0.33	6.2
Milwaukee, [Winkler].....	20.27	28.02	23.37	23.89	19	44	19	42.83	8	—10	22	—2.33	4.5
Mosinee.....	7.42	25.77	12.32	15.17	19	46	19	32.67	8	—32	8	—10.00	5.7
New Danemora (s).....				15.20	14	36	19	37.00	8	—33	8	—11.17	—
Platteville.....	15.36	25.22	18.48	19.69	19	50	19	42.00	8	—19	8	—11.00	4.7
Waukesha.....	21.62	29.07	24.86	25.18	20	46	20	42.67	8	—10	8	—8.33	6.2

a Observations taken at 7 a. m., 2 p. m., and 8 p. m.

b Same temperature on the 20th.

c Same temperature on the 9th and 22d.

d Incomplete.

e Same temperature on the 22d and 23d.

f Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a. m., 23.13

g Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a. m., 22.24.

h Same temperature on the 9th.

i Observations taken at 6 a. m., 2 p. m., and 9 p. m.

j Observations taken at 6 a. m. and 1 p. m.

k Observations taken at 7 a. m., 1 p. m., and 7 p. m.

l Same temperature on the 22d.

m Observations taken morning, noon, and sunset.

n Observations taken at 7 a. m., 1 p. m., and 9 p. m.

o Same temperature on the 27th.

p Same temperature on the 21st.

q Same temperature on the 12th.

r Same temperature on the 25th.

s Observations taken at 6 a. m., noon, and 6 p. m.

## No. 14.—THERMOMETER AND FACE OF SKY, JANUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Wausaw .....	9. 16	22. 13	13. 61	14. 97	19	48	19	34. 67	8	—31	8	—13. 67	2. 7
IOWA—													
Bellevue .....	18. 03	27. 64	21. 26	22. 31	19	46	19	40. 67	8	—12	22	— 2. 67	4. 8
Border Plains .....	16. 45	32. 32	21. 65	23. 47	19	52	19	42. 67	22	—11	21	— 1. 33	4. 4
Dubuque .....	18. 35	26. 74	23. 29	22. 79	19	47	19	42. 00	8	—13	22	— 2. 00 <sup>a</sup>	3. 7
Fairfield .....	19. 87	32. 19	24. 23	25. 43	19	54	19	45. 00	22	—10	7	— 3. 67	4. 3
Fort Madison (b) .....	21. 29	31. 26	26. 39	26. 31	27	50	19	42. 33	22	— 9	7	— 3. 33	3. 9
Muscatine .....	19. 38	29. 35	22. 07	23. 60	19	50	19	42. 00	7	—12	7	—12. 00	2. 7
Pleasant Plain .....	18. 19	32. 19	22. 29	24. 22	19	54	19	43. 33	7	—10	7	— 4. 00	3. 6
Rossville .....	13. 06	22. 33	16. 54	17. 31	19	41	19	38. 37	8	—18	7	— 8. 97	4. 1
Sioux City (c) .....	15. 27	31. 46	18. 14	21. 02	23	48	?	?	21	—11	?	?	---
MINNESOTA—													
Beaver Bay .....	8. 56	18. 06	11. 67	12. 76	14	36	13	25. 33	21	—19	21	—14. 34	5. 2
Burlington .....	6. 52	19. 87	9. 23	11. 87	19	43	19	34. 00	7	—26	7	—19. 00	4. 4
Forest City .....	2. 70	19. 06	8. 00	9. 92	19	42	19	26. 67	7	d—25	7	—18. 67	1. 2
Hazlewood .....	9. 55	17. 19	13. 39	13. 38	19	44	19	36. 67	7	—22	7	—14. 33	4. 2
Kandotta (e) .....	0. 83	14. 87	9. 06	8. 25	19	38	19	30. 00	22	—32	21	—22. 00	2. 0
Princeton .....	4. 59	17. 24	8. 86	10. 20	19	43	19	33. 00	8	—30	7	—19. 00	3. 4
NEBRASKA—													
Bellevue .....	21. 95	34. 56	25. 02	27. 18	19	55	19	46. 33	22	— 9	?	?	2. 9
Brownville .....	21. 64	36. 32	26. 09	28. 02	19	54	19	44. 00	7	— 9	8	2. 67	3. 8
Elkhorn .....	17. 00	31. 97	22. 29	23. 75	18	53	19	41. 00	21	d—12	21	— 0. 33	4. 2
Fontenelle .....	16. 58	32. 71	24. 03	24. 44	19	52	4	41. 67	7	d—12	4	41. 67	1. 9
Gilbert's Trading Post .....	2. 03	15. 78	4. 90	7. 57	31	36	15	24. 33	6	—14	6	— 6. 33	3. 7
Omaha, [Byers] .....													2. 9
Omaha, [Rain] .....	17. 48	30. 09	23. 35	23. 64	18	f 50	19	40. 67	7	d—10	21	1. 00	3. 4
KANSAS—													
Burlingame .....	27. 26	39. 50	31. 50	32. 75	19	56	19	49. 00	22	— 3	22	8. 00	3. 7
Denver City .....	17. 00	35. 87	20. 52	24. 46	31	62	23	43. 67	6	—11	8	5. 33	---
Lawrence .....	29. 39	41. 90	34. 03	35. 11	11	62	11	52. 33	7	— 2	7	9. 33	4. 0
Leavenworth C'y, [Berthoud] .....													3. 4
Leavenworth C'y, [McCarty] .....	25. 42	36. 16	29. 29	30. 29	19	54	19	47. 00	7	— 6	7	2. 67	4. 5
Manhattan .....	25. 36	39. 58	29. 77	31. 57	19	59	19	49. 33	7	— 3	7	9. 67	4. 8
UTAH—													
Great Salt Lake City .....	18. 00	32. 00	25. 00	25. 00	---	47	---	---	---	2	---	---	---
OREGON—													
Fort Vancouver .....	33. 64	40. 74	37. 22	37. 20	---	---	---	---	---	---	---	---	---
Portland (g) .....	34. 84	41. 48	38. 00	38. 11	19	52	19	45. 00	10	20	10	29. 67	---
CALIFORNIA—													
Marysville .....	42. 93	50. 16	46. 00	46. 36	19	60	19	54. 67	9	h 33	9	35. 33	6. 1
Sacramento .....	41. 48	48. 35	44. 77	44. 87	19	57	18	51. 67	10	34	10	36. 00	6. 3
MEXICO—													
Cordova (i) .....	60. 84	64. 40	61. 57	62. 56	28	72. 7	---	---	8	56. 1	---	---	---
Mirador .....	56. 07	65. 79	58. 17	60. 01	---	---	---	---	8	48. 2	---	---	---
Vera Cruz (j) .....	68. 34	---	67. 43	67. 88	---	---	---	---	---	---	---	---	---
WEST INDIES—													
Nassau, Bahamas (k) .....	---	---	---	75. 82	1	81	1	81. 00	10	68	10	68. 50	---
St. George's, Bermuda (l) .....	---	---	---	62. 10	---	69. 6	---	---	---	53. 1	---	---	---
CENTRAL AMERICA—													
Guatemala (m) .....	---	---	---	62. 19	6	78. 1	---	---	10	46. 4	---	---	---
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (n) .....	73. 96	84. 70	79. 27	79. 31	8	88	18	80. 67	10	69	10	76. 67	6. 1
Chanarcillo, Chili (o) .....	61. 14	73. 68	61. 30	65. 37	20	79	---	---	29	51	---	---	---
Chanarcillo, Chili (p) .....	65. 54	71. 68	66. 61	67. 61	---	---	---	---	---	---	---	---	---
EASTERN CONTINENT—													
Jerusalem, Palestine .....	43. 66	51. 95	45. 12	46. 91	1	63	1	57. 83	18	34	17	37. 33	2. 4

<sup>a</sup> Same temperature on the 7th.<sup>b</sup> Observations taken at 6 a. m., noon, and 7 p. m.<sup>c</sup> Incomplete.<sup>d</sup> Same temperature on the 22d.<sup>e</sup> Observations taken at 7 a. m., 2 p. m., and 6 p. m.<sup>f</sup> Same temperature on the 19th.<sup>g</sup> Observations taken at 6 a. m., noon, and 6 p. m.<sup>h</sup> Same temperature on the 10th.<sup>i</sup> Observations taken at 9 a. m., 12 m., 3, 6, and 9 p. m. Mean at 12 m., 62.94; at 6 p. m., 63.07.<sup>j</sup> Observations taken from 7 to 9 a. m., and from 10 p. m. to midnight. Incomplete.<sup>k</sup> Mean obtained from daily maximum and minimum.<sup>l</sup> Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.<sup>m</sup> Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m.<sup>n</sup> Observations taken at 6 a. m., 2 p. m., and 6 p. m.<sup>o</sup> Observations taken at 6 a. m., 3 p. m., and 9 p. m.<sup>p</sup> Observations taken at 9 a. m., noon, and 6 p. m.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	W'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	□	°	°	°	°	°	°	°	°	
Fort Simpson (a).....				—17. 12	5	10	5	2. 50	20	—48	20	—38. 50	---
Hamilton (b).....	27. 70		29. 50	28. 60	20	46	23	42. 00	7	12 c	10	15. 00	---
Montreal.....	16. 33	23. 45	18. 85	19. 54	19	41	18	37. 20	13	—11	2	—0. 56	5. 8
Moose Factory (d).....	—13. 96	5. 66	—6. 25	—4. 85		32. 5				—40			---
Red River Settlement.....	—4. 24	7. 65	—3. 85	—1. 47	25	e 28	25	23. 33	11	—32	11	—22. 67	3. 9
Rigolet (f).....	—4. 25		2. 43	—0. 91			21	22. 50	11	—22 g	11	—20. 50	---
St. John's.....	22. 14	26. 96	23. 07	24. 06	5	48	5	45. 67	16	8 e	8	11. 33	7. 0
St. Martin (h).....	7. 95	24. 79	15. 53	16. 09	19	45	20	37. 00	13	—23	11	—1. 53	---
Stanbridge.....	14. 75	25. 61	18. 82	19. 73	19	46	19	39. 33	13	—13	11	—0. 33	6. 1
Toronto (h).....	23. 67	29. 12	25. 82	26. 04	18	43	23	37. 55	10	4	10	9. 27	7. 9
Windsor.....	18. 89	27. 26	22. 80	22. 98	4	46	4	42. 00	8	—4	11	7. 33	6. 4
Wolfville.....	19. 46	27. 60	21. 18	22. 75	4	50	4	43. 00	1	2 i	11	7. 17	6. 3
MAINE—													
Cornish.....	16. 64	26. 57	19. 96	21. 06	16	41	16	35. 67	11	—3 j	26	2. 00	5. 2
Cornishville.....	19. 46	28. 43	21. 61	23. 17	16	k 42	20	36. 67	11	1	26	5. 00	4. 6
Dexter.....													6. 2
Gardiner.....	12. 79	27. 12	15. 95	18. 62	20	40	20	37. 33	13	—10	13	1. 67	6. 1
Perry.....	18. 16	25. 93	22. 14	22. 08	4	43	20	39. 17	26	—11	11	3. 67	4. 9
Portland.....	19. 46	28. 02	23. 71	23. 40	16	43	16	36. 33	11	1	26	6. 16	6. 5
Steuben.....	17. 36	28. 50	23. 04	22. 97	17	43	9	38. 00	2	—7	11	7. 00	6. 2
NEW HAMPSHIRE—													
Concord.....	22. 60	44. 43	25. 95	30. 99	17	66	17	42. 67	11	6	12	18. 00	6. 2
Shelburne.....	13. 11	32. 42	18. 78	21. 47	19	51	16	39. 00	13	—15	26	1. 00	5. 5
Stratford.....	12. 82	25. 32	17. 46	18. 53	19	41	20	36. 33	11	—14 c	11	—0. 67	6. 4
VERMONT—													
Brandon.....	19. 13	29. 47	22. 32	23. 64	19	44	20	37. 67	11	—12	25	5. 83	5. 8
Burlington.....	18. 52	26. 46	21. 68	22. 22	19	43	20	37. 50	13	—5. 5	2	2. 00	6. 2
Craftsbury.....	14. 96	26. 11	19. 04	20. 04	19	43	19	35. 00	13	—8	11	2. 00	6. 6
Rupert.....	22. 64	34. 36	29. 00	28. 67	21	m 50	24	42. 00	12	—2	12	10. 67	5. 7
St. Johnsbury.....	14. 62	26. 71	16. 46	19. 26	16	40	20	37. 33	11	—22 c	13	—14. 00	6. 3
MASSACHUSETTS—													
Amherst.....	21. 74	31. 89	26. 10	26. 58	16	44	20	38. 40	13	3	13	10. 33	6. 0
Cambridge.....	24. 30	34. 11	27. 48	28. 63	17	n 46	21	40. 67	12	6	12	13. 67?	6. 7
Danvers (o).....	23. 36	35. 00	26. 07	28. 14	16	50	16	40. 00	11	6 c	11	12. 00	6. 7
Florida.....													6. 6
Lawrence.....	22. 75	31. 75	26. 14	26. 88	16	p 45	20	40. 00	11	0	11	11. 60	6. 7
Mendon.....	25. 14	32. 39	26. 71	28. 08	20	46	20	42. 67	11	4	11	13. 33	5. 7
Nantucket.....	34. 16	39. 71	34. 57	36. 15	11	q 48	20	46. 00	11	16	11	22. 33	6. 5
New Bedford.....	28. 9	35. 83	29. 98	31. 58	9	r 44	20	43. 33	13	14	11	16. 33	6. 7
Richmond.....	19. 43	27. 46	23. 86	23. 58	16	l 40	19	40. 67	13	—2	12	6. 00	5. 2
Westfield.....	21. 93	31. 75	26. 00	26. 56	23	48	16	38. 67	27	4	13	11. 00	6. 5
Williamstown.....	23. 54	29. 36	24. 96	25. 95	23	44	20	38. 00	13	0	13	10. 00	6. 9
Worcester.....	24. 87	33. 78	28. 30	28. 98	16	q 48	16	44. 67	13	11	11	c 16. 17	6. 2
RHODE ISLAND—													
Providence (s).....	29. 10	35. 70	30. 10	31. 63	23	51	23	41. 33	13	14	---	?	6. 1
CONNECTICUT—													
Columbia.....	26. 96	36. 68	24. 93	29. 52	23	58	23	41. 67	11	8	11	15. 00	5. 9
Middletown.....	25. 19	37. 75	27. 59	30. 18	23	56	23	42. 67	13	9	13	17. 67	6. 1
Pomfret.....	23. 43	30. 89	26. 83	27. 05	20	43	20	41. 10	11	8	11	13. 67	6. 0
Saybrook.....	28. 07	34. 07	30. 00	30. 71	23	46	23	39. 00	11	15	11	18. 33	6. 3
Wallingford.....	24. 52	34. 27	27. 89	28. 89	23	53	23	41. 00	14	8	13	16. 50	5. 6
NEW YORK—													
Bellport.....	31. 04	37. 04	33. 25	33. 78	22	49	16	42. 67	11	17 c	12	20. 00	5. 7
Beverly.....	25. 04	33. 08	28. 73	28. 95	23	53	---	?	13	11	11	15. 33	6. 4

a Register thermometer.

b Observations taken at 9 a. m. and 9 p. m.

c Same temperature on the 13th.

d Observations taken at sunrise, 2 p. m., and 10 p. m.

e Same temperature on the 26th.

f Observations taken at sunrise and sunset.

g Same temperature on the 12th and 26th.

h Observations taken at 6 a. m., 2 p. m., and 10 p. m.

i Same temperature on the 8th.

j Same temperature on the 15th.

k Same temperature on the 19th.

l Same temperature on the 20th.

m Same temperature on the 24th.

n Same temperature on the 22d.

o Observations taken at 7 a. m., 1 p. m., and 9 p. m.

p Same temperature on the 28th.

q Same temperature on the 23d.

r Same temperature on the 16th, 20th, and 28th.

s Observations taken at sunrise, 1 p. m., and 10 p. m.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°	°		°		°		□		
Buffalo (a) .....	28.85	32.62	29.58	30.30	19	50	19	45.00	13	15	---	?	6.6
Flatbush .....	28.60	37.07	31.42	32.36	23	55	23	41.50	11	16	11	20.80	6.5
Nichols .....	23.25	36.68	28.00	29.31	23	55	20	42.00	5	4	10	13.00	7.4
Oswego .....	24.11	32.36	27.04	27.84	23	48	23	41.67	13	8	10	15.33	7.0
Penn Yan (b) .....	24.54	36.43	29.71	30.23	23	55	23	45.67	13	5	10	8.67	2.3
Rochester, [Dewey] .....	28.64	34.32	30.36	31.11	20	59	20	50.33	13	14	10	15.00	8.1
Wampsville .....	23.14	32.75	25.46	27.12	27	49	19	41.67	13	c 3	10	10.00	7.9
Waterford .....	22.64	32.66	26.43	27.24	23	49	16	40.00	13	3.5	25	13.16	6.3
NEW JERSEY—													
Freehold .....	30.50	40.32	32.95	34.59	24	59	24	45.67	13	18	13	c 24.67	---
Lambertville .....	26.78	40.08	31.79	32.88	23	60	20	46.13	8	15	11	22.63	4.0
Newark (d) .....	---	---	---	32.81	23	57	20	45.13	8	12	11	22.00	---
PENNSYLVANIA—													
Bellefonte .....	29.64	40.54	32.89	34.36	23	58	23	45.33	7	e 16	7	24.00	7.5
Berwick .....	27.93	35.18	31.43	31.51	23	57	23	43.67	5	10	5	20.00	5.4
Cannonsburg .....	32.89	39.28	37.50	36.57	23	58	23	51.00	14	19	4	25.67	7.9
Carlisle .....	30.19	38.00	32.63	33.57	20	f 57	20	f 45.33	5	15	5	24.00	6.3
Chambersburg .....	30.33	40.04	33.86	34.94	22	58	20	47.33	5	19	7	25.33	6.8
Chromedale .....	30.43	40.14	34.50	35.02	23	65	20	51.00	8	17	11	24.33	6.1
Easton (g) .....	27.11	37.61	28.07	30.93	23	60	23	44.67	11	12	11	17.00	6.3
Fleming .....	26.46	40.10	29.60	32.05	23	58	23	45.67	7	9	10	20.33	6.9
Gettysburg .....	28.86	40.09	31.75	33.57	23	59	20	49.00	5	12	11	22.33	6.2
Harrisburg, [Heisely] .....	32.57	39.25	35.67	35.83	23	56	23	46.33	11	24	11	26.00	6.5
Harrisburg, [Hickok] .....	30.96	38.93	33.64	34.51	23	58	20	47.67	27	20	12	24.83	6.7
Lewisburg .....	27.03	37.61	30.27	31.64	23	58	20	42.40	5	11	5	17.13	7.3
Linden (h) .....	25.67	34.77	28.77	30.39	23	52	27	44.00	5	4	---	?	---
Morrisville .....	28.46	39.93	31.86	33.42	23	62	20	47.00	11	16	11	21.33	5.3
Mount Joy .....	30.05	41.77	34.48	35.43	23	63	20	51.83	27	15½	11	24.33	5.8
Murrysville .....	28.63	38.54	30.71	32.63	19	f 57	19	48.00	5	12	10	19.00	7.5
Norristown .....	29.60	37.37	31.89	32.95	23	58	23	44.00	8	14	11	21.70	5.8
North Whitehall (i) .....	25.93	38.96	33.07	32.65	23	56	23	43.33	5	8	11	20.67	6.4
Philadelphia .....	32.70	40.64	35.99	36.44	23	62	20	49.67	11	20	11	22.80	6.1
Pittsburg, [Marine Hospital] .....	30.46	38.50	33.89	34.28	23	55	19	47.33	14	14	11	21.67	7.4
Pocopson .....	29.25	39.82	33.32	34.13	23	60	20	49.67	27	17	11	22.67	6.5
Shamokin .....	25.54	36.64	30.50	30.89	20	f 54	20	46.67	5	6	11	18.67	6.4
Somerset .....	28.50	38.89	30.29	32.56	23	59	23	48.33	11	12	11	18.33	7.9
Tarentum .....	28.74	40.18	32.54	33.82	19	f 58	19	48.67	5	8	7	21.00	7.3
West Haverford .....	31.50	40.54	---	36.02	23	59	20	52.00	7	19	11	23.00	6.1
Westtown .....	29.25	38.14	32.56	33.32	23	59	23	46.50	8	16	11	20.50	6.2
Worthington (j) .....	26.75	38.00	33.25	32.67	23	60	23	48.00	7	9	7	k 20.33	---
MARYLAND—													
Annapolis .....	33.36	42.66	39.36	38.46	20	61	20	54.33	1	l 21	11	28.00	6.5
Baltimore .....	35.07	43.05	38.20	38.77	20	62	20	54.33	11	24	11	27.33	6.6
Bladensburg .....	31.24	42.57	35.12	36.31	20	64	---	?	1	m 19	---	?	7.1
Chestertown .....	32.86	41.33	34.32	36.17	23	58	21	51.00	11	21	11	24.00	6.6
Frederick .....	33.12	41.37	35.94	36.81	23	58	20	49.17	5	20	10	27.50	6.5
Leitersburg .....	28.93	41.32	32.79	34.35	23	62	20	51.00	5	6	5	23.33	5.8
Leonardtown .....	31.89	44.74	37.93	38.19	23	60	20	54.00	11	c 22	11	28.33	5.8
Sykesville .....	32.11	42.79	34.29	36.40	23	61	20	51.67	5	16	5	21.33	5.6
DISTRICT OF COLUMBIA—													
Washington .....	35.14	44.18	38.82	39.38	20	63	20	54.33	11	23	11	28.33	6.2
VIRGINIA—													
Crichton's Store (n) .....	41.43	48.58	50.71	46.91	17	o 64	20	63.00	11	26	11	32.33	6.1
Cross Creek .....	28.50	39.92	30.74	33.05	19	69	23	48.33	14	4	10	17.67	---
Hartwood .....	35.82	45.32	38.43	39.86	20	64	20	56.00	11	21	10	28.00	---

a Observations taken at 8 a. m., 2 p. m., and 9 p. m.

b Observations taken at sunrise, 2 p. m., and sunset.

c Same temperature on the 14th.

d Daily maximum and minimum.

e Same temperature on the 8th.

f Same temperature on the 23d.

g Observations taken at 8 a. m., 2 p. m., and 10 p. m.

h Observations taken at 7 a. m., 1 p. m., and 9 p. m. Incomplete.

i Observations taken at sunrise, noon, and sunset.

j Observations taken at morning, noon, and evening.

k Same temperature on the 10th and 11th.

l Same temperature on the 5th.

m Same temperature on the 5th and 11th.

n Observations taken at 3½ a. m., noon, and 4½ p. m.

o Same temperature on the 21st and 23th.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'temp	Date.	Temp.	Date.	Mean temp	
VIRGINIA—Continued.	°	°	°	■	°	°	°	°	°	°	°	°	
Kanawha .....	37. 15	47. 61	40. 31	41. 69	19	66	19	60. 00	5	18	10	25. 67	---
Lewinsville .....	38. 48	44. 57	39. 86	40. 97	23	64	20	54. 33	11	26	10	28. 33	6. 3
Lewisburg .....	33. 29	45. 46	36. 46	38. 40	18	a 64	18	54. 67	7	13	10	19. 00	6. 0
Meadow Dale .....	28. 54	39. 04	34. 57	34. 05	23	56	18	48. 67	5	— 6	10	18. 33	6. 3
Montross .....	35. 18	45. 38	37. 54	39. 37	20	66	20	53. 33	1	b 22	7	c 28. 67	5. 9
Montview .....	35. 68	47. 38	40. 96	41. 34	23	64	28	58. 33	1	d 22	7	e 30. 00	5. 0
Point Pleasant .....	30. 04	46. 93	36. 39	37. 79	17	f 57	18	47. 00	8	17	7	27. 00	6. 6
Poplar Grove .....	36. 57	49. 43	39. 02	41. 67	27	71	19	59. 33	7	17	10	26. 67	6. 6
Portsmouth .....	43. 32	53. 07	44. 43	46. 94	20	73. 5	20	63. 50	11	29. 5	10	34. 50	4. 6
Rose Hill .....						64				27			
Rougemont .....	34. 54	48. 54	38. 36	40. 48	23	67	20	q 53. 67	5	h 20	11	28. 33	6. 0
Ruthven .....	37. 31	49. 79	40. 84	42. 65	20	68	?	?	14	21	?	?	5. 1
Smithfield .....	38. 03	50. 39	41. 59	43. 34	20	70	20	60. 80	1	i 23	11	31. 40	6. 4
Stribling Springs .....	26. 25	42. 33	27. 46	32. 08	28	62	20	45. 33	7	6	7	16. 00	5. 8
Westwood .....	37. 50	49. 04	42. 00	42. 85	20	68	16	57. 33	11	24	11	31. 67	---
Winchester .....	32. 50	45. 18	35. 68	37. 79	20	64	20	53. 00	5	j 20	10	24. 67	5. 6
NORTH CAROLINA—													
Chapel Hill .....	38. 29	53. 11	44. 14	45. 18	20	k 70	16	l 58. 00	5	m 26	7	33. 33	6. 4
Davidson College .....	39. 65	51. 76	44. 90	45. 44	24	71	?	?	7	27	?	?	6. 0
Green Plains .....	38. 82	51. 46	41. 68	43. 99	20	70	20	60. 00	1	21	11	32. 00	---
Murfreesborough .....	40. 44	52. 00	45. 70	46. 05	20	72	20	62. 00	1	26	7	34. 00	5. 0
SOUTH CAROLINA—													
Aiken .....	43. 12	57. 44	47. 61	49. 39	19	79	19	68. 67	1	27	8	34. 67	5. 4
All Saints .....	46. 07	59. 36	51. 32	52. 25	25	74	20	66. 00	1	27	1	40. 00	5. 1
Charleston, [Johnson] .....	50. 07	61. 64	55. 36	55. 69	25	77	25	66. 33	4	37	1	n 46. 33	---
Columbia, [Barton] .....	44. 29	56. 73	48. 75	49. 92	19	78	19	67. 83	1	27	8	37. 50	6. 6
Columbia, [White] .....	45. 75	56. 75	51. 14	51. 21	19	76	19	70. 67	5	28	1	33. 00	5. 4
St. John's (o) .....	41. 13	61. 28	47. 13	49. 85	18	76	?	?	1	25	?	?	5. 2
GEORGIA—													
Athens .....	42. 64	55. 49	48. 74	48. 96	18	75	25	65. 63	5	24	10	37. 60	6. 1
Atlanta .....	44. 32	51. 32	44. 14	46. 59	19	72	19	64. 67	4	p 30	8	q 34. 67	5. 8
Savannah .....	49. 27	62. 72	55. 15	55. 71	25	80	25	71. 33	1	37	10	44. 87	4. 4
Sparta .....	45. 68	59. 79	50. 54	52. 00	19	r 78	25	70. 33	5	28	8	38. 67	5. 5
Thomaston .....													5. 6
Thomson .....	42. 67	58. 11	48. 56	49. 78	25	79	25	69. 84	5	22	8	33. 67	6. 2
Whitemarsh Island .....	50. 32	62. 46	55. 75	56. 18	25	80	25	70. 67	4	37	10	46. 33	4. 3
Zebulon .....	49. 33	57. 40	53. 30	53. 34	17	70	24	66. 50	10	31	10	40. 67	5. 4
FLORIDA—													
Alligator .....	50. 56	70. 96	57. 00	59. 51	24	84	27	72. 67	14	34	4	46. 33	3. 4
Atsena .....													4. 3
Belair .....	51. 68	68. 86	59. 21	59. 92	18	82	25	s 74. 00	4	30	4	44. 67	4. 0
Gainesville .....	53. 39	62. 89	60. 00	58. 76	27	t 79	27	72. 67	4	36	4	46. 00	3. 1
Jacksonville .....	54. 04	68. 00	58. 39	60. 14	19	79	20	70. 67	5	i 39	4	u 49. 33	4. 2
Micanopy .....	52. 82	73. 42	58. 11	61. 45	28	86	28	74. 00	5	35	4	47. 33	4. 0
St. Augustine .....	60. 57	68. 93	60. 50	63. 33	25	81	25	72. 00	4	46	4	52. 00	3. 4
Salt Ponds (v) .....	71. 11	77. 57		74. 34	26	s 84	26	s 80. 00	5	60	4	62. 00	2. 8
Seville .....	51. 54				20	76	?	?	10	38	?	?	6. 2
ALABAMA—													
Carlowville .....	49. 96	64. 14	54. 64	56. 25	18	76	18	68. 00	10	34	10	43. 33	5. 0
Greene Springs .....	48. 87	60. 32	51. 19	53. 46	18	79	18	72. 33	7	q 26	10	32. 67	6. 1
Greensborough .....	49. 54	60. 50	52. 40	54. 15	25	78	19	71. 50	7	26	?	?	5. 7
Montgomery .....	48. 96	62. 59	53. 33	54. 96	18	79	18	70. 33	10	26	10	36. 67	5. 4
Selma .....	49. 96	60. 46	55. 46	55. 29	19	78	19	71. 67	7	q 30	10	36. 67	6. 7

a Same temperature on the 19th.

b Same temperature on the 11th and 14th.

c Same temperature on the 11th.

d Same temperature on the 5th and 8th.

e Same temperature on the 8th and 11th.

f Same temperature on the 22d.

g Same temperature on the 23d.

h Same temperature on the 7th and 11th.

i Same temperature on the 14th.

j Same temperature on the 7th, 10th, and 14th.

k Same temperature on the 24th.

l Same temperature on the 18th and 20th.

m Same temperature on the 7th, 8th, and 11th.

n Same temperature on the 7th.

o Incomplete.

p Same temperature on the 7th and 10th.

q Same temperature on the 10th.

r Same temperature on the 25th.

s Same temperature on the 27th.

t Same temperature on the 28th.

u Same temperature on the 5th.

v Thermometer  $2\frac{1}{2}$  to  $2\frac{3}{4}$  degrees too high.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSISSIPPI—	°	°	°	°		■		°		°		°	
Columbus .....	46. 11	57. 49	50. 56	51. 40	19	76	19	70. 43	10	24	10	31. 77	5. 4
Natchez .....	50. 33	69. 80	58. 30	59. 47	18	a 78	18	72. 00	10	30	10	42. 33	6. 3
Paulding .....	50. 98	65. 55	57. 89	58. 14	18	83	18	75. 83	7	27	10	39. 50	5. 9
LOUISIANA—													
Black River .....	53. 93	66. 75	59. 72	60. 13	18	b 82	18	75. 67	10	33	10	43. 33	7. 2
New Orleans (c) .....	61. 75	66. 14	69. 25	65. 71	18	82	25	79. 00	10	43	10	47. 00	---
TEXAS—													
Austin, [Palm] .....	53. 21	67. 57	58. 65	59. 81	19	83	19	74. 67	9	32	■	40. 00	6. 6
Austin, [Van Nostrand] .....	53. 18	67. 22	59. 48	59. 96	19	82	19	74. 60	■	32	9	40. 63	7. 3
Larissa .....	53. 02	63. 64	57. 69	58. 12	15	79	17	73. 33	9	29	■	36. 83	5. 1
New Braunfels .....	54. 04	68. 43	57. 79	60. 09	17	d 81	17	72. 50	■	33	■	47. 03	0. 4
Northern tier of counties (e) .....	42. 89	63. 80	49. 85	52. 45									
Roundtop .....	56. 00	71. 00	66. 00	64. 33		82				34			
Sisterdale .....	51. 12	65. 95	54. 67	57. 25	17	78	17	70. 73	6	31	■	39. 46	6. 8
Union Hill .....	53. 43	67. 14	58. 64	59. 74	24	81	17	73. 00	9	29	9	36. 33	7. 4
Washington .....	55. 31	68. 89	59. 64	61. 28	24	83	24	77. 00	9	32	3	46. 00	6. 1
Webberville .....	57. 32	69. 62	64. 27	63. 74	19	82	19	78. 00	■	35	9	43. 00	5. 3
ARKANSAS—													
Washington (f) .....	44. 86	60. 00	---	52. 43	23	80	19	74. 00	■	27	6	34. 50	---
TENNESSEE—													
Glenwood .....	39. 20	48. 17	43. 59	43. 65	19	74	19	67. 10	10	13	10	20. 57	7. 1
La Grange .....	43. 87	53. 18	48. 14	48. 40	19	76	19	70. 85	■	20	6	27. 67	6. 5
Memphis .....	43. 32	52. 43	48. 50	48. 08	19	73	19	68. 00	10	21	■	g 28. 67	---
KENTUCKY—													
Bardstown .....	35. 84	44. 62	40. 11	40. 19	19	72	19	67. 33	7	12	4	19. 16	7. 0
Danville .....	35. 75	48. 14	40. 54	41. 48	19	70	19	65. 33	5	13	4	21. 00	7. 0
Louisville (h) .....	34. 00	45. 29	39. 75	39. 68	19	73	19	66. 33	7	15	4	20. 33	7. 5
Paris .....	31. 35	44. 00	41. 05	38. 80	19	68½	19	64. 83	7	3	4	19. 83	7. 1
Springdale (i) .....	33. 04	44. 89	41. 04	39. 66	19	71	19	66. 83	7	9	4	20. 83	7. 7
OHIO—													
Avon .....	29. 95	37. 79	32. 52	33. 42	19	61	19	55. 53	7	7	10	16. 67	7. 1
Bellefontaine .....	25. 78	35. 30	29. 23	30. 10	19	56	19	53. 10	10	1	10	10. 33	7. 1
Bowling Green .....	27. 05	37. 84	31. 54	32. 14	19	57	19	54. 33	7	■	10	16. 00	6. 0
Cincinnati, [Harper] .....	34. 68	48. 82	40. 61	41. 37	23	74	19	62. 67	7	16	4	22. 67	6. 5
Cincinnati, [Phillips] .....	36. 14	43. 89	40. 92	40. 32	19	68	19	62. 00	7	14	4	25. 00	7. 0
Cleveland .....	27. 78	35. 93	30. 39	31. 37	19	57	19	50. 00	7	■	10	15. 67	7. 8
College Hill .....	31. 61	39. 32	33. 96	34. 96	19	64	19	60. 67	5	k 16	5	18. 00	7. 2
Collingwood .....	27. 86	38. 00	31. 86	32. 57	22	68	19	51. 33	7	4	10	13. 33	---
Hillsborough .....	30. 66	38. 68	35. 59	34. 98	19	62	19	58. 50	10	11	10	16. 30	7. 0
Hiram .....	26. 87	35. 73	29. 39	30. 67	23	57	19	47. 33	7	g 10	10	13. 33	7. 4
Hudson (m) .....	27. 50	35. 92	30. 65	31. 36	19	56. 5	19	49. 57	7	7. 6	10	16. 47	6. 8
Jackson, [Monroe county] .....	31. 32	41. 36	35. 25	35. 98	27	60	19	54. 00	14	13	---	?	6. 9
Madison, [Atkins] .....	29. 25	38. 28	32. 00	33. 18	19	58	19	51. 33	2	7	---	?	7. 8
Madison, [King] .....	28. 50	36. 54	29. 57	31. 54	23	54	19	47. 67	7	4	7	18. 33	7. 7
Montville .....	27. 70	35. 33	30. 84	31. 29	19	58	19	52. 50	10	7	6	18. 50	7. 1
New Lisbon .....	34. 07	47. 39	37. 28	39. 58	19	n 64	19	57. 33	8	7	8	21. 67	6. 0
Northwood .....													6. 5
Portsmouth .....	34. 25	46. 75	39. 35	40. 12	19	69	19	63. 00	7	18	■	24. 33	6. 6
Ripley .....	32. 93	---	38. 82	35. 87	19	65	19	60. 33	7	13	---	?	8. 0
Rockport .....	31. 04	42. 00	35. 21	36. 08	23	65	23	53. 00	7	10	10	22. 00	---
Savannah .....	26. 96	37. 43	29. 93	31. 47	23	60	19	53. 00	7	— 5	10	12. 67	7. 3
Troy .....	27. 50	38. 68	35. 04	33. 74	19	60	19	56. 00	10	9	10	15. 67	7. 5
Urbana .....	27. 39	39. 50	30. 57	32. 49	19	61	19	57. 00	10	7	10	14. 00	6. 8
Welchfield .....	26. 39	36. 89	28. 75	30. 68	23	59	19	48. 00	10	o 9	10	15. 00	6. 5
Westerville .....	29. 16	38. 59	34. 37	34. 04	23	59	19	55. 50	7	8	10	16. 83	6. 6
Windham .....	26. 50	36. 04	30. 36	30. 97	22	56	19	46. 33	7	0	7	16. 67	---

a Same temperature on the 19th.

b Same temperature on the 19th and 26th.

c Observations taken at 9 a. m., noon, and 3 p. m.

d Same temperature on the 24th.

e Observations taken at 7 a. m., 2 p. m., 7 p. m., and 9 p. m. Mean at 7 p. m., 53.25.

f Observations taken at sunrise and 2 p. m.

g Same temperature on the 10th.

h Observations taken at 7 a. m., 3 p. m., and 9 p. m.

i Observations taken at 7 a. m., 2 p. m., and 6 p. m.

k Same temperature on the 7th.

l Same temperature on the 22d.

m The records of the thermometer at this place are 0.85 too high.

n Same temperature on the 23d.

o Same temperature on the 14th.



## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—	°	°	°	°		°		°		°			
Battle Creek	24.00	36.71	28.04	29.58	22	50	22	41.67	14	3	6	15.00	5.8
Detroit	28.50	36.18	29.21	31.30	19	55	19	47.67	10	7	10	9.67	6.6
Lansing (a)	24.35	33.50	28.14	28.66	19	57	19	49.00	14	7	10	14.00	3.9
Marquette	15.28	26.89	17.26	19.81	16	45	17	37.03	11	—10	11	—1.75	5.2
Monroe, [Whelpley]													7.4
New Buffalo	26.43	36.21	31.15	31.26	19	62	19	57.33	6	9	—	?	7.9
Ottawa Point (b)	21.46	30.46	27.82	25.63	18	44	18	37.75	11	—5	11	9.00	7.3
Port Huron	25.42	35.89	28.96	30.09	19	c 52	19	45.67	7	0	10	16.00	7.4
Thunder Bay Island (d)	21.27	25.18	23.91	23.36	22	37	18	35.37	4	1	4	3.00	7.0
Ypsilanti	23.88	35.18	28.71	29.26	19	54	19	46.16	14	2	10	14.00	7.0
INDIANA—													
Aurora (e)	32.07	44.43	39.18	38.56	19	67	19	63.00	7	12	4	29.00	—
Cannelton	35.76	43.63	39.01	39.47	19	67	19	63.40	4	17	4	18.10	6.5
Logansport	29.82	40.25	33.46	34.51	19	67	19	62.33	10	14	4	17.67	7.2
New Harmony	32.89	43.25	38.29	38.14	19	72	19	65.33	10	9	4	17.67	6.4
Richmond, [Moore]	29.77	38.80	33.65	34.07	19	63	19	59.80	10	10	4	16.80	7.1
ILLINOIS—													
Augusta	24.78	36.68	29.78	30.41	19	70	19	53.67	4	—3	9	5.00	5.0
Aurora	22.25	34.46	27.43	28.05	19	66	19	52.67	13	—8	9	6.00	5.6
Batavia, [Capon]	22.54	36.43	27.18	28.72	19	68	19	53.33	13	—2	9	8.33	6.1
Batavia, [Mead]	20.53	33.39	24.78	26.23	19	65	19	51.33	13	—3	9	3.33	5.9
Brighton	26.68	41.71	34.36	34.25	19	68	18	51.67	4	0	4	4.00	4.9
Carthage (f)	21.86	35.79	29.64	30.10	19	64	22	41.33	9	—2	9	2.67	—
Edgington	23.21	35.75	27.46	28.81	19	61	19	50.00	9	—4	9	3.33	5.6
Elgin	20.43	32.68	25.50	26.20	19	66	19	52.00	13	—4	9	3.33	6.2
Manchester (g)	25.96	40.29	30.04	32.10	19	74	19	56.07	4	h 0	9	9.33	5.6
Marengo	20.79	32.04	25.82	26.22	19	64	19	51.33	10	—2	9	4.00	5.9
Ottawa	22.37	34.92	28.48	28.59	19	67	19	54.00	10	0	9	6.00	5.7
Pekin	22.86	37.68	28.29	29.61	19	71	19	53.67	10	—2	9	5.33	5.9
Peoria	27.06	38.15	31.50	32.24	19	70	19	56.50	10	2	9	8.00	5.8
Riley	21.44	32.12	24.19	25.92	19	62	19	49.33	9	i 0	9	1.67	4.7
Sandwich	22.39	33.53	25.75	27.22	19	66	19	53.33	10	i 0	9	5.33	5.2
Upper Alton	29.79	43.00	34.36	35.72	19	74	19	61.00	4	5	9	12.33	—
Waynesville	23.54	36.57	32.25	30.79	19	70	19	62.17	4	—6	4	2.67	6.1
West Salem	32.29	43.68	37.36	37.78	19	77	19	69.67	10	7	4	13.67	6.5
West Urbana	26.64	38.89	30.29	31.94	19	72	19	58.67	4	h 2	4	9.00	6.3
Wheaton	22.78	32.62	26.48	27.29	19	65	19	52.30	13	—1	9	4.67	6.0
Winnebago	21.51	31.87	25.53	26.30	19	64	19	50.33	13	—5	9	2.83	5.6
MISSOURI—													
St. Louis, [Engelman]	32.41	43.59	37.48	37.83	19	76	19	60.67	10	8	4	h 18.83	5.9
St. Louis, [Fendler]	31.14	43.57	36.04	36.92	19	76	19	60.00	10	5	9	16.33	—
WISCONSIN—													
Appleton	18.37	31.00	22.11	23.83	22	56	19	45.67	6	—2.5	9	3.00	4.9
Bay City	5.79	21.93	11.64	13.12	17	46	17	36.67	12	—30	9	—10.67	3.5
Bayfield	10.67	21.57	14.39	15.54	17	45	17	36.33	12	—15	9	—5.67	5.1
Beloit	21.07	35.42	25.28	27.26	19	66	19	51.67	13	—5	9	4.00	4.7
Kenosha	23.77	32.88	27.91	28.19	19	55	19	46.50	10	0	9	4.67	4.6
Madison, [Sterling]	19.93	29.11	24.46	24.50	19	56	19	45.00	9	—5	9	—1.33	5.8
Manitowoc	21.50	33.00	27.32	27.29	19	52	19	44.67	10	—2	9	7.33	6.3
Milwaukee, [Pomeroy]	25.71	34.14	28.54	29.46	20	47	22	43.33	10	3	9	12.33	8.1
Milwaukee, [Winkler]	22.89	31.77	26.21	26.96	19	50	19	46.33	9	—2	9	2.67	5.2
Mosinee	10.68	33.18	15.22	19.69	22	56	19	37.67	8	—20	10	—6.00	5.5
New Danemora (j)	11.79	29.25	22.82	21.29	18	45	17	40.00	6	—15.5	9	—4.00	—
Platteville	19.36	32.07	24.04	25.16	19	60	19	47.33	9	—16	9	—5.33	5.0
Wausaw	16.18	31.21	19.86	22.42	22	50	19	37.67	8	—8	8	—2.00	4.0
IOWA—													
Bellevue	19.00	33.39	25.21	25.87	17	h 58	17	48.00	13	—6	9	1.33	5.7
Border Plains	16.43	32.57	21.11	23.37	22	56	22	42.67	13	—11	9	—2.33	—

a Observations taken at 7 a. m., 2 p. m., and 8 p. m.

b Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a. m., 22.79.

c Same temperature on the 23d.

d Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a. m., 23.09.

e Observations taken at 6 a. m., 2 p. m., and 9 p. m.

f Observations taken at 7 a. m., 1 p. m., and 7 p. m.

g Observations taken at 7 a. m., 1 p. m., and 9 p. m.

h Same temperature on the 10th.

i Same temperature on the 13th.

j Observations taken at 6 a. m., noon, and 6 p. m.

k Same temperature on the 19th.

## No. 15.—THERMOMETER AND FACE OF SKY, FEBRUARY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Iowa—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Burlington.....	26.67	37.67	31.50	31.95	19	58	19	49.00	9	0	9	5.33	6.1
Dubuque.....	19.68	31.82	26.32	25.94	19	a 52	19	45.00	9	— 7	9	0.00	4.4
Fairfield.....	22.39	34.11	26.30	27.60	22	57	22	46.67	4	— 5 b	9	0.67	5.6
Fort Madison (c).....	22.32	34.96	29.35	28.88	19	61	19	50.67	6	— 4	9	2.33	4.8
Muscatine.....	19.46	33.21	24.43	25.37	2	56	19	45.33	13	—13	9	— 1.33	4.4
Pleasant Plain.....	18.54	36.07	24.74	26.45	17	d 56	17	e 44.00	13	— 10	9	0.00	5.1
Rossville.....	15.87	29.03	21.53	22.14	22	48	22	38.90	9	—11	9	— 6.60	4.9
MINNESOTA—													
Beaver Bay.....	7.80	21.63	14.80	14.74	17	37	17	33.33	10	—15 f	9	— 7.00	3.9
Burlington.....	7.00	26.18	13.82	15.67	17	48	17	37.67	11	—20	9	— 7.33	3.6
Forest City.....	7.79	25.07	10.46	14.44	18	45	18	34.00	9	—20	9	— 8.67	1.8
Hazlewood.....	9.75	22.46	12.58	14.93	18	45	18	37.67	9	—20	9	—13.67	4.9
Kaudotta (g).....	1.57	20.60	13.10	11.75	22	42	24	29.33	9	—27	9	—11.00	3.6
Princeton.....	7.82	25.25	14.71	15.93	23	h 42	18	h 33.33	7	—20	10	—10.00	3.8
NEBRASKA—													
Bellevue.....	18.75	33.07	24.11	25.31	21	i 55	21	42.67	12	—10	12	1.33	?
Brownville.....	20.07	36.29	24.39	26.92	22	57	26	44.00	12	—17	12	0.67	3.8
Elkhorn.....	14.96	28.86	20.46	21.43	22	53	22	41.00	12	—18	12	4.67	4.4
Fontenelle.....	14.86	31.61	24.04	23.50	22	54	22	44.67	12	—15	9	— 1.33	2.8
Omaha, [Byers].....													2.8
Omaha, [Rain].....	16.21	28.29	21.60	22.03	22	50	18	38.00	12	—15	12	— 5.67	4.3
KANSAS—													
Burlingame.....	27.10	40.75	31.40	33.08	1	j 58	23	48.00	12	— 6	9	12.67	2.8
Lawrence (k).....	32.18	46.05	35.36	37.86	1	j 60	17	49.67	4	8	?	?	4.1
Leavenworth City.....													3.6
Manhattan.....	25.61	42.46	30.18	32.75	22	63	18	52.00	12	— 5	11	11.67	4.6
UTAH—													
Great Salt Lake City.....	38.00	43.00	40.00	40.33		48				16			
OREGON—													
Fort Vancouver.....	36.57	43.00	38.85	39.47									
Portland (l).....	36.78	43.18	39.61	39.86	5	54	5	49.33	13	28	13	33.33	
CALIFORNIA—													
Marysville.....	47.85	56.07	51.00	51.64	7	65	7	59.33	19	39	19	47.33	5.4
Sacramento.....	46.96	54.29	50.25	50.50	5	62	5	57.33	22	39	22	44.67	5.6
San Francisco.....	48.29	54.82	49.57	50.89	5	m 61	5	61.00	19	i 43	18	i 47.33	4.6
MEXICO—													
Cordova (m).....	66.65	71.26	67.87	69.01	28	78.1			7	60.1			
Mirador (n).....	59.63	74.64	64.67	66.31					7	50			
Vera Cruz (o).....	72.05		73.25	72.65									
WEST INDIES—													
Centre Signal Station, Ber. (p).....		67.30			26	q 71			1	r 58			
Nassau, Bahamas (s).....				76.41	28	82	28	81.50	14	72	14	72.00	
St. George's, Bermuda (t).....				62.3		69.3				52.1			
CENTRAL AMERICA—													
Guatemala (u).....				64.74	28	81.7			5	46.6			
SOUTH AMERICA—													
Catharina Sophia, Surinam (l).....	74.87	84.57	79.21	79.55	2	v 87	27	81.67	20	70	3	77.00	5.2
Chanarcillo (l).....	59.81	72.72	67.04	66.52	8	80			5	51			
Chanarcillo, Chili (w).....	66.65	74.50	60.96	67.37									
EASTERN CONTINENT—													
Jerusalem, Palestine.....	47.29	56.55	47.75	50.53	10	69	10	58.00	4	38	3	42.00	1.9

a Same temperature on the 21st and 22d.

b Same temperature on the 9th.

c Observations taken at 6 a. m., noon, and 7 p. m.

d Same temperature on the 19th, 22d, and 26th.

e Same temperature on the 19th.

f Same temperature on the 12th.

g Observations taken at 7 a. m., 2 p. m., and 6 p. m.

h Same temperature on the 24th.

i Same temperature on the 22d.

j Same temperature on the 18th.

k Incomplete.

l Observations taken at 6 a. m., noon, and 6 p. m.

m Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 69.42; mean at 6 p. m., 69.87.

n Observations taken at 7 a. m., 2 p. m., and 8 p. m.

o Observations taken from 7 to 9 a. m., and from 10 p. m. to midnight.

p Observations taken at noon.

q Same temperature on the 27th.

r Same temperature on the 2d.

s Mean obtained from daily maximum and minimum.

t Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

u Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.

v Same temperature on the 6th, 9th, and 27th.

w Observations taken at 9 a. m., 3 p. m., and 9 p. m.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Fort Simpson (a) -----				—8.85	24	b 45	24	630.00	9	—36	2	—16.00	-----
Hamilton (c) -----	37. 10			37. 81	24	56	24	49. 00	1	23	1	23. 50	-----
Montreal -----	30. 23	37. 96	33. 03	33. 74	18	50	18	47. 83	3	— 5	2	4. 96	6. 1
Moose Factory (d) -----	6. 82	22. 48	13. 58	14. 29		40				—25			-----
Red River Settlement -----	12. 81	26. 93		19. 87	19	42	19	34. 00	27	— 4	27	2. 00	3. 4
Rigolet (e) -----	16. 10		21. 87	18. 98	28	38	20	39. 50	3	—20	3	—15. 50	-----
St. John's -----	32. 29	37. 84	32. 65	34. 26	15	b 48	28	43. 67	4	7	4	15. 67	6. 1
St. Martin (f) -----	24. 18	38. 75	30. 34	31. 09	25	52	2	43. 07	2	—19	1	0. 30	5. 7
Stanbridge -----	27. 94	37. 90	30. 03	31. 96	29	52	29	47. 00	2	—15	2	2. 00	6. 4
Toronto (f) -----	33. 10	39. 14	36. 32	36. 19	24	52	24	46. 45	2	10	1	18. 32	6. 5
Windsor -----	28. 29	36. 53	31. 14	31. 99	30	51	26	46. 67	2	— 4	2	2. 33	6. 6
Wolfville -----	30. 64	38. 79	32. 16	33. 83	30	50	27	45. 17	2	— 5	2	2. 17	6. 5
MAINE—													
Cornish -----	27. 39	36. 10	30. 19	31. 23	13	g 46	13	40. 67	2	— 4	2	5. 66	5. 1
Cornishville -----	29. 41	36. 87	31. 58	32. 62	10	h 44	19	39. 00	2	0	1	9. 33	5. 0
Dexter -----													6. 1
Gardiner -----	27. 55	38. 13	32. 08	32. 59	17	48	30	42. 33	3	— 8	2	9. 00	5. 6
Perry -----	28. 32	37. 89	30. 68	32. 04	13	50	19	43. 67	2	— 5	2	4. 00	4. 9
Portland -----	29. 74	37. 10	33. 56	33. 47	13	j 48	13	42. 00	2	k 4	2	10. 83	5. 5
Steuben -----	29. 29	36. 84	31. 35	32. 49	30	47	29	41. 00	2	— 1	2	8. 33	5. 7
NEW HAMPSHIRE—													
Shelburne -----	27. 50	43. 06	33. 44	34. 67	17	61	17	44. 33	3	—10	3	15. 67	7. 2
Stratford -----	24. 84	36. 94	29. 00	30. 26	11	l 48	28	42. 00	3	—12	2	0. 67	6. 4
VERMONT—													
Brandon -----	29. 84	40. 67	32. 44	34. 32	29	56	29	47. 67	2	k 4	2	7. 67	6. 2
Burlington -----	29. 34	38. 02	33. 60	33. 65	28	m 52	18	46. 83	3	3	2	4. 33	6. 3
Craftsbury -----	26. 00	37. 03	30. 16	31. 06	28	50	29	43. 00	2	— 8	2	3. 00	6. 3
Rupert -----	31. 74	45. 74	39. 29	38. 92	27	64	28	n 54. 00	2	4	1	10. 67	6. 4
St. Johnsbury -----	25. 50	37. 52	29. 65	30. 89	13	o 46	12	40. 67	3	—20	2	— 5. 00	6. 4
MASSACHUSETTS—													
Amherst -----	31. 24	43. 08	36. 00	36. 77	28	57	18	47. 70	2	2	2	12. 80	5. 4
Bridgewater -----	37. 71	45. 94		41. 83	17	64	17	60. 50	2	11	2	16. 50	4. 9
Cambridge -----	34. 30	43. 04	37. 67	38. 37	17	p 57	18	51. 00	2	8	2	14. 33	5. 6
Florida -----													6. 6
Lawrence -----	32. 16	43. 03	36. 29	37. 16	19	58	15	49. 00	3	5	2	16. 33	5. 3
Mendon -----	35. 48	44. 83	38. 22	39. 51	18	61	13	54. 33	2	10	2	15. 67	6. 0
Nantucket -----	39. 48	45. 19	39. 48	41. 38	13	54	29	49. 33	2	18	2	22. 33	4. 8
New Bedford -----	36. 68	44. 76	37. 23	39. 56	18	58	18	50. 67	2	11	2	17. 33	5. 7
Richmond -----	30. 26	41. 45	34. 19	35. 30	12	53	15	45. 00	2	2	2	14. 67	6. 2
Westfield -----	31. 74	42. 84	36. 65	37. 08	28	59	28	47. 00	2	5	2	14. 33	6. 4
Williamstown -----	33. 71	38. 97	34. 13	35. 60	12	51	14	44. 67	2	8	2	11. 00	6. 4
Worcester -----	34. 24	45. 50	39. 38	39. 71	17	58	15	49. 00	2	10		?	6. 0
RHODE ISLAND—													
Providence (q) -----	36. 10	46. 70	38. 90	40. 57	13	p 60	28	50. 00	2	k 13	2	19. 00	5. 5
CONNECTICUT—													
Columbia -----	37. 55	46. 03	35. 23	39. 60	23	62	13	48. 67	2	8	2	7. 33	6. 4
Middletown -----	34. 53	48. 20	38. 31	40. 40	28	65	18	51. 10	3	9	2	18. 67	5. 1
New Haven -----	37. 78	46. 04	39. 00	40. 94	13	60	28	49. 33	3	16	1	23. 67	-----
Pomfret -----	33. 10	43. 21	35. 94	37. 42	28	56	18	48. 00	2	8	2	14. 50	5. 9
Saybrook -----	35. 16	43. 97	38. 29	39. 14	17	r 51	18	47. 33	2	16	2	20. 33	5. 6
Wallingford -----	34. 24	46. 87	38. 35	39. 82	23	62	22	50. 83	3	11	2	19. 00	4. 7
NEW YORK—													
Bellport -----	39. 82	46. 00	39. 42	41. 75	23	54	29	48. 67	2	19	2	22. 33	5. 3
Beverly -----	35. 80	46. 19	40. 19	40. 73	12	s 59	12	52. 00	2	13	2	19. 00	5. 7

a Register thermometer.

b Same temperature on the 27th.

c Observations taken at 9 a. m. and 9 p. m.

d Observations taken at sunrise, 2 p. m., and 10 p. m.

e Observations taken at sunrise and sunset.

f Observations taken at 6 a. m., 2 p. m., and 10 p. m.

g Same temperature on the 14th.

h Same temperature on the 14th, 24th, and 28th.

i Same temperature on the 2d.

j Same temperature on the 17th.

k Same temperature on the 3d.

l Same temperature on the 24th.

m Same temperature on the 29th.

n Same temperature on the 18th.

o Same temperature on the 14th and 28th.

p Same temperature on the 28th.

q Observations taken at sunrise, 1 p. m., and 10 p. m.

r Same temperature on the 23d.

s Same temperature on the 17th and 28th.

## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp	Date.	Temp.	Date	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Buffalo (a).....	38.61	42.18	43.24	41.34	28	69	28	53.00	2	23	1	25.33	6.2
Flatbush.....	37.80	48.08	41.04	42.31	13	61	12	51.40	2	13	2	22.60	5.6
Fort Edward.....	31.77	42.77	36.13	36.89	17	57	23	45.67	3	1	2	10.00	6.1
Houseville.....	31.13	39.93	32.90	34.65	28	59	18	50.00	2	1	1	7.33	6.3
Nichols.....	34.29	48.06	37.19	39.85	28	67	18	56.33	2	8	2	17.67	6.2
Oswego.....	34.39	41.94	38.81	38.38	28	60	18	51.33	2	11	2	17.00	6.1
Penn Yan (c).....	32.77	47.90	40.19	40.29	18	69	18	58.00	2	12	1	20.00	3.4
Rochester. [Dewey].....	36.49	45.74	39.55	40.59	24	63	18	57.00	2	20	2	25.00	6.0
Wampsville.....	32.29	41.52	34.61	36.14	17	60	29	51.33	2	6	1	14.67	6.2
Waterford.....	34.37	45.61	37.81	39.26	28	63	18	52.67	2	6	2	13.67	5.1
NEW JERSEY—													
Freehold.....	40.38	52.00	41.75	44.71	12	72	18	57.00	2	19	3	28.33	---
Lambertville.....	37.95	53.21	42.78	47.67	22	67	18	57.13	2	17	2	26.80	4.7
Moorestown (f).....	41.35	53.79	45.00	46.71	22	70	18	56.00	3	25	3	32.67	5.7
Newark (g).....				43.90	12	63	12	53.75	2	18	2	26.25	---
PENNSYLVANIA—													
Bellefonte.....	38.10	51.28	41.48	43.62	28	71	28	59.00	2	26	2	29.33	5.5
Berwick.....	40.16	51.13	42.77	44.69	28	65	18	57.33	2	18	2	25.67	4.4
Cannonsburg.....	40.32	50.20	46.42	45.65	28	67	28	58.33	20	27	19	29.67	5.3
Carlisle.....	39.76	51.19	44.06	45.00	18	67	18	57.00	2	21	2	27.80	4.9
Chambersburg.....	40.16	52.71	43.71	45.53	18	68	18	56.00	2	20	2	28.00	5.1
Easton (h).....	39.37	49.47	40.23	43.02	13	65	18	53.67	1	19	2	26.17	5.6
Fleming.....	34.00	50.38	39.67	41.35	28	68	28	55.00	2	10	2	24.33	5.4
Gettysburg.....	37.29	52.39	42.48	44.05	28	68	18	56.00	2	17	2	24.67	4.9
Harrisburg. [Heisely].....	41.84	52.42	47.27	47.18	28	66	18	58.00	2	24	2	30.33	5.2
Harrisburg. [Hickok].....	39.84	51.68	45.29	45.60	18	64	18	57.33	2	20	2	26.83	5.4
Lewisburg.....	36.34	49.48	40.82	42.21	28	63	28	53.63	2	12	1	19.70	6.1
Linden (j).....	36.10	45.60	39.00	40.23	28	65	28	53.00	2	13	2	20.50	---
Morrisville.....	38.00	53.29	42.39	44.56	22	67	18	58.33	2	17	2	25.00	4.0
Mount Joy.....	41.65	56.58	47.06	48.43	18	73	18	63.67	2	20	2	29.17	5.1
Murrysville.....	38.40	51.74	41.00	43.71	28	71	28	57.67	1	d 23	1	28.33	5.2
Norristown.....	41.85	50.50	44.01	45.45	18	65	18	58.67	2	20	2	25.90	5.4
North Whitehall (k).....	36.74	49.52	45.52	43.93	12	62	18	57.33	2	17	2	27.00	5.5
Philadelphia.....	41.77	55.31	47.27	48.12	28	70	18	58.67	2	22	2	29.33	5.5
Pittsburg. [Marine Hosp.].....	40.03	50.87	45.81	45.57	28	67	28	59.00	2	23	1	31.33	5.3
Pecopson.....	39.29	52.74	43.90	45.31	28	66	18	57.67	2	19	2	27.33	5.5
Shamokin.....	35.19	48.68	44.13	42.67	13	64	18	57.67	2	11	2	25.67	4.8
Somerset.....	35.81	48.74	41.10	41.88	17	66	28	55.67	2	16	2	25.67	6.1
Tarentum.....	37.07	53.26	42.65	44.33	28	71	28	65.50	2	20	1	28.33	5.6
West Haverford.....	40.51	50.13		45.32	28	67	15	61.00	2	18	2	25.50	5.0
Westtown.....	39.07	51.10	43.29	44.49	18	64	18	57.00	2	17	2	24.10	5.5
Worthington (m).....	35.87	50.19	46.94	44.33	28	66	28	59.00	2	12	2	30.33	---
MARYLAND—													
Annapolis.....	41.94	53.82	49.03	48.26	29	64	18	58.00	2	24	2	29.66	4.7
Baltimore.....	44.69	55.68	49.80	50.06	29	67	18	61.50	2	25	2	30.67	5.7
Bladensburg.....	39.44	57.55	42.79	46.59	22	n 71		?	2	20	2	28.33	---
Chestertown.....	40.94	54.21	45.68	46.94	23	69	18	58.80	2	21	2	27.00	5.0
Frederick.....	41.15	52.84	46.07	46.69	18	65	18	58.33	2	24	2	29.93	5.0
Leitersburg.....	38.00	53.43	42.72	44.72	28	70	18	58.67	2	20	2	27.33	4.4
Leonardtown.....	44.76	56.59	48.41	49.92	22	i 71	18	59.67	2	24		?	4.8
Sykesville.....	41.10	55.06	44.26	46.81	18	70	18	60.33	2	25	2	30.60	4.1
DISTRICT OF COLUMBIA—													
Washington.....	44.06	55.52	49.19	49.59	18	67	18	62.00	2	25	2	31.00	4.9
VIRGINIA—													
Crichton's Store (o).....	50.45	59.74	61.53	57.24	29	74	29	67.00	2	e 34	2	41.33	5.3

a Observations taken at 8 a. m., 2 p. m., and 9 p. m.

b Same temperature on the 29th.

c Observations taken at sunrise, 2 p. m., and sunset.

d Same temperature on the 2d.

e Same temperature on the 3d.

f Incomplete.

g Daily maximum and minimum.

h Observations taken at 8 a. m., 2 p. m., and 10 p. m.

i Same temperature on the 28th.

j Observations taken at 7 a. m., 1 p. m., and 9 p. m.; incomplete.

k Observations taken at sunrise, noon, and sunset.

l Same temperature on the 18th and 28th.

m Observations taken morning, noon, and evening.

n Same temperature on the 28th and 29th.

o Observations taken at 8 a. m., noon, and 5 p. m.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—Continued.	°	°	°	°		°		°		°			
Cross Creek .....	34.34	55.41	41.67	43.81	11	73	28	60.67	2	14	1	27.33	-----
Hartwood .....	44.48	56.48	48.10	49.69	18	a 68	28	60.67	2	29	2	32.00	-----
Kanawha .....	44.96	60.00	49.77	51.58	28	75	28	62.67	1	b 30	19	36.00	6.3
Lewinsville .....	45.11	57.31	48.71	50.38	18	69	14	62.16	4	30	2	34.33	5.0
Lewisburg .....	39.65	58.61	44.77	47.68	28	72	23	58.33	1	c 30	2	d 37.00	4.0
Montross .....	44.61	55.23	47.03	48.96	18	e 68	22	59.67	2	26	2	28.67	5.1
Mont View .....	43.81	60.13	49.68	51.21	21	78	23	61.33	2	28	3	32.67	4.1
Point Pleasant .....	46.48	54.16	45.74	48.79	8	65	8	62.67	1	32	19	39.33	2.8
Poplar Grove .....	42.61	62.35	46.81	50.59	28	81	28	68.33	2	b 28	19	34.00	5.0
Portsmouth .....	51.44	61.38	53.05	55.29	29	74.5	29	66.83	2	37.5	2	39.50	3.7
Rose Hill .....						81½				34			-----
Rougemon .....	44.68	59.93	50.45	51.69	29	75	29	61.67	2	26	3	32.67	4.6
Ruthven .....	46.75	52.48	48.55	49.26	29	76	29	63.67	2	30	?	?	4.3
Smithfield .....	46.67	62.07	49.88	52.87	29	74	29	65.67	2	28	2	33.90	4.9
Stribling Springs .....	33.42	53.61	36.48	41.17	17	67	29	51.33	2	12	2	25.67	4.5
The Plains (f) .....	45.35	58.71	48.94	51.00	25	68	18	60.00		?	-----	?	4.4
Westwood .....	45.02	60.07	51.11	52.07	29	72	29	63.00	2	29	2	35.33	-----
Winchester .....	40.71	56.10	44.75	47.19	18	72	18	60.67	2	24	2	30.67	3.8
NORTH CAROLINA—													
Chapel Hill .....	47.32	63.26	52.48	54.35	13	g 76	24	65.33	2	32	3	41.33	5.2
Green Plains .....	47.81	62.03	50.19	53.34	29	76	29	64.00	2	h 34	2	37.67	-----
Murfreesborough .....	48.81	62.32	55.10	55.41	29	76	29	67.00	2	33	2	37.67	3.9
SOUTH CAROLINA—													
Aiken .....	51.30	66.05	55.10	57.48	29	80	29	73.33	20	i 40	?	?	4.7
All Saints .....	55.23	65.35	58.78	59.79	30	79	29	71.67	20	38	19	48.33	4.8
Charleston .....	58.00	66.26	60.68	61.65	30	81	29	j 70.33	20	44	2	k 51.67	-----
Columbia, [Barton] .....	51.97	66.88	56.68	58.58	29	80	29	68.33	20	33	19	46.83	6.3
Columbia, [White] .....	54.58	66.35	60.23	60.39	29	81	29	73.33	20	38	2	46.67	4.1
St. John's (l) .....	55.65	69.73	57.67	61.02	29	82	29	73.67	10	40	?	?	5.3
GEORGIA—													
Athens .....	49.50	62.19	55.13	55.61	29	76	29	67.40	20	37	2	45.77	5.3
Atlanta .....	48.97	60.23	55.10	54.77	23	74	23	m 66.67	19	34	2	43.33	4.2
Augusta .....	55.82	71.26	60.45	62.51	29	85	29	77.00	19	43	2	49.83	5.2
Savannah .....	57.32	67.75	60.85	61.97	29	83	29	75.80	19	43	19	50.97	5.4
Sparta .....	51.42	65.77	56.68	57.96	29	80	29	72.67	20	37	2	46.67	5.2
Thomaston .....													5.3
Thomson .....	52.02	66.17	55.74	57.98	29	83	29	74.67	20	36	2	45.00	5.6
Whitemarsh Island .....	59.16	67.77	61.16	62.70	29	j 83	29	75.67	19	44	19	50.33	5.5
Zebulon .....	55.21	63.27	59.91	59.46	23	n 76	29	73.83	19	42	2	48.33	4.6
FLORIDA—													
Alligator .....	60.16	75.52	61.77	65.82	17	87	30	77.00	19	39	19	50.67	5.2
Atsena .....	64.68	69.87	67.06	67.20	13	76	29	72.33	20	52	19	57.33	5.3
Belair .....	59.74	71.61	65.10	65.48	13	j 82	29	77.67	19	41	19	54.00	5.4
Gainesville (o) .....	61.29	71.82	65.58	66.23	13	81	30	75.33	19	41	19	51.67	4.8
Jacksonville .....	64.23	72.46	63.90	66.86	30	84	30	78.33	20	45	19	55.33	5.2
Micanopy .....	61.46	76.42	63.77	67.22	17	p 85	30	79.33	19	b 40	19	51.00	6.1
St. Augustine .....	67.45	71.68	66.77	68.63	30	86	30	80.67	19	53	19	58.33	5.4
Salt Ponds (q) .....	75.68	81.35	-----	78.52	31	85	31	82.00	19	63	19	67.00	2.4
Seville .....	58.55	-----	-----	-----	30	75	-----	?	19	45	-----	?	5.9
ALABAMA—													
Carlowville .....	60.68	70.90	62.65	64.74	21	82	21	e 75.67	26	48	26	53.00	3.8
Greene Springs .....	52.92	65.36	55.62	57.97	23	79	23	71.33	19	38	19	44.33	5.2
Greensborough .....	50.15	63.22	55.42	56.26	3	73	-----	?	19	39	-----	?	5.7
Montgomery .....	54.26	67.10	58.35	59.90	29	82	23	72.00	19	40	18	48.33	6.0
Moulton .....	53.95	58.00	55.52	55.82	24	69	24	65.60	20	45	20	47.10	5.4

a Same temperature on the 22d and 28th.

b Same temperature on the 20th.

c Same temperature on the 2d, 4th, 13th, and 20th.

d Same temperature on the 4th.

e Same temperature on the 22d.

f For the last 17 days of the month only.

g Same temperature on the 24th and 29th.

h Same temperature on the 3d.

i Same temperature on the 26th.

j Same temperature on the 30th.

k Same temperature on the 19th.

l Incomplete.

m Same temperature on the 24th.

n Same temperature on the 29th.

o Observations taken at 6 a. m., 2 p. m., and 9 p. m.

p Same temperature on the 24th and 30th.

q Thermometer 2½ to 2¾ degrees too high.

## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ALABAMA—Continued.	□	○	○	○		○	■			○		○	
Selma	53.35	64.74	59.19	59.09	29	79	29	71.00	19	41	19	49.00	5.9
MISSISSIPPI—													
Columbus	51.01	63.20	55.89	56.70	23	76	23	70.47	19	40	18	44.03	4.7
Natchez	53.50	69.20	63.00	61.90	22	a 76	22	b 70.00	19	34	18	49.10	4.9
LOUISIANA—													
Black River	56.19	70.26	62.48	62.98	28	83	28	75.33	19	41	19	51.33	6.3
New Orleans (c)	66.16	69.77	71.06	69.00	25	91	29	79.67	18	d 57	18	58.00	---
TEXAS—													
Austin, [Palm]	52.67	71.93	58.31	60.97	28	92	28	76.00	8	e 40	6	48.67	4.1
Austin, [Van Nostrand]	53.01	73.38	59.77	62.05	28	93	28	76.83	31	36	6	50.00	4.3
Larissa	52.72	68.15	59.34	60.07	21	80	21	72.83	14	f 41	30	49.50	4.0
New Braunfels	53.95	75.37	59.27	62.86	28	91	24	76.00	18	38	■	50.80	0.9
Northern tier of counties (g)	53.48	76.92	56.85	58.27									
Roundtop	54.00	73.00	66.00	64.33		90.5				38			
Sisterdale	51.32	72.80	55.47	59.86	28	88	27	73.00	18	32	18	h 48.16	3.7
Union Hill	53.71	69.23	59.78	60.91	28	90	28	74.67	18	40	7	49.33	5.0
Washington	56.07	72.03	58.17	62.09	29	88			16	38			4.5
Webberville	57.76	73.19	65.10	65.35	29	93	29	78.00	15	42	■	54.17	2.7
ARKANSAS—													
Washington (i)	48.84	66.90	---	57.87	28	84	28	76.00	12	j 34	7	47.00	---
TENNESSEE—													
Glenwood Cottage	46.14	58.65	51.43	52.07	23	75	23	66.50	18	k 34	18	36.27	5.4
La Grange	49.87	61.33	54.60	55.27	22	79	23	72.00	18	36	18	40.07	5.4
Memphis	50.16	61.10	55.23	55.50	23	78	23	68.00	18	37	18	41.67	---
KENTUCKY—													
Bardstown	45.23	57.71	49.88	50.94	23	72	28	62.33	19	32	19	35.33	4.8
Danville	45.42	50.90	50.48	52.27	23	75	28	65.00	20	30	20	36.33	4.2
Louisville (l)	44.06	59.68	50.23	51.32	23	75	23	63.33	20	31	19	37.00	5.4
Paris	43.45	59.60	49.45	50.83	28	76	28	65.33	31	29	19	34.67	4.5
Springdale (m)	41.82	58.08	52.45	50.78	23	71	23	61.50	20	27	19	36.67	5.1
OHIO—													
Avon	43.04	51.75	42.50	45.76	28	72	28	64.00	1	n 28	1	28.67	6.3
Bellefontaine	38.51	49.23	41.44	43.06	28	66	28	59.80	2	21	19	26.00	5.9
Bowling Green	40.04	55.48	42.10	45.87	28	65	28	57.50	1	24	1	30.33	5.6
Cincinnati, [Harper]	46.29	65.00	51.35	54.21	13	81	21	65.67	20	31	19	37.33	4.3
Cincinnati, [Phillips]	43.71	57.58	49.29	50.19	7	o 70	28	63.00	20	31	19	35.33	4.4
College Hill	42.55	55.19	44.26	47.33	28	69	28	61.00	1	26	1	34.00	5.0
Collingwood	40.36	49.68	40.90	43.65	28	68	28	58.00	1	n 26	4	34.00	---
Cleveland	39.48	49.23	40.79	43.17	28	73	28	62.80	2	19	1	26.50	6.7
Hillsborough	41.13	52.18	47.11	46.81	7	p 68	28	62.33	2	26	19	30.00	5.1
Hiram	38.93	47.52	39.95	42.14	28	67	28	58.00	2	20	2	25.33	6.1
Hudson (q)	39.58	49.48	43.09	44.05	28	68	28	60.70	1	23	1	26.93	5.5
Jackson, Monroe Co. (r)	39.80	53.79	45.36	46.32	28	74	28	67.00	1	24	1	32.33	---
Madison, [Atkins]	41.35	48.50	40.08	43.31	28	68	28	58.67	1	22	1	28.33	6.0
Madison, [King]	37.81	48.87	38.65	41.78	28	70	28	60.67	2	19	1	25.00	5.8
Montville	39.76	49.10	42.29	43.72	28	69	28	61.33	2	22	1	27.00	5.7
New Lisbon	45.13	59.39	48.81	51.11	28	77	28	66.33	2	25	1	36.67	3.9
Northwood													5.4
Portsmouth	43.21	60.81	49.08	51.03	■	78	28	66.33	1	s 30	19	36.00	5.1
Rockport	44.77	54.97	47.23	48.99	28	76	28	65.33	2	26	2	33.33	---
Savannah	39.97	51.94	42.55	44.82	28	71	28	62.00	2	22	1	28.67	6.1
Troy	38.90	53.06	47.58	46.51	28	70	28	59.00	1	20	19	32.33	5.7
Urbana	39.03	54.02	44.42	45.82	24	p 70	28	62.33	1	19	1	31.00	6.0
Welchfield	38.45	49.90	39.55	42.63	28	68	28	59.00	2	18	1	24.00	5.1

*a* Same temperature on the 24th and 28th.*b* Same temperature on the 24th.*c* Observations taken at 9 a. m., noon, and 3 p. m.*d* Same temperature on the 12th.*e* Same temperature on the 15th and 18th.*f* Same temperature on the 20th.*g* Observations taken at sunrise, 7 a. m., 2, 7, and 9 p. m. Mean at sunrise, 41.10; at 7 p. m., 63.00.*h* Same temperature on the 30th.*i* Observations taken at sunrise and 2 p. m.*j* Same temperature on the 19th and 30th.*k* Same temperature on the 19th and 31st.*l* Observations taken at 7 a. m., 3 p. m., and 9 p. m.*m* Observations taken at 5 a. m., 3 p. m., and 6 p. m.*n* Same temperature on the 2d.*o* Same temperature on the 9th and 24th.*p* Same temperature on the 28th.*q* The records of thermometer at this place are 0°.85 too high.*r* Incomplete.*s* Same temperature on the 16th and 20th.



## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.	LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Ohio—Continued.	°	°	°	°		°		°		°		°	
Westerville .....	40.79	51.69	45.45	45.98	28	70	28	63.67	2	26	19	31.50	5.4
Windham .....	36.90	50.35	42.03	43.09	28	70	28	60.00	2	20	1	30.33	---
MICHIGAN—													
Battle Creek .....	36.55	48.42	38.58	41.18	17	66	23	54.00	1	20	1	28.67	5.2
Detroit .....	36.06	48.39	35.00	39.82	27	66	17	50.33	26	24	26	29.33	6.5
Grand Rapids .....	32.87	46.45	38.10	39.14	10	65	23	52.33	1	21	25	29.00	5.7
Lansing (a) .....	34.68	45.06	39.07	39.60	17	61	17	52.00	26	18	1	24.33	3.8
Marquette .....	27.52	34.79	29.48	30.60	23	57	23	47.83	1	7	1	18.80	6.9
Monroe, [Whelpley] .....													5.7
New Buffalo (b) .....	38.52	48.03	39.48	42.01	17	63	23	58.33	19	26	19	30.00	7.9
Ottawa Point (c) .....	30.87	39.29	36.90	35.14	23	56	22	44.25	2	11	1	19.75	6.4
Pert Huron .....	34.89	46.11	37.96	39.65	17	63	17	51.67	2	18	1	24.00	6.3
Thunder Bay Island (d) .....	30.43	33.93	32.05	32.32	24	46	23	41.75	1	13	1	15.75	7.1
Ypsilanti .....	35.23	47.52	37.78	40.18	17	65	24	52.00	2	20	1	28.37	6.0
INDIANA—													
Aurora .....	41.62	57.23	49.50	49.45	28	68	?	?	30	30	30	?	---
Cannelton .....	46.46	56.76	49.77	51.00	23	74	23	64.80	19	34	18	37.13	4.9
Logansport .....	41.23	53.52	46.16	46.97	6	68	28	60.67	1	27	19	32.33	6.4
Mishawaka (g) .....	35.06	46.29	40.00	40.45	17	60	17	51.00	16	24	19	30.33	5.8
New Harmony .....	44.90	56.52	49.97	50.46	23	74	23	65.00	5	32	18	38.00	5.1
Richmond, [Austin] (h) .....	40.79	53.60		47.20	23	67	?	?	1	25	19	32.00	6.7
Richmond, [Moore] .....	37.45	51.94	44.16	44.52	23	64	11	56.33	20	20	19	30.33	---
ILLINOIS—													
Augusta .....	36.80	50.03	43.55	43.46	23	71	23	58.33	19	22	19	31.00	4.7
Aurora (j) .....	35.00	46.16	39.00	40.05	23	65	23	56.00	5	23	19	30.00	6.2
Batavia, [Mead] .....	34.39	45.19	37.13	38.90	23	66	23	56.00	19	23	25	28.00	6.3
Carthage (k) .....	35.23	50.03	42.65	42.64	26	70	26	53.33	29	19	19	28.67	---
Edgington .....	36.16	46.58	40.16	40.97	23	69	23	56.67	19	22	1	32.33	7.1
Elgin .....	34.71	45.00	38.10	39.27	23	65	23	55.33	19	25	25	29.00	6.7
Manchester (m) .....	39.19	51.84	42.42	44.48	23	75	23	61.00	19	26	18	30.00	6.0
Marengo .....	34.84	43.90	37.26	38.67	23	64	23	55.67	25	25	25	29.33	6.8
Ottawa .....	34.89	47.03	39.90	40.61	23	69	23	57.00	1	23	1	31.67	6.2
Pekin .....	37.52	50.97	41.10	43.20	23	74	23	63.00	19	25	19	30.00	5.6
Peoria .....	40.15	51.58	43.51	45.08	23	72	23	58.33	19	27	19	34.33	5.4
Riley .....	33.50	44.10	36.40	38.00	23	65	23	56.00	31	23	1	29.33	4.9
Sandwich .....	35.35	45.65	38.06	39.66	23	64	23	50.33	5	24	25	29.33	6.0
Upper Alton .....	43.71	53.45	45.39	47.52	23	77	23	63.67	19	28	25	35.67	---
Waynesville .....	36.96	49.37	46.61	44.31	23	71	23	62.67	19	22	19	31.00	6.1
West Salem .....	45.10	57.75	50.23	51.03	23	77	23	66.67	1	29	18	34.00	5.2
West Urbana .....	40.71	50.68	45.33	45.57	10	65	10	57.67	19	26	18	30.00	5.8
Wheaton .....	34.98	45.25	38.45	39.56	23	65	23	56.03	19	24	19	28.83	6.9
Winnebago .....	34.27	44.53	37.16	38.65	23	65	23	56.83	31	19	25	29.16	6.7
MISSOURI—													
St. Louis, [Engelman] .....	43.40	54.87	48.40	48.89	23	77	23	65.00	19	29	18	34.00	5.5
St. Louis, [Fendler] .....	42.29	54.13	47.16	47.86	23	77	23	64.00	19	30	18	34.00	---
WISCONSIN—													
Appleton .....	32.55	40.37	34.84	35.92	16	58	23	52.00	1	16	1	24.33	6.1
Bay City .....	29.61	32.52	27.06	28.06	16	48	9	36.67	1	1	1	16.67	6.2
Bayfield .....	25.61	33.45	28.77	29.27	22	45	23	39.67	1	n 14	25	15.67	6.3
Beloit .....	34.19	46.16	36.64	39.00	23	66	23	53.33	31	14	26	30.67	5.7
Kenosha .....	35.48	42.87	37.44	38.60	17	57	21	48.67	31	26	25	29.00	5.1
Madison .....	33.23	41.48	35.39	36.69	23	61	23	51.33	30	p 24	25	27.67	6.9
Manitowoc .....	33.03	42.68	37.65	37.79	21	56	24	48.00	1	17	1	26.00	7.4
Milwaukee, [Pomeroy] .....	32.68	36.87	34.19	34.58	12	44	12	40.00	1	q 27	1	28.67	4.7

a Observations taken at 7 a. m., 2 p. m., and 8 p. m.

b Observations taken at 7 a. m., 1 p. m., and 9 p. m.

c Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a. m., 33.52.

d Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a. m., 32.81.

e Same temperature on the 1st and 2d.

f Same temperature on the 23d.

g For the last 17 days of the month only.

h Observations taken at 6 a. m. and 1 p. m.

i Same temperature on the 27th and 28th.

j Observations taken at 6 a. m., 2 p. m., and 9 p. m.

k Observations taken at 7 a. m., 1 p. m., and 7 p. m.

l Same temperature on the 10th.

m Observations taken at 7 a. m., 1 p. m., and 9 p. m.

n Same temperature on the 25th and 26th.

o Same temperature on the 21st.

p Same temperature on the 31st.

q Same temperature on the 29th.

## No. 16.—THERMOMETER AND FACE OF SKY, MARCH, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°	■	°	°	°	°	°	°	°	
Milwaukee, [Winkler] .....	34.87	40.97	36.52	37.45	21	55	23	48.00	25	25	1	30.00	5.6
New Danemora (a) .....	29.98	41.26	36.50	35.91	23	72	23	53.17	19	20	1	27.17	7.4
Platteville .....	34.06	44.90	36.93	38.63	23	64	23	51.33	19	b 22	18	c 30.33	6.5
Waukesha .....	35.87	45.72	37.90	39.88	11	58	—	?	25	25	—	?	6.9
Wausaw .....	31.48	41.26	33.52	25.42	23	66	23	53.33	25	18	25	24.67	5.5
IOWA—													
Bellevue .....	35.81	45.77	37.77	39.78	23	62	16	51.67	31	24	1	31.67	7.0
Border Plains .....	33.19	43.81	36.90	37.97	22	65	23	51.33	19	21	19	31.33	6.7
Burlington .....	39.22	51.03	44.58	44.94	23	72	23	59.67	19	26	18	d 34.00	6.3
Dubuque .....	36.52	44.68	39.71	40.30	23	62	22	55.00	19	24	18	32.33	5.8
Fairfield .....	37.03	48.84	41.10	42.32	23	74	23	57.67	1	e 29	29	34.00	6.2
Fort Madison (f) .....	35.94	47.68	43.52	42.38	23	69	23	58.00	19	22	18	30.67	5.1
Muscatine .....	34.52	46.03	40.16	40.24	23	67	23	54.67	19	23	18	e 29.67	5.6
Pleasant Plain .....	34.68	47.87	40.68	41.08	22	73	22	55.33	19	23	29	31.67	5.9
Rossville .....	31.63	41.27	34.96	35.95	26	60	23	48.50	19	21	4	28.60	6.4
MINNESOTA—													
Beaver Bay, [Clark] .....	25.60	32.16	28.29	28.68	15	40	23	38.00	25	9	25	14.37	6.0
Burlington .....	25.03	35.97	27.58	29.53	17	g 45	10	36.67	25	8	25	17.33	6.8
Forest City .....	28.94	36.55	27.13	30.87	16	47	16	40.67	4	10	4	21.33	3.7
Hazlewood .....	25.97	34.32	29.06	29.78	22	48	22	41.33	15	h 12	12	i 21.00	6.4
Princeton .....	28.51	36.80	30.61	31.97	16	j 47	23	42.33	19	b 12	31	21.60	6.3
NEBRASKA—													
Bellevue .....	36.48	46.55	38.19	40.41	22	67	5	53.33	29	24	18	28.33	5.9
Brownville .....	35.65	53.19	39.84	42.89	26	70	5	56.00	12	k 24	14	31.33	4.9
Elkhorn .....	31.97	44.58	34.93	37.16	20	70	20	51.67	29	19	29	26.33	5.7
Omaha, [Rain] .....	33.48	45.58	37.51	38.85	22	67	22	51.67	19	20	29	28.67	5.7
KANSAS—													
Burlingame .....	38.32	54.16	43.22	45.23	20	69	5	57.67	15	26	29	32.67	3.8
Lawrence .....	40.87	54.55	44.29	46.57	26	76	26	59.33	29	26	29	33.00	4.6
Manhattan .....	39.00	58.01	43.39	46.80	21	g 74	26	57.00	29	29	29	34.33	5.7
Neosho Falls .....	39.55	57.29	45.97	47.60	22	m 73	22	59.67	29	27	29	33.67	3.9
OREGON—													
Fort Vancouver .....	39.74	45.22	40.51	41.82	—	—	—	—	—	—	—	—	—
Portland (a) .....	38.52	46.42	42.48	42.47	24	58	24	54.67	11	n 32	11	34.07	—
CALIFORNIA—													
Marysville .....	46.48	59.45	51.12	52.35	26	68	26	61.67	31	37	28	46.67	4.0
Sacramento .....	46.94	55.61	51.87	51.47	25	m 64	25	59.67	31	40	10	b 47.00	3.8
San Francisco .....	47.06	56.74	49.48	51.09	17	67	25	57.33	28	b 41	30	47.00	3.2
MEXICO—													
Cordova (o) .....	71.98	76.05	72.23	73.96	29	87.1	—	—	18	62.6	—	—	—
Minatitlan .....	72.48	86.10	75.08	77.89	24	98	29	85.33	20	62	15	71.16	3.5
Mirador (p) .....	64.71	78.39	68.27	70.46	—	—	—	—	16	56.5	—	—	—
Vera Cruz (q) .....	76.40	—	77.20	76.80	—	—	—	—	—	—	—	—	—
WEST INDIES—													
Nassau, Bahamas (r) .....	—	—	—	79.91	30	86	29	85.00	19	73	19	73.50	—
St. George's, Bermuda (t) .....	—	—	—	61.9	—	69.3	—	—	—	49.1	—	—	—
CENTRAL AMERICA—													
Guatemala (u) .....	—	—	—	67.89	3	85.1	—	—	21	50	—	—	—
SOUTH AMERICA—													
Catharina Sophia, Surinam .....	73.78	85.61	79.30	79.56	22	88	6	v 81.00	9	67	u	77.00	4.9
Chanarcillo, Chili (a) .....	59.23	71.92	65.32	65.49	—	—	—	—	—	—	—	—	—
Chanarcillo, Chili (w) .....	65.62	74.36	59.15	66.38	9	79	—	—	25	52	—	—	—
EASTERN CONTINENT—													
Jerusalem, Palestine .....	51.48	61.44	51.97	54.96	23	81	23	73.67	9	33	9	39.00	1.3

a Observations taken at 6 a. m., noon, and 6 p. m.

b Same temperature on the 31st.

c Same temperature on the 25th.

d Same temperature on the 19th.

e Same temperature on the 18th and 25th.

f Observations taken at 6 a. m., noon, and 7 p. m.

g Same temperature on the 22d.

h Same temperature on the 12th.

i Same temperature on the 18th.

j Same temperature on the 23d.

k Same temperature on the 29th.

l Same temperature on the 28th.

m Same temperature on the 26th.

n Same temperature on the 12th and 29th.

o Observations taken at 9 a. m., 12 m., 3, 6, and 9 p. m. Mean at 12 m., 74.84; at 6 p. m., 74.68.

p Observations taken at 7 a. m., 2 p. m., and 8 p. m.

q Observations taken from 7 to 9 a. m., and from 9 to 11 p. m.

r Mean obtained from daily maximum and minimum.

s Same temperature on the 30th and 31st.

t Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

u Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.

v Same temperature on the 22d and 23d.

w Observations taken at 9 a. m., 3 p. m., and 9 p. m.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Fort Simpson (a).....	-----	-----	-----	21.82	20	68	22	45.00	10	b-10	10	b0.00	-----
Halifax (c).....	-----	-----	-----	38.60	30	58	23	44.80	11	23	6	32.95	5.1
Hamilton (d).....	41.43	-----	40.08	40.75	30	62	30	57.50	4	e32	4	f32.50	-----
Montreal.....	34.06	45.03	35.85	38.31	29	72	29	54.67	5	21	5	26.20	-----
Moose Factory (g).....	47.00	27.83	14.87	15.80	-----	57	-----	-----	-----	-23	-----	-----	-----
Red River Settlement.....	24.97	34.70	26.93	28.87	30	68	-----	?	8	11	1	10.33	4.2
Rigolet (h).....	27.50	-----	30.03	28.77	29	41	25	39.00	16	14	9	j17.50	-----
St. John's.....	39.00	43.93	37.43	40.12	29	61	25	49.33	1	k30	1	k32.67	7.8
St. Martin (l).....	31.60	47.65	37.11	38.79	29	76	29	58.30	10	18	5	26.77	-----
Stanbridge.....	34.97	43.57	35.70	38.08	29	67	29	53.00	9	20	5	22.67	4.9
Toronto (l).....	35.52	44.04	38.20	39.25	30	61	30	54.67	9	24	5	29.13	5.9
Windsor.....	34.18	43.52	36.95	38.22	30	60	24	45.83	6	25	9	30.50	6.2
Wolfville.....	35.72	44.42	37.18	39.11	24	58	24	50.67	6	25	9	29.67	75.6
MAINE—													
Cornish, [West].....	33.96	42.66	35.20	37.27	30	64	30	55.33	9	20	5	25.00	4.1
Cornishville.....	34.90	43.50	36.70	38.37	30	64	30	54.33	9	21	5	26.67	4.4
Dexter.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.0
Gardiner.....	36.07	45.05	34.27	38.46	30	63	30	51.67	9	25	5	29.67	4.4
Lisbon.....	35.27	46.63	39.30	40.40	30	68	30	55.33	10	22	5	30.67	3.4
Perry.....	33.83	42.05	36.23	37.37	29	60	30	49.17	6	22	9	26.83	4.6
Portland.....	35.95	44.98	38.02	39.98	30	65	30	54.50	6	27	5	30.00	4.2
Steuben (m).....	34.81	43.15	37.31	38.42	30	60	---	?	9	25	11	28.33	4.8
NEW HAMPSHIRE—													
Shelburne (n).....	30.31	46.76	35.16	37.41	29	72	29	49.73	9	20	9	25.77	4.3
Stratford.....	29.90	42.27	32.30	34.82	29	68	29	50.00	10	17	5	22.67	4.6
VERMONT—													
Brandon.....	34.83	45.35	37.90	39.36	29	68	29	53.67	9	24	9	28.50	4.9
Burlington.....	34.75	43.57	38.22	38.85	29	65	29	56.33	9	21	9	27.67	4.7
Craftsbury.....	31.13	40.77	34.93	35.61	29	66	29	53.00	9	16	5	23.00	4.5
Rupert.....	33.53	48.40	42.20	41.38	30	70	30	56.00	9	20	1	30.67	5.9
St. Johnsbury.....	31.48	43.35	32.75	35.86	29	68	29	47.33	9	20	9	23.67	4.6
MASSACHUSETTS—													
Amherst.....	38.40	49.70	41.67	43.25	30	71	30	57.50	9	29	9	32.70	4.9
Boston.....	39.08	50.62	42.13	43.94	21	70	21	54.00	5	30	5	34.00	5.6
Bridgewater (p).....	41.35	49.02	43.14	44.50	21	62	30	56.00	6	31	5	34.50	5.0
Cambridge.....	37.67	47.20	40.78	41.88	30	62	---	?	6	29	9	33.33	5.1
Florida.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.7
Lawrence.....	37.43	47.52	39.60	41.52	30	64	30	54.33	10	29	11	32.50	5.1
Mendon.....	37.37	46.17	39.73	41.09	30	65	30	55.67	9	24	9	32.67	5.2
Nantucket.....	43.29	48.77	42.51	44.86	21	q58	26	51.83	6	33	9	34.43	5.0
New Bedford.....	40.27	49.08	41.75	43.70	30	63	26	54.33	10	30	5	33.83	5.8
Richmond.....	34.10	48.00	40.70	40.93	29	66	30	55.00	11	20	5	29.67	5.6
Westfield.....	39.90	49.70	42.03	43.88	30	74	30	59.67	4	r30	5	32.33	5.4
Williamstown.....	38.70	45.00	38.73	40.81	29	61	30	50.67	9	25	5	30.67	6.2
Worcester.....	39.79	49.64	42.19	43.87	30	71	30	61.67	9	29	9	33.67	5.2
RHODE ISLAND—													
Providence (s).....	39.10	51.50	41.90	44.17	30	69	30	55.00	10	29	11	35.00	5.0
CONNECTICUT—													
Columbia.....	40.53	51.93	39.47	43.98	30	76	30	59.67	5	28	5	32.00	5.5
Middletown.....	39.39	54.38	42.44	45.40	30	77	30	59.53	10	28	5	34.33	5.0
Pomfret.....	37.38	47.84	39.99	41.74	30	70	30	58.17	5	t28	5	31.17	5.4
Saybrook.....	40.50	50.73	43.13	44.79	30	u61	26	53.67	6	v30	5	35.00	5.7

a Register thermometer. No observations on the 4th, 5th, or 6th, nor after the 26th.

b Same temperature on the 14th.

c Observations taken at 9½ a. m. and 3½ p. m.

d Observations taken at 9 a. m. and 9 p. m.

e Same temperature on the 5th and 8th.

f Same temperature on the 5th.

g Observations taken at sunrise, 9 p. m., and 10 p. m.

h Observations taken at sunrise and sunset.

i Same temperature on the 29th.

j Same temperature on the 11th and 12th.

k Same temperature on the 6th.

l Observations taken at 6 a. m., 2 p. m., and 10 p. m.

m Incomplete.

n Observations taken at sunrise, noon, and 9 p. m.

o Same temperature on the 9th.

p Observations taken at 7 a. m., 2 p. m., and 7 p. m.

q Same temperature on the 25th.

r Same temperature on the 5th, 6th, and 9th.

s Observations taken at sunrise, 1 p. m., and 10 p. m.

t Same temperature on the 6th and 9th.

u Same temperature on the 21st.

v Same temperature on the 7th.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1859.

NAME OF STATION.	MEAN.				MAXIMA.			MINIMA.				Mean cloudiness.	
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.	LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.		Date.	M'n temp.	Date.	Temp.		Date.
CONNECTICUT—Continued.	°	°	°	°	■	°		°		°			
Wallingford.....	38.72	52.45	42.63	44.60	30	77	30	58.83	10	29	5	33.67	4.8
NEW YORK—													
Bellport.....	43.17	49.70	42.73	45.20	25	58	26	53.67	9	31	5	36.33	5.2
Beverly.....	40.03	53.04	45.10	46.06	30	71	30	59.67	6	31	5	35.00	5.9
Buffalo (a).....	40.39	45.36	42.08	42.61	30	67	30	59.67	9	31	4	32.33	5.8
Flatbush.....	42.63	52.16	44.16	46.32	30	73	26	61.03	6	33	5	37.63	6.2
Fort Edward.....	38.10	48.03	40.90	42.34	29	70	29	56.00	9	25	9	31.00	5.4
Nichols.....	39.03	51.93	41.37	44.11	30	73	13	58.67	■	27	5	31.67	6.3
Oswego.....	37.40	44.37	39.50	40.42	30	56	30	48.67	5	b 29	5	30.33	5.5
Penn Yan (c).....	33.45	48.17	41.70	41.11	12	67	12	52.67	9	24	5	29.33	2.8
Rochester, [Dewey].....	40.00	46.97	41.47	42.81	30	69	30	56.33	9	29	4	32.00	6.2
Wampsville.....	37.03	47.43	37.27	40.58	30	69	30	54.00	4	d 26	5	28.00	6.0
Waterford.....	41.43	51.23	42.88	45.18	29	69	29	59.17	5	30	5	33.00	4.8
NEW JERSEY—													
Freehold.....	44.57	55.20	46.37	48.71	13	e 70	21	61.00	9	33	■	40.67	4.7
Lambertville.....	42.11	55.52	45.38	44.34	30	76	26	61.87	6	33	5	36.27	3.8
Newark (f).....				47.51	30	74	30	57.25	5	g 30	5	37.39	---
PENNSYLVANIA—													
Bedford.....	42.82	55.95	47.35	48.71	12	80	12	66.83	■	22	9	31.92	5.3
Bellefont.....	44.60	59.03	47.97	50.53	13	80	13	73.33	5	g 32	10	40.00	6.3
Berwick.....	45.17	55.47	47.67	49.44	30	76	30	66.00	5	33	5	36.67	4.2
Cannonsburg.....	43.43	52.87	49.50	48.60	11	73	11	61.33	6	29	5	31.00	6.6
Carlisle.....	44.93	53.95	47.69	48.86	30	72	30	63.00	9	32	5	36.33	5.7
Chambersburg.....	46.47	55.93	46.97	49.79	25	77	30	65.33	9	30	5	36.33	6.4
Easton (h).....	44.50	53.43	44.12	47.35	30	76	30	64.00	■	g 32	5	35.33	6.2
Fleming.....	41.17	55.43	44.37	46.99	30	77	13	61.33	■	28	5	32.67	5.9
Gettysburg.....	42.07	55.22	48.17	48.49	30	71	30	61.00	9	30	5	36.00	6.0
Harrisburg, [Heisely].....	45.80	55.63	51.37	50.93	30	76	30	65.33	9	34	5	39.67	5.7
Harrisburg, [Hickok].....	43.45	54.68	50.08	49.40	30	74	30	63.33	■	32	5	37.33	6.7
Lewisburg.....	43.76	54.29	46.19	48.08	30	73	30	61.67	9	30	5	33.37	6.4
Linden (i).....	40.00	50.45	44.10	44.85	21	64	12	55.00	9	27	---	?	7.2
Morrisville.....	42.63	54.63	44.73	47.36	30	75	26	62.33	5	j 34	6	38.67	4.7
Mount Joy.....	46.92	59.25	50.48	52.22	30	79	30	67.67	9	32	5	39.67	5.6
Norristown.....	44.42	52.81	45.84	47.69	30	73	26	62.33	9	32	5	37.33	5.7
North Whitehall (k).....	39.33	53.27	49.37	47.32	30	75	30	63.00	■	28	5	33.00	5.4
Philadelphia.....	45.70	56.13	49.01	50.28	30	78	30	64.67	9	33	5	40.80	6.0
Pittsburg, [Marine Hospital].....	44.33	54.53	48.53	49.13	11	72	11	63.00	9	28	5	36.00	6.3
Pocopson.....	41.77	54.60	45.87	47.41	30	75	26	59.00	7	31	■	37.33	6.1
Shamokin.....	35.47	50.27	44.73	43.49	30	74	30	56.67	7	b 26	5	32.33	5.2
Somerset.....	39.83	53.57	43.17	45.52	12	73	12	61.33	9	18	5	28.67	6.7
Tarentum.....	43.59	55.97	45.97	48.51	11	75	11	64.67	8	23	5	33.33	6.2
West Haverford.....	44.73	55.80	---	50.26	26	74	26	67.00	9	32	■	39.00	6.0
Worthington (m).....	39.30	52.83	50.97	47.70	30	76	11	68.33	■	19	5	32.67	---
MARYLAND—													
Annapolis.....	45.63	56.25	51.13	51.00	3	71	26	65.00	6	34	5	39.83	6.1
Baltimore.....	48.54	57.40	53.08	53.01	30	74	---	?	■	b 37	---	?	6.1
Bladensburg.....	45.37	59.77	47.10	50.75	3	n 75	---	?	■	33	---	?	6.4
Frederick.....	45.01	54.41	48.17	49.20	30	71	25	58.83	9	33	5	37.50	6.3
Leitersburg.....	43.48	56.04	46.31	48.61	25	75	13	64.00	9	30	8	37.33	5.7
Leonardtwn.....	46.86	58.55	50.87	52.09	26	80	26	68.00	9	p 34	8	41.33	6.0
Sykesville.....	46.40	58.30	47.77	50.82	25	75	3	n 62.33	5	30	5	35.33	5.4
DISTRICT OF COLUMBIA—													
Washington.....	48.27	57.43	51.03	52.24	26	72	3	64.00	■	35	5	39.33	6.1
VIRGINIA—													
Crichton's Store (q).....	64.21	66.37	63.29	64.62	12	87	14	78.67	■	38	6	38.00	5.6

a Observations taken at 8 a. m., 2 p. m., and 9 p. m.

b Same temperature on the 9th.

c Observations taken at sunrise, 2 p. m., and sunset.

d Same temperature on the 5th.

e Same temperature on the 21st.

f Daily maximum and minimum.

g Same temperature on the 6th.

h Observations taken at 8 a. m., 2 p. m., and 10 p. m.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m. Incomplete.

j Same temperature on the 6th, 7th, and 9th.

k Observations taken at sunrise, noon, and sunset.

l Same temperature on the 30th.

m Observations taken morning, noon, and evening.

n Same temperature on the 25th.

o Same temperature on the 26th.

p Same temperature on the 19th.

q Observations taken at 7 a. m., noon, and 5 p. m.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Min temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—Continued.	°	°	°	°	°		°		°		°		
Cross Creek .....	39.23	55.87	44.63	46.58	11	79	13	66.33	■	17	5	31.33	----
Falmouth .....	47.60	58.57	51.53	52.57	11	80	3	65.67	6	a 34	5	41.67	----
Kanawha .....	47.60	61.48	52.86	53.98	11	80	11	70.33	6	31	5	34.00	6.3
Lewinsville .....	47.97	59.02	51.02	52.67	3	b 77	3	65.33	■	33	5	38.00	6.2
Lewisburg .....	45.20	62.37	48.30	51.96	12	85	12	70.00	5	25	5	28.67	4.9
Montross .....	48.60	58.83	50.57	52.67	26	77	3	c 68.00	6	32	6	a 40.67	5.1
Mont View .....	47.37	63.47	53.13	54.67	12	84	12	68.67	5	32	5	38.67	5.5
Point Pleasant .....	41.50	50.20	42.23	44.64	11	63	11	55.67	■	28	6	36.33	5.3
Poplar Grove .....	45.47	64.43	49.57	53.16	11	88	11	71.67	6	26	5	33.33	6.4
Portsmouth .....	50.87	65.00	53.87	56.58	11	86.5	11	71.50	19	34.5	6	44.17	3.7
Rose Hill .....						71½				41			
Rougemont .....	48.83	62.93	53.90	55.22	11	d 82	11	69.33	■	31	5	41.00	6.0
Ruthven .....	50.10	63.84	51.83	55.26	15	85		?	5	34	18	41.00	3.5
Smithfield .....	49.98	65.00	54.59	56.52	14	83	14	74.33	6	32	6	40.00	5.8
Stribling Springs .....	37.96	57.03	40.50	45.16	12	81	26	61.67	1	17	5	30.33	5.1
The Plains .....	45.77	57.87	50.60	51.41	30	76	26	63.33	6	33	5	35.33	5.3
Westwood .....	48.48	63.93	55.04	55.82	14	85	14	69.00	6	31		?	----
Winchester .....	45.13	59.53	48.90	51.19	3	76	13	65.33	9	28	5	37.33	4.5
NORTH CAROLINA—													
Chapel Hill .....	52.30	63.30	57.10	59.23	12	90	14	77.00	6	30	6	43.00	5.4
Davidson College .....	51.11	64.42	56.13	57.22	13	84	14	74.13	6	29	6	39.73	4.5
Green Plains .....	52.30	66.67	54.13	57.70	13	86	12	77.00	5	34	6	42.00	----
Murfreesborough .....	51.97	65.80	57.63	58.47	14	84	12	e 74.33	6	34	6	42.67	3.9
SOUTH CAROLINA—													
Aiken .....	54.07	68.19	58.35	60.20	11	86		?	■	33	6	45.33	4.3
All Saints .....	58.63	69.86	62.67	63.72	14	86	14	78.33	6	38	6	45.67	3.3
Charleston .....	59.67	69.93	63.83	64.48	12	f 81	14	75.67	6	41	6	48.33	----
Columbia, [Barton] .....	53.77	70.63	61.72	62.04	13	88	13	77.50	6	32	6	45.50	5.0
Columbia, [White] .....	59.60	70.80	62.67	64.36	13	89	13	82.33	■	43	6	49.33	3.6
St. John's (g) .....	57.27	70.50	59.31	62.36	13	85		?	6	39		?	4.4
GEORGIA—													
Athens .....	55.02	67.87	58.83	60.57	14	84	14	76.60	6	35	5	44.10	4.6
Atlanta .....	51.47	65.40	58.80	58.56	12	e 84	12	74.67	■	30	5	42.67	3.9
Augusta .....	59.18	76.27	62.17	65.87	28	92	11	d 79.00	6	43	5	h 53.33	4.4
Savannah .....	59.10	72.60	64.02	65.24	14	89	14	78.50	6	43	6	49.33	3.6
Sparta .....	51.40	69.73	58.97	60.03	13	87	12	74.00	6	30	6	42.00	4.0
Thomaston .....													3.9
Thomson .....	59.18	71.78	59.98	63.65	13	90	14	77.33	6	41	6	48.33	5.3
Whitemarsh Island .....	60.55	70.72	63.79	65.02	14	88	14	79.00	6	44	■	49.33	3.4
FLORIDA—													
Alligator .....	63.13	79.20	63.73	68.69	13	f 94	14	81.33	18	46	24	53.33	3.6
Atsena .....	65.60	71.00	69.30	68.63	13	79	14	76.00	18	51	■	56.33	4.0
Belair (g) .....	61.27	75.37	68.83	68.49	13	85	12	e 78.67	17	47	16	i 56.67	4.2
Gainesville (j) .....	60.93	73.75	67.37	67.35	13	84	12	k 76.67	7	l 48		?	3.8
Jacksonville .....	69.43	76.86	67.47	71.25	14	89	14	81.00	6	52		?	3.2
Micanopy .....	63.62	81.14	63.50	69.42	13	93	13	79.67	23	45		?	5.2
St Augustine .....	68.53	74.20	68.20	70.31	14	88	14	81.00	23	55	6	59.00	3.2
Salt Ponds (m) .....	76.68	81.77		79.22	1	n 85	1	o 82.00	24	66	24	68.00	2.5
Seville .....	59.60				12	p 70			6	q 48			4.4
ALABAMA—													
Carlowville .....	55.97	69.03	59.43	61.48	28	80	9	73.00	15	42	5	49.67	4.6
Greene Springs .....	55.98	70.36	58.79	61.71	12	86	12	77.00	6	35	5	44.33	4.1
Greensborough (r) .....	55.10	65.46	57.87	59.48	29	78		?	17	39		?	3.4
Montgomery .....	58.11	72.28	61.95	64.11	13	87	13	78.10	6	41	5	h 50.33	4.6

a Same temperature on the 9th.  
b Same temperature on the 25th.  
c Same temperature on the 26th.  
d Same temperature on the 12th.  
e Same temperature on the 13th.  
f Same temperature on the 14th.  
g Incomplete.  
h Same temperature on the 6th.  
i Same temperature on the 22d.

j Observations taken at 6 a. m., 2 p. m., and 9 p. m.  
k Same temperature on the 15th.  
l Same temperature on the 24th.  
m Thermometer 2½ to 2½ degrees too high.  
n Same temperature on the 4th, 7th, and 16th.  
o Same temperature on the 4th, 8th, and 16th.  
p Same temperature on the 13th and 30th.  
q Same temperature on the 19th and 24th.  
r For the last half of the month only.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp.	
ALABAMA—Continued.	°	°	°	°		°		°		°		°	
Moulton .....	58.34	63.07	60.59	60.67	13	79	14	76.67	5	42	6	46.80	5.7
Selma .....	57.63	70.23	63.47	63.78	12	86	12	78.00	6	40	6	49.33	4.8
MISSISSIPPI—													
Columbus .....	55.26	69.79	60.17	61.74	10	a 83	13	77.30	■	38	5	45.57	4.1
Natchez .....	57.30	69.80	63.47	63.52	13	82	13	76.67	23	36	5	50.00	4.7
Paulding .....	58.93	73.32	64.79	65.68	12	a 89	13	82.00	17	39	5	50.00	5.1
LOUISIANA—													
Black River .....	59.77	72.80	66.17	66.25	13	89	13	84.00	23	44	5	53.00	5.3
New Orleans (b) .....	70.60	73.77	75.00	73.12	13	c 87	13	86.00	17	d 56	6	59.00	---
TEXAS—													
Austin, [Palm] .....	59.90	76.77	63.32	66.66	29	91	25	78.59	5	43	5	52.58	5.1
Austin, [Van Nostrand] .....	60.21	77.40	64.04	67.22	29	93	25	77.83	5	46	5	53.98	5.3
Larissa .....	58.62	69.90	65.09	64.54	25	86	11	77.33	4	42	---	?	4.7
New Braunfels .....	62.00	81.03	69.13	70.72	28	97	25	80.67	23	38	22	54.67	1.5
Northern tier of counties (e) .....	56.76	---	56.40	55.97	---	---	---	---	---	---	---	---	---
Roundtop .....	60.00	77.00	67.00	68.00	---	89	---	---	---	34	---	---	---
Sisterdale .....	59.67	77.00	63.40	66.69	29	87	25	76.93	22	42	5	52.90	5.0
Union Hill .....	59.13	73.37	63.37	64.96	26	85	12	f 76.67	23	32	22	50.33	5.9
Washington .....	59.81	73.00	59.20	64.00	11	84	11	75.67	23	38	5	50.67	5.4
Webberville .....	61.37	77.77	68.60	69.25	25	90	25	84.00	■	44	5	55.00	4.4
ARKANSAS—													
Washington (g) .....	52.73	72.63	---	62.68	■	88	9	79.00	17	32	5	45.00	---
TENNESSEE—													
Glenwood .....	49.99	61.63	53.94	55.19	12	83	11	73.30	6	31	■	33.73	6.3
La Grange .....	53.32	66.83	56.52	58.89	13	86	11	76.00	5	35	5	40.33	5.3
Memphis .....	54.70	65.30	58.83	59.61	10	h 83	10	74.00	6	37	4	43.00	6.0
KENTUCKY—													
Bardstown .....	49.58	59.82	52.08	53.83	13	78	13	73.50	5	28	5	31.50	5.6
Danville .....	52.62	65.67	54.62	57.64	11	c 83	10	73.67	6	30	5	33.67	5.6
Louisville (i) .....	47.47	61.27	52.60	53.78	12	82	11	a 71.67	■	31	5	34.09	6.1
Paris .....	47.97	59.65	51.39	53.00	11	79	11	74.67	■	29	5	32.00	5.8
Springdale (j) .....	44.67	60.35	53.67	52.90	11	81	11	72.33	■	24	5	32.67	6.1
OHIO—													
Avon .....	44.68	47.70	44.78	45.72	11	72	11	61.93	5	30	5	32.50	5.0
Bellefontaine .....	41.61	50.23	44.30	45.38	30	70	30	62.00	5	25	5	27.67	6.4
Bowling Green .....	43.88	53.76	44.94	47.53	11	k 72	11	62.47	8	30	5	35.00	5.4
Cincinnati, [Harper] .....	48.90	62.93	53.57	55.13	11	81	11	d 72.33	5	d 33	5	35.00	5.7
Cincinnati, [Phillips] .....	48.87	56.93	51.30	52.37	11	78	11	69.33	■	31	5	32.00	5.9
Cleveland .....	41.60	48.78	42.77	44.38	11	74	11	61.33	■	26	5	31.83	6.7
College Hill .....	44.50	56.43	46.30	49.08	11	l 72	11	64.00	6	25	5	31.33	6.0
Collingswood .....	43.00	50.70	43.70	45.80	11	70	11	62.33	9	32	5	34.00	---
Hillsborough .....	43.90	53.32	48.30	48.51	13	74	11	66.67	5	28	5	28.50	5.4
Hiram .....	41.07	50.21	42.03	44.44	13	74	13	63.33	5	d 28	5	30.67	6.1
Hudson (m) .....	40.59	51.91	43.05	45.18	11	72	---	?	9	28	---	?	5.7
Jackson, Monroe county (n) .....	46.32	56.40	50.04	50.92	30	73	---	?	5	29	---	?	6.0
Kelley's Island .....	41.50	46.67	42.73	43.63	11	62	11	55.00	5	30	5	33.00	5.8
Madison, [Atkins] .....	45.97	49.21	42.79	45.99	11	78	11	64.67	6	30	6	33.33	6.5
Madison, [King] .....	42.70	48.27	40.00	43.66	11	70	11	60.00	6	28	6	30.00	6.7
Montville .....	42.80	51.52	44.35	46.22	13	73	13	65.17	5	o 28	5	30.33	6.1
Mount Union .....	45.89	55.46	45.19	48.85	13	78	13	68.67	?	?	?	?	5.2
New Lisbon .....	49.93	61.97	49.87	53.92	11	a 83	11	73.67	9	30	5	38.67	4.7
Northwood .....	---	---	---	---	---	---	---	---	---	---	---	---	5.4
Portsmouth .....	48.36	62.20	50.66	53.74	11	82	11	71.33	6	30	5	37.67	6.1

a Same temperature on the 13th.

b Observations taken at 9 a. m., noon, and 3 p. m.

c Same temperature on the 12th.

d Same temperature on the 6th.

e Observations taken at sunrise, 7 a. m., 7 p. m., and 9 p. m. Mean at sunrise, 48.64; mean at 7 p. m., 62.10.

f Same temperature on the 26th.

g Observations taken at sunrise and 2 p. m.

h Same temperature on the 13th and 26th.

i Observations taken at 7 a. m., 3 p. m., and 9 p. m.

j Observations taken at 5 a. m., 2 p. m., and 6 p. m.

k Same temperature on the 30th.

l Same temperature on the 20th.

m Incomplete. The records of the thermometer at this place are 0.85 too high.

n Incomplete.

o Same temperature on the 8th.



## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°		°		°		°		°	
Rockport .....	45.93	54.23	48.10	49.42	11	76	11	63.67	5	34	5	37.67	---
Savannah .....	43.50	54.23	44.20	47.31	13	81	13	70.00	8	25	5	30.67	6.5
Troy .....	43.10	54.70	47.57	48.46	13	78	13	68.33	6	27	5	30.67	7.3
Urbana .....	43.27	54.40	46.23	47.97	13	79	13	68.00	5	a 28	5	29.67	6.7
Welchfield .....	42.00	51.16	41.23	44.80	11	74	11	63.67	8	26	5	28.67	5.7
Westerville .....	44.57	53.63	47.92	48.71	11	b 74	13	68.17	5	29	5	30.50	6.6
Windham .....	40.30	50.73	44.83	45.29	30	75	11	64.67	5	c 28	5	30.00	---
MICHIGAN—													
Battle Creek .....	39.93	50.50	42.17	44.20	30	71	30	57.67	8	29	4	33.00	5.0
Detroit .....	41.07	54.50	36.87	44.15	11	72	11	63.00	5	d 33	2	37.33	6.8
Grand Rapids .....	37.63	49.33	41.80	43.09	30	80	30	65.67	4	e 27	15	30.33	6.5
Marquette .....	32.28	38.60	30.19	33.69	28	62	28	55.13	4	12	4	20.47	5.4
Monroe [Whelpley] .....													5.5
New Buffalo (f) .....	41.23	49.61	41.23	44.02	13	74	13	63.67	8	26	8	31.33	7.1
Ottawa Point (g) .....	33.53	42.40	40.06	38.67	30	59	30	53.25	4	24	4	28.25	6.6
Port Huron (h) .....	39.18	47.63	38.59	41.80	11	71	11	58.33	9	29	8	33.67	6.1
Thunder Bay Island (i) .....	32.33	36.90	34.90	34.84	30	49	30	45.00	3	j 23	4	25.87	6.8
Ypsilanti .....	39.92	50.05	40.80	43.59	30	72	30	60.50	5	a 28	5	32.00	6.5
INDIANA—													
Aurora (k) .....	44.07	57.07	51.23	51.09	11	80	11	70.00	6	l 26	5	32.00	---
Cannelton .....	49.54	58.65	52.54	53.58	13	77	13	73.33	5	32	5	34.00	5.5
Logansport .....	44.63	56.23	48.10	49.65	20	m 76	30	66.00	5	n 29	5	33.67	6.8
Mishawaka .....	37.30	51.59	42.64	43.84	13	m 74	13	64.00	8	c 27	5	32.33	5.4
New Harmony .....	42.73	58.70	52.00	51.14	11	77	10	70.00	6	27	5	36.00	6.2
Richmond, [Austin] (o) .....	43.26	53.72	---	48.49	13	77	13	67.50	6	27	5	30.00	7.2
Richmond, [Moore] .....	44.23	53.03	48.87	48.71	13	74	13	65.33	5	30	5	32.33	6.3
ILLINOIS—													
Augusta .....	40.30	52.96	47.30	46.85	30	72	10	63.67	4	21	4	27.67	5.0
Aurora .....	38.53	51.13	41.16	43.61	25	m 69	30	56.67	4	26	4	29.67	5.9
Batavia, [Aron] .....	36.30	47.80	39.67	41.26	30	68	30	56.00	4	24	15	29.33	6.6
Batavia, [Meal] .....	36.46	48.70	39.70	41.62	30	71	30	60.33	4	22	4	27.33	6.7
Carthage (q) .....	39.23	54.33	46.40	46.65	24	m 73	10	63.67	4	20	4	28.67	---
Edgington .....	36.77	51.33	42.87	43.66	24	72	10	58.67	4	24	4	27.00	6.1
Elgin .....	37.07	48.83	40.13	42.01	30	71	30	58.33	4	24	4	28.00	6.7
Manchester (f) .....	42.43	54.86	45.63	47.64	20	77	20	65.00	4	p 26	4	e 30.67	5.6
Marengo .....	35.27	46.83	37.70	39.93	30	67	30	53.33	4	e 25	15	28.67	6.7
Ottawa .....	40.74	51.77	42.37	44.96	30	70	30	61.33	4	24	4	27.33	6.6
Pekin .....	41.06	55.33	45.00	47.20	25	79	25	63.67	4	25	4	29.00	5.7
Peoria .....	42.33	55.17	48.13	48.54	25	72	10	63.67	4	26	4	31.33	6.0
Riley .....	35.32	48.26	40.73	41.44	30	70	30	60.33	4	22	4	27.00	4.6
Sandwich .....	38.83	50.10	40.63	43.19	25	74	30	60.00	4	e 24	4	27.67	5.7
Upper Alton .....	45.27	57.00	48.24	50.17	20	80	20	68.00	4	26	4	31.33	4.4
West Salem .....	48.60	59.10	52.07	53.26	20	r 79	10	71.00	5	32	4	37.67	5.9
West Urbana .....	43.20	54.47	48.80	48.82	24	90	10	67.33	5	27	5	27.67	6.5
Wheaton .....	37.22	48.56	39.71	41.86	30	66	10	55.90	4	24	4	27.67	7.1
Winnebago .....	35.70	48.87	39.53	41.37	30	73	30	57.86	4	21	4	26.67	5.7
MISSOURI—													
St. Louis, [Engelmann] .....	47.25	58.02	51.78	52.35	20	82	20	71.00	4	28	4	33.33	5.3
St. Louis, [Fendler] .....	46.77	57.33	50.10	51.40	20	81	20	69.00	4	28	4	33.00	---
WISCONSIN—													
Appleton .....	36.07	46.77	37.37	40.07	30	75	30	59.33	4	25	3	29.67	6.3
Bay City .....	29.27	37.60	27.53	31.47	28	64	28	46.67	12	20	8	20.00	5.0
Beloit .....	35.60	51.03	40.17	42.27	30	72	30	58.00	4	20	4	29.00	4.8
Kenosha .....	37.87	44.44	40.48	40.93	18	56	18	51.67	4	27	3	31.83	4.0
Madison .....	36.47	45.31	40.11	40.63	30	68	30	59.67	4	22	4	27.00	5.5

a Same temperature on the 8th.

b Same temperature on the 13th.

c Same temperature on the 9th.

d Same temperature on the 17th, 18th, and 22d.

e Same temperature on the 5th.

f Observations taken at 7 a. m., 1 p. m., and 9 p. m.

g Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at

9 a. m., 38.70.

h Incomplete.

i Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at

9 a. m., 35.23.

j Same temperature on the 4th, 5th, and 8th.

k Observations taken at 6 a. m., 2 p. m., and 9 p. m.

l Same temperature on the 16th.

m Same temperature on the 30th.

n Same temperature on the 6th.

o Observations taken at 6 a. m. and 1 p. m.

p Same temperature on the 5th and 6th.

q Observations taken at 7 a. m., 1 p. m., and 7 p. m.

r Same temperature on the 25th.

## No. 17.—THERMOMETER AND FACE OF SKY, APRIL, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	Mean temp.	Date	Temp.	Date	Mean temp.	
WISCONSIN—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Manitowoc	36.40	45.03	39.13	40.19	30	69	30	57.00	4	a 28	3	b 32.37	6.9
Milwaukee, [Pomeroy]	36.87	40.53	36.50	37.97	7	49	30	44.67	3	27	3	30.67	7.2
Milwaukee, [Winkler]	36.72	43.82	37.97	39.50	30	58	30	52.33	15	27	3	c 30.67	5.1
New Denmark	30.40	49.03	34.34	37.92	30	74	30	52.67	1	9	1	b 26.67	4.0
Platteville	35.50	48.67	38.40	40.86	30	79	30	66.00	4	17	15	25.67	5.5
Warsaw	33.50	49.77	36.83	40.03	29	86	30	67.00	5	12	4	22.67	4.6
IOWA—													
Bellevue	37.83	51.13	41.23	43.40	30	72	30	58.67	4	24	4	28.00	6.9
Brierley Plains	39.50	47.37	37.33	41.40	30	74	30	62.33	4	16	4	24.33	5.9
Burlington	41.43	58.86	47.03	49.11	30	78	10	65.67	4	25	4	29.67	6.3
Dubuque	40.23	49.13	41.73	43.70	30	69	30	59.33	4	25	4	29.33	5.1
Fairfield	40.55	51.70	42.07	44.77	24	75	10	64.33	4	24	4	27.00	5.7
Fort Madison (d)	38.57	52.17	47.63	46.12	25	72	10	63.33	4	e 23	4	29.33	5.4
Franklin	36.03	47.57	40.60	41.40	30	73	30	65.00	4	18	4	24.67	5.3
Muscataine	33.53	51.53	41.63	43.23	30	72	30	60.67	4	22	4	26.00	5.4
Pleasant Plain	37.20	52.43	42.60	44.08	30	72	30	61.63	4	22	4	26.67	5.1
Poultney	35.63	45.41	36.05	39.03	—	?	—	?	—	?	—	?	—
Rossville	32.90	44.76	37.26	38.31	30	72	30	59.83	4	16	4	23.40	5.5
MINNESOTA—													
Beaver Bay, [Clarke]	30.82	36.15	30.70	32.56	29	59	29	48.83	1	12	1	18.67	5.3
Beaver Bay, [Wieland]	29.02	40.35	27.97	32.45	30	66	30	49.67	1	10	1	f 19.00	—
Burlington	27.37	41.20	29.50	32.69	29	62	29	43.33	4	12	4	23.67	4.5
Forest City	35.67	44.63	31.83	37.39	30	76	30	62.33	3	17	3	23.00	2.5
Hazlewood	31.27	42.17	34.30	35.91	30	72	30	58.33	4	18	3	23.33	5.5
Princeton	32.77	44.50	36.50	37.92	30	76	30	66.33	5	f 15	3	24.00	5.1
NEBRASKA—													
Bellevue	36.97	50.43	40.32	42.57	25	72	30	73.33	4	15	4	21.67	4.8
Elkhorn	34.00	49.43	37.97	40.47	30	74	30	63.00	3	10	3	16.67	5.7
Omaha, [Rain]	35.30	47.96	40.40	41.22	19	70	30	63.67	3	15	4	20.67	5.5
KANSAS—													
Burlingame	42.26	59.57	45.57	49.13	9	88	9	71.67	3	21	3	28.33	3.8
Lawrence	42.50	58.87	47.67	49.68	9	87	9	69.67	4	22	4	28.67	5.0
Leavenworth City	—	—	—	—	—	—	—	—	—	—	—	—	4.0
Manhattan	43.30	60.10	47.17	50.19	9	90	9	76.33	4	22	3	26.67	4.7
Neosho Falls	44.10	61.63	50.27	52.00	9	89	9	73.67	4	24	4	31.00	3.8
UTAH—													
Great Salt Lake City	42.00	52.00	43.00	45.67	—	76	—	—	—	16	—	—	—
OREGON—													
Fort Vancouver	44.16	57.60	69.36	49.97	—	—	—	—	—	—	—	—	—
Portland (g)	44.70	59.90	53.63	52.74	5	70	21	64.00	2	31	10	41.33	—
CALIFORNIA—													
Sacramento	52.40	62.37	56.57	57.11	15	76	16	67.67	3	41	1	46.67	3.0
San Francisco	50.20	61.00	49.90	53.70	15	85	15	66.33	11	45	11	48.67	3.9
MEXICO—													
Cerro Gordo (h)	72.18	76.21	73.44	74.32	13	83.8	—	—	17	61.9	—	—	—
Minatitlan	76.23	88.33	78.68	81.08	2	98	29	88.33	18	67	18	71.67	4.0
Mirador (i)	67.85	79.84	69.94	72.54	—	—	—	—	18	55.9	—	—	—
Veracruz (j)	79.45	—	78.46	78.95	—	—	—	—	—	—	—	—	—
WEST INDIES—													
Nassau Bahamas (k)	—	—	—	81.64	15	186	1	85.00	21	76	22	76.00	—
St. George's, Bermuda (m)	—	—	—	61.7	—	73	—	—	—	54.5	—	—	—
Turk's Island, Bahamas (g)	75.33	79.37	76.53	77.08	1	85	9	78.67	6	74	14	p 75.00	—
CENTRAL AMERICA—													
Guatemala (q)	—	—	—	68.70	25	84.9	—	—	10	53.2	—	—	—
SOUTH AMERICA—													
Catharina Sophia, Surinam (r)	75.00	86.00	79.45	80.15	—	?	—	?	—	?	—	?	5.0

a Same temperature on the 5th and 8th.

b Same temperature on the 4th.

c Same temperature on the 15th.

d Observations taken at 6 a. m., noon, and 7 p. m.

e Same temperature on the 5th.

f Same temperature on the 8th.

g Observations taken at 6 a. m., noon, and 6 p. m.

h Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 74.59; mean at 6 p. m., 75.18.

i Observations taken at 7 a. m., 2 p. m., and 8 p. m.

j Observations taken at 8 a. m. to 11 a. m. and at 9 p. m. to 11 p. m. Mean obtained from daily maximum and minimum.

k Same temperature on the 1st.

l Observations taken at 1 a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

m Same temperature on the 23d.

n Same temperature on the 13th, 14th, 20th, 21st, 25th, and 26th.

p Same temperature on the 25th.

q Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.

r Observations taken at 6 a. m., 2 p. m., and 6 p. m. Omitted for the first 8 days.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) -----	58.77		55.13	56.95	8	77	8	74.50	9	44	9	45.50	----
Moose Factory (b) -----	32.63	50.05	38.53	40.40	----	69	----	?	12	15	12	30.00	4.2
Red River Settlement -----	47.56	61.70	48.97	52.74	16	76	----		12	25	12	30.00	4.2
Rigolet (c) -----	33.00		40.13	36.56	18	56	18	49.50	16	18	5	24.50	----
St. John's -----	50.00	65.45	47.48	54.31	12	78	29	69.67	11	34	1	41.33	5.4
St. Martin (d) -----	50.36	71.37	56.90	59.54	26	92	26	77.97	11	35	17	48.20	----
Stanbridge -----	54.39	66.39	54.81	58.53	7	85	27	74.67	1	e 40	9	44.33	3.6
Toronto (d) -----	50.37	60.70	52.72	54.62	7	76	7	65.92	14	41	9	45.48	4.1
Windsor -----	49.03	61.92	51.66	54.20	7	77	26	67.50	11	36	10	41.33	5.3
Wolfville -----	54.20	63.59	52.64	56.81	27	83	26	73.33	16	38	9	45.17	5.1
MAINE—													
Cornish, [West] -----	50.61	64.13	52.42	55.72	7	f 84	8	73.00	10	36	10	39.67	4.3
Cornishville -----	54.48	65.51	56.48	58.82	7	86	7	76.33	10	41	10	43.67	5.0
Dexter -----													4.7
Gardiner -----	52.67	63.64	51.29	55.87	8	79	7	67.33	10	41	9	46.67	5.4
Lisbon -----	52.22	64.97	52.25	56.48	8	86	8	71.33	10	g 40	10	46.67	4.2
Perry -----	47.58	60.69	48.15	52.14	7	80	25	62.17	10	36	12	h 44.50	3.7
Portland -----	51.37	58.97	51.16	53.83	8	79	8	68.33	10	42	10	43.67	4.7
Stenben -----	50.00	59.03	46.74	51.92	7	78	8	62.67	10	i 36	10	42.00	5.7
NEW HAMPSHIRE—													
Shelburne (j) -----	43.71	72.61	52.80	56.37	27	95	27	72.00	3	27	3	45.23	4.6
Stratford -----	49.48	66.90	51.65	56.01	26	85	25	74.00	9	36	9	44.67	4.5
VERMONT—													
Brandon -----	52.21	68.31	55.65	58.72	7	90	27	75.00	3	38	9	41.67	4.2
Burlington -----	53.58	64.81	55.26	57.88	26	k 82	27	75.33	9	39	9	42.00	3.5
Craftsbury -----	50.13	64.77	54.74	56.55	7	81	27	72.00	1	39	9	44.00	4.0
Rupert -----	54.13	71.16	64.19	63.16	7	90	7	75.33	1	36	9	51.33	3.8
St. Johnsbury -----	41.42	67.23	51.77	53.47	7	87	27	73.67	3	33	3	45.33	3.5
MASSACHUSETTS—													
Amherst -----	52.59	68.67	56.32	59.19	7	f 86	8	72.00	11	l 44	10	45.20	4.2
Bridgewater (m) -----	53.98	61.52	52.57	56.02	7	84	7	70.00	12	n 42	11	l 43.67	5.3
Cambridge -----	53.07	66.43	54.03	57.84	8	86	8	71.00	16	42	12	45.00	4.9
Florida -----													5.2
Lawrence -----	52.29	64.24	54.19	56.91	7	87	8	72.67	12	41	10	o 43.00	4.6
Mendon -----	53.26	65.55	54.29	57.70	7	f 86	8	73.00	9	p 41	11	42.00	4.8
Nantucket -----	54.59	58.78	51.03	54.80	24	69	27	61.17	16	41	11	45.17	4.6
New Bedford -----	52.84	61.69	51.15	55.23	27	73	27	64.00	11	42	11	43.50	5.9
Richmond -----	50.35	69.42	59.74	59.84	7	q 84	26	73.67	23	38	10	42.67	4.3
Westfield -----	51.13	68.40	55.39	58.31	7	f 85	7	71.00	11	42	10	44.00	4.7
Williamstown -----	55.16	65.79	55.40	58.78	8	82	8	73.00	2	r 44	10	47.67	?
Worcester -----	54.22	66.97	55.62	58.94	8	87	8	74.00	11	40	11	42.83	5.2
RHODE ISLAND—													
Providence (s) -----	53.11	64.50	53.00	56.87	26	80	26	66.00	16	42	11	44.33	5.3
CONNECTICUT—													
Columbia -----	53.23	67.94	52.10	57.76	7	90	8	72.00	12	40	11	42.00	4.6
Middletown -----	53.91	70.90	53.90	59.57	7	90	0	71.33	11	l 43	11	44.50	4.1
Pomfret -----	51.79	64.39	52.15	56.11	8	82	7	67.50	11	39	11	40.50	4.7
Saybrook -----	52.68	62.35	53.68	56.24	8	k 72	27	63.33	11	44	11	46.67	5.1
Wallingford -----	51.29	68.64	54.10	58.01	8	87	8	68.83	16	42	11	44.17	4.0
NEW YORK—													
Belleport -----	54.90	61.02	52.61	56.18	14	73	8	63.33	3	41	11	46.33	4.7
Beverly -----	54.16	64.96	56.50	58.54	7	81	27	64.67	11	43	11	45.33	4.3
Buffalo (t) -----	56.97	63.93	59.00	59.97	25	75	25	71.33	9	43	9	48.00	2.8
Flatbush -----	55.65	66.47	54.47	58.86	8	87	8	71.33	3	44	11	45.80	4.7

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at sunrise, 2 p. m., and 10 p. m.

c Observations taken at sunrise and sunset.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e Same temperature on the 2d and 9th.

f Same temperature on the 8th.

g Same temperature on the 16th.

h Same temperature on the 18th.

i Same temperature on the 15th.

j Observations taken at sunrise, noon, and 9 p. m.

k Same temperature on the 27th.

l Same temperature on the 12th.

m Observations taken at 7 a. m., 2 p. m., and 7 p. m. Incomplete.

n Same temperature on the 13th.

o Same temperature on the 17th.

p Same temperature on the 11th and 12th.

q Same temperature on the 26th.

r Same temperature on the 10th.

s Observations taken at sunrise, 1 p. m., and 10 p. m.

t Observations taken at 8 a. m., 2 p. m., and 9 p. m.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST TEM.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Fort Edward	54.65	67.90	57.68	60.08	8	84	27	73.67	10	43	11	45.00	5.0
Nichols	56.10	73.71	54.68	61.50	7	a 90	26	74.00	1	b 44	10	49.33	5.1
Oswego	54.78	65.84	52.71	57.78	8	83	25	71.33	14	c 44	9	45.00	3.5
Penn Yan (d)	47.87	70.61	58.48	58.99	8	88	25	73.00	23	35	9	46.67	5.6
Rochester, [Dewey]	57.29	69.03	60.10	62.14	8	e 88	25	79.33	9	45	9	46.67	3.2
Wampsville	55.90	70.90	54.55	60.48	8	86	26	72.67	1	44	9	50.67	3.8
Waterford	57.32	69.24	59.10	61.89	8	87	26	76.67	11	f 46	10	48.67	3.9
NEW JERSEY—													
Freehold	54.46	69.52	56.03	60.00	8	88	8	71.33	16	44	11	45.33	---
Lambertville	54.12	71.47	58.18	61.26	8	90	27	74.30	4	45	11	47.33	5.4
Moorestown (g)	59.38	70.39	58.55	62.77	27	84	---	?	---	---	11	49.33	4.4
Newark (h)	---	---	---	59.51	7	82	7	75.75	2	i 41	11	46.50	---
PENNSYLVANIA—													
Bedford	56.93	75.58	61.48	64.66	9	87	26	76.67	1	j 46	11	k 54.33	3.1
Bellefonte	57.77	77.39	60.45	65.20	11	l 88	21	74.00	2	44	11	56.00	4.3
Berwick	59.56	72.55	62.00	64.64	7	m 86	26	74.33	10	k 49	11	52.00	3.7
Cannonsburg	57.06	73.90	65.93	65.63	8	84	25	71.00	14	50	27	59.67	3.4
Carlisle	59.67	71.14	62.05	64.24	8	84	8	75.33	12	50	12	52.80	4.2
Chambersburg	61.90	74.58	61.84	66.11	9	a 90	9	75.33	5	50	12	55.00	4.5
Easton (n)	58.45	72.16	57.65	62.75	11	89	8	72.17	11	o 45	11	47.00	4.3
Fleming	57.81	77.03	57.25	64.03	7	m 90	13	74.67	2	45	17	55.67	4.1
Gettysburg	57.45	70.17	63.39	63.67	8	85	8	78.33	2	47	11	53.33	3.8
Harrisburg, [Heisely]	60.74	75.32	67.58	67.88	11	90	9	77.67	2	j 52	11	54.67	4.1
Harrisburg, [Hickok]	57.50	72.84	63.90	64.75	9	87	9	72.83	2	48	11	52.67	4.3
Lewisburg	58.80	71.52	60.21	63.51	7	85	27	71.67	17	48	11	52.07	5.3
Morrisville	56.06	69.84	57.06	60.99	11	84	27	71.00	11	p 44	11	45.33	3.5
Mount Joy	62.26	78.48	65.47	68.74	9	93	26	79.33	4	49	11	52.17	3.1
Norristown	54.98	68.13	58.90	60.67	11	80	9	71.00	5	45	10	49.00	4.4
North Whitehall (q)	51.10	72.45	64.87	62.81	11	87	20	72.33	4	38	11	49.33	4.1
Philadelphia	59.66	72.24	62.06	64.65	8	r 85	9	74.50	11	48	11	49.70	4.7
Pittsburg, [Marine Hospital]	60.38	73.83	65.03	66.41	13	s 82	26	73.33	23	51	23	58.67	4.7
Pocapson	57.26	71.94	58.95	62.72	27	86	10	73.67	5	40	11	48.67	4.3
Shamokin	47.90	70.33	61.16	59.80	11	88	9	72.00	5	34	28	48.00	4.2
Somerset	56.10	75.16	58.65	63.30	8	a 86	21	a 70.67	22	t 48	28	54.00	4.9
Tarentum	58.68	76.19	60.74	65.20	8	u 86	26	u 71.67	11	t 48	10	56.00	---
West Haverford	57.19	71.45	---	64.32	8	84	8	u 73.00	11	45	11	46.00	4.3
Worthington (w)	54.52	71.81	70.55	65.63	8	84	7	73.33	23	43	23	57.33	---
MARYLAND—													
Annapolis	58.24	69.52	63.92	63.89	27	80	27	72.50	2	46	11	51.67	4.2
Baltimore (g)	61.14	70.85	66.84	66.28	9	x 85	9	75.00	11	52	---	?	5.0
Bladensburg	57.95	74.36	58.00	63.44	27	90	27	76.00	5	39	---	?	4.6
Chestertown	58.84	70.45	59.25	62.85	27	84	9	72.83	12	46	12	48.50	4.1
Frederick	59.93	71.04	61.33	64.10	8	82	27	73.33	2	50	11	53.17	5.5
Leitersburg	59.03	73.32	60.06	64.14	9	86	21	74.67	11	50	11	52.67	4.1
Leontown	58.97	73.21	60.57	64.25	9	88	11	73.33	2	46	11	51.67	4.3
Sykesville	58.26	72.23	61.65	64.05	7	m 85	8	u 73.33	2	y 50	2	51.00	4.0
DISTRICT OF COLUMBIA—													
Washington	59.52	71.00	64.03	64.85	27	84	27	74.00	2	48	11	52.67	4.1
VIRGINIA—													
Crichton's Store (z)	61.78	76.05	73.47	70.43	27	89	---	?	5	48	---	?	4.4
Cross Creek	53.63	81.42	60.08	65.04	6	93	13	70.00	3	41	23	56.00	---

- a Same temperature on the 26th.  
 b Same temperature on the 28th.  
 c Same temperature on the 30th.  
 d Observations taken at sunrise, 2 p. m., and sunset.  
 e Same temperature on the 25th.  
 f Same temperature on the 10th and 17th.  
 g Incomplete.  
 h Daily maximum and minimum.  
 i Same temperature on the 4th and 5th.  
 j Same temperature on the 4th.  
 k Same temperature on the 17th.  
 l Same temperature on the 7th, 8th, and 27th.  
 m Same temperature on the 8th.

- n Observations taken at 8 a. m., 2 p. m., and 10 p. m.  
 o Same temperature on the 16th.  
 p Same temperature on the 12th.  
 q Observations taken at sunrise, noon, and sunset.  
 r Same temperature on the 27th.  
 s Same temperature on the 25th and 26th.  
 t Same temperature on the 23d.  
 u Same temperature on the 9th.  
 v Same temperature on the 29th.  
 w Observations taken at 6 a. m., noon, and 6 p. m.  
 x Same temperature on the 10th.  
 y Same temperature on the 11th and 15th.  
 z Observations taken at 7 a. m., noon, and 5½ p. m.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY		
					Date	Temp	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
VIRGINIA--Continued.	°	°	°	°		°		°		°			
Falmouth	64.06	73.48	62.58	66.71	9	a 88	27	78.00	6	51	11	53.67	
Kanawha	57.48	76.61	62.76	65.62	13	86	9	71.67	1	48	15	b 59.00	3.5
Lewinsville	59.84	74.48	61.74	65.35	19	87	9	74.00	4	51	11	53.33	4.2
Lewisburg	59.81	75.74	64.55	68.03	5	c 82	21	75.00	2	d 48	29	58.67	3.1
Montross	59.10	71.58	61.00	63.89	27	83	10	79.67	2	e 48	11	49.33	3.8
Mont View	58.74	75.72	64.03	66.16	8	f 88	26	76.00	12	g 50	11	53.33	3.7
Point Pleasant	69.45	80.32	70.74	73.50	26	d 86	13	h 78.33	1	56	1	59.00	5.2
Poplar Grove	57.77	81.23	60.39	66.46	13	93	31	74.67	23	46	22	60.33	3.9
Portsmouth	59.47	72.89	57.73	63.36	9	a 84.5	9	75.17	2	41.5	2	50.83	3.2
Rose Hill						85½				49½			
Rougemont	62.53	73.29	66.30	67.37	27	86	30	76.00	2	51	2	57.00	4.0
Ruthven	58.96	74.90	60.15	64.67	27	89		?	2	i 49		?	3.0
Smithfield	55.16	71.79	62.21	63.05	27	82	27	74.67	3	47	11	53.50	3.9
Westwood	58.73	76.00	64.26	66.33	27	90	31	76.33	2	44	11	54.33	--
Winchester	61.29	76.97	61.71	66.66	9	91	9	78.33	10	52	11	57.00	3.9
NORTH CAROLINA--													
Chapel Hill	61.29	79.65	63.65	68.20	14	a 90	31	78.33	3	46	1	j 59.33	3.3
Davidson College	58.93	73.60	62.71	65.08	13	82		?	2	48		?	3.1
Green Plains	59.90	76.55	62.00	66.15	27	89	27	75.67	3	i 48	1	53.67	--
Murfreesborough (k)	63.55	76.37	65.65	68.86	31	87	27	76.67	12	m 54	12	58.00	3.5
SOUTH CAROLINA--													
Aiken	62.13	80.97	65.07	69.39	14	93	14	82.00	1	49	2	n 60.33	3.3
All Saints	64.65	75.45	67.87	69.32	27	83	10	76.00	2	50	2	6.67	2.8
Charleston	66.61	77.39	70.55	71.52	10	o 82	21	7.67	2	53	2	63.67	--
Columbia, [Barton]	60.00	80.81	67.68	69.50	14	93	31	76.00	3	47	1	61.50	4.3
Columbia, [White]	65.23	80.06	71.55	72.28	27	90	27	81.00	1	49	1	63.00	3.2
St. John's	64.97	79.11	63.70	69.26	14	89	2	-----	2	50	-----	-----	3.6
GEORGIA--													
Athens	64.78	76.58	66.06	69.14	14	88	14	78.03	3	53	3	62.00	3.3
Atlanta	62.16	75.90	68.26	68.77	14	b 88	14	78.00	1	p 52	1	60.67	2.6
Augusta	69.85	88.00	70.63	76.16	14	100	14	86.67	1	59	1	n 66.00	3.5
Savannah	66.60	78.40	70.00	71.67	14	89	14	78.43	1	54	2	62.43	3.5
Sparta	59.74	81.16	67.6	69.50	14	93	14	78.33	2	n 51	2	60.33	3.2
Thomaston													3.0
Thomson	71.83	83.13	68.07	74.34	27	95	14	85.67	2	54	-----	?	4.7
Whitemarsh Island	69.35	76.77	70.19	72.10	14	b 85	15	77.67	2	58	2	64.33	3.2
FLORIDA--													
Alligator	71.55	87.16	71.00	76.57	15	q 96	15	83.33	3	r 64	4	67.67	2.4
Atsena	72.29	79.61	75.61	75.84	12	s 86	15	80.00	1	j 64	1	68.67	1.4
Belair	70.10	83.52	76.77	76.80	15	92	15	83.67	1	j 62	1	69.33	3.9
Gainesville (t)	66.13	80.97	73.28	73.46	15	86	21	u 76.00	2	59	1	66.67	3.0
Jacksonville	73.72	81.26	71.64	75.54	18	a 87	18	80.67	1	64	2	i 69.00	2.7
Micanopy	70.77	87.43	69.76	75.99	18	97	15	80.67	1	62	1	68.33	3.8
St. Augustine	75.23	77.68	73.97	75.63	19	89	19	80.00	1	69	1	69.67	2.6
Salt Ponds (v)	78.08	83.39	-----	80.74	31	87	20	l 83.50	2	75	2	77.50	2.8
Seville	69.36	-----	-----	-----	15	98	-----	?	2	62	-----	?	3.0
ALABAMA--													
Carlowville	68.78	81.58	72.06	74.14	15	w 91	23	x 82.67	1	50	1	58.33	2.1
Greene Springs	68.54	82.21	69.14	73.30	31	91	26	79.87	23	56	3	62.33	3.2
Greensborough	67.72	79.54	70.10	72.45	15	m 87	-----	?	28	58	-----	?	3.3
Montgomery	69.57	83.14	72.27	75.99	15	m 89	16	79.67	2	61	1	66.33	2.8
Moulton	70.28	74.94	72.36	73.52	26	82	26	78.60	2	63	1	65.60	5.2
Selma	64.52	82.84	74.06	73.81	15	90	31	81.67	28	58	1	66.67	4.2

a Same temperature on the 27th.  
b Same temperature on the 15th.  
c Same temperature on the 13th and 14th.  
d Same temperature on the 29th.  
e Same temperature on the 11th.  
f Same temperature on the 9th.  
g Same temperature on the 23d.  
h Same temperature on the 26th.  
i Same temperature on the 5th.  
j Same temperature on the 2d.  
k For the last 20 days of the month only.  
l Same temperature on the 3d.

m Same temperature on the 16th.  
n Same temperature on the 3d.  
o Same temperature on the 16th, 20th, 21st, and 27th.  
p Same temperature on the 7th.  
q Same temperature on the 17th.  
r Same temperature on the 4th and 5th.  
s Same temperature on the 13th and 24th.  
t Observations taken at 6 a. m., 2 p. m., and 9 p. m.  
u Same temperature on the 22d.  
v Thermometer 2½ to 2¾ degrees too high.  
w Same temperature on the 23d and 24th.  
x Same temperature on the 24th.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSISSIPPI—	°	°	°	°		°		°		°		°	
Co umbus .....	67.32	82.86	70.09	73.42	15	91	31	81.23	28	57	3	62.10	3.4
Natchez .....	66.16	80.68	73.26	73.37	12	89	25	79.33	28	56	2	65.33	4.0
Pontling .....	70.35	85.01	76.67	77.34	15	93	26	84.33	28	59	3	69.00	3.8
LOUISIANA—													
Back River .....	69.97	82.29	75.26	75.84	12	b 88	26	82.00	1	c 63	28	66.33	3.9
New Orleans (d) .....	79.52	82.61	83.45	81.86	20	e 91	26	88.33	2	69	2	72.67	---
TEXAS—													
Austin, [Palm] .....	72.58	87.45	72.55	77.53	31	95	31	83.00	5	f 61	27	68.33	4.8
Austin, [van Nostland] .....	71.54	86.22	73.64	77.13	31	95	22	83.00	8	61	8	65.20	5.3
Luriss .....	70.43	81.10	73.75	75.09	18	93	18	82.00	28	60	28	66.00	4.3
New Braunfels .....	72.03	88.81	77.55	79.46	2	97	25	85.33	7	60	8	69.00	1.3
Northern tier of counties (g) .....	70.31	80.70	71.57	72.50	---	---	---	---	---	---	---	---	---
Roundtop .....	71.00	88.00	75.00	78.00	---	95	---	---	---	59	---	---	---
Sisterdale .....	71.80	87.22	73.94	77.65	21	96	26	84.76	8	59	8	64.10	5.0
Union Hill .....	68.39	83.94	70.35	74.23	22	h 90	21	78.00	9	59	3	67.00	5.9
Washington .....	73.25	89.06	72.56	78.29	30	j 94	30	j 82.00	---	?	---	?	4.3
Webberville .....	73.90	87.65	77.26	79.60	31	98	31	86.33	6	62	8	67.00	4.3
ARKANSAS—													
Washington (k) .....	64.67	83.67	---	74.17	20	l 90	15	m 80.00	28	52	28	65.00	5.0
TENNESSEE—													
Glenwood .....	61.04	74.69	64.71	66.81	20	84	20	75.73	1	c 54	27	59.27	5.0
La Grange .....	67.75	75.79	71.27	71.60	13	88	13	81.00	1	c 58	1	64.67	3.7
KENTUCKY—													
Baristown .....	65.08	76.85	65.93	69.29	25	85	13	76.50	27	54	27	58.00	3.4
Danville .....	65.10	79.95	66.07	70.37	13	89	13	77.67	27	57	27	59.67	2.6
Louisville (n) .....	62.94	80.32	68.94	70.73	26	90	26	79.00	1	53	1	64.67	4.3
Millersburg .....	65.48	75.97	67.58	69.68	13	85	13	77.00	23	o 58	27	58.67	3.7
Paris .....	60.10	74.94	63.26	66.10	13	h 84	26	74.00	23	48	1	53.67	3.9
Springdale (p) .....	54.26	80.11	68.77	67.71	13	89	26	76.17	23	40	22	f 61.33	4.0
OHIO—													
Avon .....	58.17	70.22	58.03	62.14	26	87	25	76.17	11	45	---	?	4.0
Bellevue .....	63.12	73.84	60.49	65.82	7	84	7	72.67	14	49	27	54.33	4.0
Bowling Green .....	60.97	75.09	60.67	65.58	6	91	6	77.80	10	49	10	54.90	4.4
Cincinnati, [Harper] .....	64.65	77.10	71.03	70.93	8	84	25	78.00	1	57	27	61.33	3.4
Cincinnati, [Philips] .....	62.96	78.58	68.55	70.03	8	q 86	25	77.33	2	54	27	60.67	4.1
Cleveland (r) .....	58.60	65.05	56.89	60.18	5	79	5	70.00	14	45	---	?	5.0
College Hill .....	65.06	77.00	65.61	69.22	26	86	17	m 74.67	4	56	10	58.67	3.8
Collingwood .....	58.19	70.58	61.13	63.30	7	h 89	25	77.00	20	42	1	52.67	---
Freedom .....	62.97	72.81	58.35	64.71	8	-4	26	75.67	29	47	14	53.33	4.4
Hillsborough .....	57.98	73.09	64.79	65.29	6	s 82	25	a 71.20	11	t 51	27	55.67	2.6
Hudson (u) .....	60.43	71.94	63.12	65.16	7	86	7	76.40	10	45	14	51.70	5.0
Jackson, Monroe county .....	61.68	73.92	61.73	65.78	25	87	---	?	15	r 54	---	?	3.4
Kelley's Island .....	56.77	66.48	57.03	60.09	6	w 80	25	70.67	14	46	19	51.33	3.9
Madsen, [Atkins] .....	63.61	69.16	56.80	63.19	25	91	15	83.67	22	42	10	49.00	3.7
Madsen, [King] .....	60.74	67.90	54.10	60.91	25	86	25	75.67	15	43	15	44.67	3.7
Montville .....	58.19	69.82	59.79	62.60	6	s 82	6	72.33	10	44	10	50.00	4.6
Mount Union .....	64.76	77.18	60.04	67.33	19	92	19	78.00	22	48	10	55.33	3.3
New Lebanon .....	65.00	83.42	66.25	71.56	6	x 95	26	80.67	24	51	22	58.67	2.9
Portsmouth .....	62.71	79.52	65.68	69.30	13	90	25	76.67	1	y 55	10	62.00	3.9
Rockport .....	61.48	71.71	62.65	65.28	5	z 84	25	76.67	9	aa 48	10	52.00	---
Savannah .....	61.45	76.97	59.68	66.03	7	92	26	76.67	11	40	10	50.33	4.7

a Same temperature on the 26th.

b Same temperature on the 14th, 15th, 20th, 25th, 26th, and 31st.

c Same temperature on the 28th.

d Observations taken at 9 a. m., noon, and 3 p. m.

e Same temperature on the 15th.

f Same temperature on the 2d.

g Observations taken at sunrise, 7 a. m., 2, 7, and 9 p. m. Mean at

sunrise 65.91, and at 7 p. m., 73.57.

h Same temperature on the 25th.

i Same temperature on the 23d and 24th.

j Same temperature on the 3d.

k Observations taken at sunrise and 2 p. m.

l Same temperature on the 14th and 15th.

m Same temperature on the 15th.

n Observations taken at 7 a. m., 3 p. m., and 9 p. m.

o Same temperature on the 27th and 28th.

p Observations taken at 5 a. m., 2 p. m., and 7 p. m.

q Same temperature on the 12th, 17th, 18th, and 25th.

r Observations interrupted from the 17th to the 27th of the month.

s Same temperature on the 7th.

t Same temperature on the 22d and 23d.

u The records of thermometer at this place are 0°.85 too high.

v Same temperature on the 23d and 25th.

w Same temperature on the 7th and 24th.

x Same temperature on the 7th and 8th.

y Same temperature on the 2d.

z Same temperature on the 6th, 7th, 8th, 18th, and 25th.

aa Same temperature on the 10th.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°	°				°				
Troy .....	60.65	77.29	66.03	67.99	8	88	25	84.67	23	43	23	57.67	4.4
Urbana .....	60.19	77.42	61.48	66.36	7	88	25	74.67	11	a 50	10	55.67	4.7
Welchfield .....	62.71	74.03	57.96	64.90	7	89	25	77.33	10	b 44	10	50.67	3.0
Westerville .....	60.42	75.85	63.39	66.55	6	84	7	78.67	10	48	10	54.17	4.4
Windham .....	55.45	71.97	59.87	62.43	6	83	25	71.33	23	46	10	a 55.00	---
MICHIGAN—													
Battle Creek .....	57.68	73.58	59.16	63.47	6	89	11	c 74.00	9	44	9	46.33	3.6
Detroit .....	64.19	74.25	57.29	65.24	7	92	7	79.33	9	37	10	49.33	4.7
Grand Rapids, [Streng] .....	57.29	74.35	58.19	63.28	5	d 86	24	74.67	22	43	9	47.00	4.7
Lake George (e) .....	45.69	56.20	47.47	49.79	26	70	26	58.33	18	38	?	?	5.8
Marquette .....	46.02	56.84	46.09	49.65	23	84	23	66.23	13	34	?	?	5.3
Monroe, [Whelpley] .....													5.1
New Buffalo (f) .....	58.68	66.10	56.94	60.57	7	82	24	72.33	13	38	29	45.00	6.1
Ottawa Point (g) .....	47.39	55.00	53.58	52.25	6	h 66	25	62.25	14	35	9	40.50	5.2
Thunder Bay Island (i) .....	43.26	48.11	46.00	46.02	7	58	25	52.25	14	36	14	39.62	5.4
Ypsilanti .....	56.69	72.26	55.58	61.51	25	90	25	81.00	14	43	13	45.67	6.8
INDIANA—													
Aurora (j) .....	61.35	80.13	65.90	69.13	13	92	25	78.33	10	38	10	54.67	---
Cannelton .....	64.53	75.92	64.87	68.44	13	84	26	75.80	22	54	27	59.10	3.7
Logansport .....	61.58	76.48	63.48	67.18	6	k 87	24	74.33	13	50	27	54.33	5.2
Mishawaka .....	52.65	73.45	58.58	61.56	25	84	24	71.67	23	39	22	48.00	4.2
New Harmony .....	65.90	77.42	66.93	70.08	12	87	12	l 78.00	27	58	27	62.00	5.0
Notre Dame .....	61.59	71.00	62.00	64.86	7	86	7	75.33	13	45	13	52.33	5.8
Richmond, [Austin] (m) .....	60.81	78.37	---	69.59	7	90	25	81.00	23	50	10	n 58.00	6.2
Richmond, [Haines] (o) .....	62.42	75.45	65.71	67.86	25	87	25	76.00	23	50	10	57.00	2.6
Richmond, [Moore] .....	60.12	73.11	63.26	65.50	7	p 80	25	72.00	10	51	9	54.11	4.1
ILLINOIS—													
Augusta .....	59.42	71.13	63.67	64.74	24	81	5	71.00	14	n 50	13	53.33	4.6
Aurora .....	55.32	70.33	56.77	60.81	5	q 82	24	70.67	13	r 43	29	47.67	5.3
Batavia, [Capon] .....	55.39	69.55	55.52	60.15	5	84	5	70.67	13	40	29	47.33	5.6
Batavia, [Mead] .....	54.61	69.74	55.35	59.90	23	84	5	69.67	13	38	13	45.33	5.6
Carthage .....	61.68	72.84	66.40	66.97	23	84	18	74.00	15	48	14	52.67	---
Edgington .....	56.26	70.61	61.23	62.70	24	83	24	73.00	30	44	13	53.67	5.5
Elgin .....	54.71	68.16	56.10	59.66	6	84	5	70.33	13	41	29	46.33	6.3
Manchester (f) .....	61.83	72.06	61.58	65.16	18	81	24	73.33	10	52	14	54.67	4.8
Marengo .....	54.10	67.74	54.94	58.93	7	81	6	72.00	14	40	14	s 45.67	5.8
Ottawa .....	57.20	70.93	60.46	62.86	23	82	24	74.00	19	41	14	49.67	6.0
Pekin .....	60.11	74.68	62.11	65.63	25	84	24	74.00	27	49	14	54.00	5.2
Peoria .....	61.83	75.11	66.16	67.70	6	85	24	75.00	14	50	14	54.33	5.1
Riley .....	54.32	70.00	54.90	59.74	5	83	24	70.33	14	n 41	29	48.33	4.4
Sandwich .....	58.09	71.96	59.25	63.10	31	t 84	24	73.00	13	40	13	46.50	5.3
Upper Alton .....	61.77	73.74	63.35	66.29	4	u 80	8	73.33	14	49	14	53.67	3.5
West Salem .....	65.10	79.71	67.84	70.88	12	88	12	77.67	27	56	27	62.67	4.9
West Urbana .....	63.32	74.87	62.77	66.99	5	85	24	75.00	27	49	27	56.33	5.4
Wheaton .....	56.39	67.68	55.79	59.95	6	82	6	72.77	13	38	29	45.33	6.1
Winnebago .....	55.97	70.76	58.08	61.60	5	q 83	5	q 72.33	14	n 44	29	49.00	6.2
MISSOURI—													
St. Louis, [Engelmann] .....	64.92	75.61	66.24	68.92	18	85	24	75.00	14	n 55	14	58.67	4.6
St. Louis, [Fendler] .....	63.19	75.10	64.45	67.58	26	85	24	75.00	14	52	14	56.33	---
WISCONSIN—													
Appleton .....	52.10	68.10	53.94	58.05	5	84	7	70.00	9	38	9	43.33	4.7
Bay City .....	44.06	50.84	42.48	45.79	17	82	6	68.33	8	v 32	8	33.33	5.3
Beloit .....	55.48	71.77	55.84	61.03	7	85	7	71.00	14	41	14	48.33	4.4

a Same temperature on the 23d.

b Same temperature on the 14th.

c Same temperature on the 25th.

d Same temperature on the 7th and 31st.

e For the last half of the month only.

f Observations taken at 7 a. m., 1 p. m., and 9 p. m.

g Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a.

m., 53.02.

h Same temperature on the 24th.

i Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean at 9 a.

m., 46.72.

j Observations taken at 6 a. m., 2 p. m., and 9 p. m.

k Same temperature on the 18th.

l Same temperature on the 23th.

m Observations taken at 6 a. m. and 1 p. m.

n Same temperature on the 27th.

o Observations taken at 7 a. m., 12 m., and 6 p. m.

p Same temperature on the 8th.

q Same temperature on the 6th.

r Same temperature on the 15th.

s Same temperature on the 29th.

t Same temperature on the 6th and 7th.

u Same temperature on the 5th, 6th, 11th, 12th, and 24th.

v Same temperature on the 13th.

## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST WIND.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	☐	○	○	☐		○		☐		☐		○	
Delafield (a).....	54.13	64.35	53.25	57.24	17	b 75	---	?	13	59	---	?	5.5
Green Bay.....	51.77	67.16	53.23	57.39	5	86	6	73.67	2	c 38	2	43.67	3.6
Kenosha.....	54.29	55.98	52.35	54.21	11	78	7	67.17	19	40	19	42.50	4.2
Madison, [Sterling].....	57.55	66.45	57.42	60.47	5	79	5	72.00	13	d 44	13	46.33	5.0
Manitowoc.....	51.19	60.13	50.13	53.82	6	72	5	e 60.67	13	38	13	42.33	6.1
Milwaukee, [Larkin].....													4.8
Milwaukee, [Pomeroy].....	54.58	63.84	53.71	57.38	8	83	24	73.67	19	41	19	43.00	6.7
Milwaukee, [Winkler].....	52.81	60.52	51.71	55.01	8	83	24	72.67	13	38	19	41.67	3.7
New Danemora.....	50.71	67.55	53.08	57.11	17	84	8	69.33	13	34	13	42.50	6.1
Platteville.....	56.42	71.81	60.52	62.92	4	f 82	4	74.00	28	42	13	50.33	5.6
Wausau.....	53.32	67.52	54.03	58.29	1	g 84	6	72.67	14	h 40	11	46.00	6.1
IOWA—													
Bellevue.....	56.94	71.42	59.77	62.71	8	i 82	5	72.67	13	j 46	29	52.33	6.0
Border Plains.....	58.74	69.35	59.29	62.46	31	84	17	75.33	13	40	13	49.00	6.3
Burlington.....	64.71	74.42	63.42	67.52	4	90	23	77.33	26	48	14	52.00	5.8
Dubuque.....	58.77	69.81	60.48	63.02	23	84	17	76.33	26	45	13	51.00	4.9
Fairfield.....	60.87	70.78	60.94	64.20	17	82	5	k 73.00	13	45	14	50.00	5.6
Fort Madison (l).....	59.35	70.58	64.38	64.77	23	82	23	73.67	13	48	14	51.67	4.6
Muscataine.....	56.84	69.65	59.81	62.10	23	82	23	72.67	13	m 45	14	51.33	3.8
Pleasant Plain.....	58.48	73.42	61.64	64.51	29	84	23	73.67	15	44	13	51.33	5.1
Poultney.....	59.63	70.89	56.25	62.26	23	86	---	?	13	38	---	?	5.7
Rossville.....	52.94	66.65	57.32	58.97	6	80	6	69.53	13	38	13	43.93	6.1
MINNESOTA—													
Beaver Bay, [Clark].....	44.68	49.79	44.52	46.33	27	69	27	56.17	13	35	8	38.67	5.5
Beaver Bay, [Wieland].....	45.11	56.97	44.00	48.69	17	n 80	24	66.00	8	35	8	37.00	5.8
Burlington.....	39.71	56.32	43.13	46.39	14	o 72	24	60.00	13	p 30	8	38.00	5.1
Chatfield.....	55.87	68.06	55.81	59.91	17	86	7	68.33	13	35	26	48.00	6.5
Forest City.....	55.45	63.94	53.78	57.72	23	84	23	77.67	13	36	26	44.33	3.1
Hazlewood.....	52.00	64.44	54.57	57.00	23	84	---	?	13	34	---	?	5.9
Princeton.....	54.90	66.29	54.42	58.54	24	90	24	78.33	13	38	26	43.33	5.7
NEBRASKA—													
Bellevue.....	58.32	70.32	61.74	63.46	31	84	31	76.33	13	40	26	49.00	4.4
Brownville.....	61.71	77.58	65.55	68.28	30	92	31	83.00	13	44	14	52.00	5.4
Elkhorn.....	58.67	74.20	62.86	65.24	31	89	31	78.00	13	39	26	44.67	5.2
Nebraska City.....	60.25	69.76	62.21	64.07	31	85	31	78.23	13	41	13	48.83	5.3
Omaha, [Rain].....	55.77	69.22	60.90	61.96	4	84	31	76.67	13	38	13	46.67	5.1
KANSAS—													
Burlingame.....	59.51	73.16	62.06	64.91	24	b 86	24	b 75.00	13	45	13	48.33	3.9
Lawrence.....	61.00	73.13	63.55	65.89	31	86	24	76.00	13	43	13	48.00	4.9
Manhattan.....	58.16	73.97	62.32	64.82	28	88	31	73.67	24	42	24	48.33	5.0
Moneka.....	64.36	76.75	---	70.55	30	90	30	85.00	13	50	13	54.50	4.5
Neosho Falls.....	61.00	75.45	63.87	66.77	24	88	24	77.33	13	49	13	49.33	3.4
UTAH—													
Great Salt Lake City.....	53.00	66.00	53.00	57.33	---	81	---	---	---	38	---	---	---
OREGON—													
Fort Vancouver.....	50.12	64.45	54.74	56.44	---	---	---	---	---	---	---	---	---
Portland (g).....	50.07	66.52	59.45	58.68	27	86	15	73.00	26	40	10	47.33	---
MEXICO—													
Cordova (r).....	75.45	79.65	76.41	77.54	8	84.6	---	---	29	s 70.5	---	---	---
Minatitlan.....	78.68	89.97	81.11	83.25	1	t 96	1	88.17	29	74	27	79.17	3.0
Mirador (u).....	70.29	82.67	72.01	74.99	---	---	---	---	16	v 64.4	---	---	---
Vera Cruz (w).....	83.73	---	82.49	83.11	---	---	---	---	---	---	---	---	---

a Incomplete.

b Same temperature on the 31st.

c Same temperature on the 13th.

d Same temperature on the 13th.

e Same temperature on the 6th.

f Same temperature on the 6th and 7th.

g Same temperature on the 2d, 5th, and 6th.

h Same temperature on the 16th.

i Same temperature on the 18th and 23d.

j Same temperature on the 14th.

k Same temperature on the 6th and 17th.

l Observations taken at 6 a. m., noon, and 7 p. m.

m Same temperature on the 15th.

n Same temperature on the 23d.

o Same temperature on the 24th.

p Same temperature on the 14th, 15th, and 19th.

q Observations taken at 6 a. m., noon, and 6 p. m.

r Observations taken at 9 a. m., 12 m., 3, 6, and 9 p. m. Mean at 12 m., 78.0; mean at 6 p. m., 78.19.

s Same temperature on the 27th.

t Same temperature on the 2d.

u Observations taken at 7 a. m., 2 p. m., and 8 p. m.

v Same temperature on the 30th.

w Observations taken from 7 a. m. to 9 a. m., and from 9 p. m. to 11 p. m. Incomplete.



## No. 18.—THERMOMETER AND FACE OF SKY, MAY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CALIFORNIA—	□	○	□	○		○		○		○		○	
Sacramento .....	59.23	67.77	62.10	63.03	16	<i>a</i> 80	26	71.33	3	51	2	53.33	2.1
San Francisco.....	54.13	64.90	53.06	57.36	26	93	26	73.67	3	<i>b</i> 48	3	51.67	3.2
Union Rancho.....	57.96	81.51	66.25	68.57	28	94	22	77.00	10	43	11	53.67	1.8
WEST INDIES—													
Nassau, Bahamas ( <i>c</i> ).....				82.50	10	88	10	87.50	14	<i>d</i> 79	25	79.00	---
St. George's, Bermuda ( <i>e</i> ).....				71.3		79.4				64.7			---
Turk's Island, Bahamas ( <i>f</i> ).....	78.84	81.65	78.94	79.81	12	90	12	83.00	3	<i>g</i> 76	5	77.33	---
CENTRAL AMERICA—													
Guatemala ( <i>h</i> ) .....				69.10	7	<i>i</i> 86.7			18	54.9			---
SOUTH AMERICA—													
Cathar'a Sophia, Surinam ( <i>f</i> )	75.53	85.98	81.25	80.92	27	90	28	82.00	17	72	19	76.67	5.4

*a* Same temperature on the 26th.*b* Same temperature on the 9th.*c* Mean obtained from daily maximum and minimum.*d* Same temperature on the 15th.*e* Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.*f* Observations taken at 6 a. m., noon, and 6 p. m.*g* Same temperature on the 4th, 5th, 15th, 17th, and 18th.*h* Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.*i* Same temperature on the 5th.

## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
BRITISH AMERICA—	□	□	■	○		□		■		□		□	
Hamilton (a) .....	64.33		61.73	63.03	29	87	28	84.00	4	41	4	41.50	
Moose Factory (b) .....	37.02	53.98	43.87	44.96		83				19			
Red River Settlement .....	53.13	63.80	53.36	56.76	6	85		?	10	30	2	41.33	3.6
Rigolet (c) .....	39.30		44.87	42.08	28	72	28	68.00	2	d 28	4	30.50	
St. John's .....	59.23	69.67	59.43	62.78	5	78	5	67.67	21	48	21	52.67	4.3
St. Martin (e) .....	55.52	71.26	61.73	62.84	27	91	29	79.63	12	31	4	45.00	
Stanbridge .....	58.73	66.70	59.53	61.65	29	90	29	79.67	4	f 40	4	42.67	6.1
Toronto (e) .....	54.31	64.25	55.81	58.12	29	85	28	75.03	4	g 36	4	38.13	5.0
Windsor .....	57.42	69.48	58.18	61.69	28	82	28	69.51	6	44	12	50.50	6.3
Wolfville (h) .....	61.65	73.25	59.12	64.67	29	83	29	74.17	■	g 45	12	51.00	7.5
MAINE—													
Cornish .....	57.86	66.53	57.33	60.57	29	86	29	80.67	5	40	5	44.00	5.5
Cornishville .....	59.46	68.20	59.63	62.43	29	90	29	82.00	5	42	5	45.67	6.0
Dexter .....													6.3
Gardiner .....	59.60	67.20	57.93	61.58	29	84	29	79.00	5	49	5	45.33	6.5
Lisbon .....	60.47	68.30	58.83	62.53	29	92	29	85.00	5	42	5	46.67	5.3
Perry .....	53.87	64.28	53.57	57.24	14	i 78	27	65.50	5	38	5	42.67	4.4
Portland .....	59.28	64.57	57.66	60.50	29	85	29	79.67	5	45	5	48.67	6.4
Steuben .....	56.80	62.53	53.80	57.61	26	76	27	67.33	5	42	5	44.00	7.1
NEW HAMPSHIRE—													
Mount Washington .....	38.53	42.55	40.36	40.48	29	62	29	58.45	11	17	11	20.62	?
Shelburne (j) .....	50.67	73.95	59.33	61.32	29	101	29	81.00	6	27	5	44.03	6.5
Stratford .....	55.90	66.67	55.67	59.41	29	88	29	76.67	5	36	5	42.00	5.9
VERMONT—													
Brandon .....	58.48	69.33	59.41	62.41	29	89	29	81.00	5	g 42	4	45.67	5.7
Burlington .....	57.95	65.62	59.40	60.99	29	88	29	79.33	■	40	4	43.67	6.0
Craftsbury .....	55.57	64.90	57.59	59.35	29	87	29	77.00	11	37	4	42.00	5.2
Rupert .....	59.40	76.67	69.00	68.36	15	k 90	15	82.00	■	44	5	50.67	6.0
St. Johnsbury .....	53.63	67.80	55.80	59.08	29	92	29	76.67	10	37	10	40.67	5.9
MASSACHUSETTS—													
Amherst .....	58.49	69.77	60.16	62.81	29	91	29	77.40	12	45	5	49.70	5.8
Bridgewater (l) .....	63.65	69.64	63.44	65.58	29	91	29	80.25	■	45	5	52.58	5.9
Cambridge .....	60.66	71.47	59.82	63.98	29	95	29	■	4	m 47	5	51.33	6.1
Florida .....													6.7
Lawrence .....	59.57	68.48	59.84	62.63	29	91	29	79.00	4	n 47	5	51.00	6.3
Mendon .....	61.70	70.88	60.83	64.47	29	93	29	80.67	■	42	5	51.67	6.0
Nantucket .....	61.97	67.87	59.75	63.20	27	78	29	70.83	11	50	5	53.00	5.3
New Bedford .....	60.85	67.82	59.65	62.77	29	83	29	74.67	7	46	5	51.50	5.8
Richmond .....	55.57	73.50	64.00	64.36	15	90	30	77.67	12	34	5	46.33	5.9
Westfield .....	57.30	69.70	59.43	62.14	29	93	29	78.67	12	43	11	42.67	6.1
Worcester .....	61.13	70.00	61.48	64.20	29	92	29	81.17	5	o 45	5	50.17	6.5
RHODE ISLAND—													
Providence (p) .....	59.90	70.70	60.60	63.73	29	88	29	79.33	5	g 46	5	50.33	6.0
CONNECTICUT—													
Columbia .....	57.73	70.00	58.27	62.00	29	90	29	76.67	5	g 42	11	40.67	6.1
Middletown .....	60.43	73.90	60.58	64.97	29	95	29	81.30	12	45	5	50.90	4.6
Pomfret .....	58.92	66.45	58.38	61.25	29	87	29	75.60	4	45	5	48.83	6.1
Saybrook .....	59.97	69.07	60.37	63.14	28	k 80	29	74.00	5	g 47	5	51.67	5.6
Wallingford .....	58.53	71.17	60.23	63.31	29	94	29	80.17	5	g 44	11	49.67	5.1
NEW YORK—													
Bellport .....	62.27	67.42	60.33	63.34	26	78	29	72.67	11	47	11	50.67	5.5
Beverly .....	61.17	68.94	62.07	64.06	29	86	29	78.33	11	45		?	5.6
Buffalo (g) .....	59.20	63.11	59.60	60.64	27	79	27	76.33	4	f 40	4	41.33	4.0
Flatbush .....	62.45	71.94	62.07	65.49	29	93	29	84.20	5	46	11	50.60	5.6
Nichols .....	59.73	73.57	57.67	63.62	15	r 89	28	79.67	4	39	4	41.67	5.7

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at sunrise, 2 p. m., and 10 p. m.

c Observations taken at sunrise and sunset.

d Same temperature on the 21st.

e Observations taken at 6 a. m., 2 p. m., and 10 p. m.

f Same temperature on the 5th.

g Same temperature on the 11th.

h Incomplete.

i Same temperature on the 27th.

j Observations taken at sunrise, noon, and 9 p. m.

k Same temperature on the 29th.

l Observations taken at 7 a. m., 2 p. m., and 7 p. m.

m Same temperature on the 5th and 13th.

n Same temperature on the 5th and 11th.

o Same temperature on the 12th.

p Observations taken at sunrise, 1 p. m., and 10 p. m.

q Observations taken at 8 a. m., 2 p. m., and 9 p. m.

r Same temperature on the 28th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Oswego.....	57.89	65.50	58.53	60.63	15	a 85	29	78.67	4	39	4	42.33	4.9
Penn Yan (b).....	52.03	70.07	59.10	60.40	27	88	28	77.00	11	32	4	38.33	4.5
Rochester, [Dewey].....	61.57	71.50	61.00	64.69	27	92	28	82.00	10	37	4	40.00	4.0
Wampsville.....	58.20	69.65	56.70	61.52	15	c 86	28	77.33	4	38	4	40.67	5.3
Waterford.....	60.85	70.32	63.33	64.83	29	92	29	82.67	5	43	4	d 49.33	5.3
NEW JERSEY—													
Freehold.....	62.18	74.93	64.72	67.28	29	96	29	85.33	5	43	4	e 52.67	---
Lambertville.....	64.06	77.39	62.91	68.12	29	98	29	83.67	4	44	11	51.27	4.7
Moorestown (f).....	63.94	74.63	67.31	68.63	15	87	---	?	5	47	---	?	6.7
Newark (g).....	---	---	---	65.38	29	91	29	82.50	5	43	5	51.75	---
PENNSYLVANIA—													
Bedford.....	61.23	74.40	64.33	66.65	29	91	15	h 78.00	11	39	4	47.00	4.1
Bellefonte.....	63.50	80.33	64.00	69.28	29	95	29	83.33	4	40	4	50.00	5.5
Berwick.....	63.33	74.56	64.72	67.53	29	93	29	83.33	4	43	4	48.33	3.7
Cannonsburg.....	60.07	70.79	65.41	65.42	27	a 86	28	79.67	5	40	4	50.33	5.0
Carlisle.....	65.65	74.37	66.34	68.79	29	92	29	83.33	4	i 46	4	49.50	4.8
Chambersburg.....	67.10	78.10	65.70	70.30	29	96	29	83.33	5	45	4	53.00	5.8
Easton (j).....	64.57	73.70	61.59	66.62	29	95	29	83.33	4	42	4	49.50	5.1
Fleming.....	61.76	76.73	60.76	66.42	29	93	29	82.33	4	41	4	46.67	5.0
Gettysburg.....	63.32	76.50	64.93	68.25	29	94	29	80.67	5	44	4	52.33	5.1
Harrisburg, [Heisely].....	66.63	78.72	71.30	72.22	29	96	29	85.33	5	47	4	55.67	4.9
Harrisburg, [Hickok].....	63.68	75.47	67.43	68.86	29	94	29	82.00	5	45	4	51.33	5.4
Lewisburg.....	63.20	73.40	62.93	66.51	29	93	29	82.97	4	42	4	46.20	6.0
Morrisville.....	62.77	74.80	63.17	66.91	29	92	29	83.33	4	44	5	52.30	3.9
Mount Joy.....	68.25	82.72	68.67	73.21	29	102½	29	87.83	4	i 48	4	55.00	3.8
Norristown.....	64.00	74.06	64.73	67.60	29	90	29	81.67	11	46	4	53.00	5.0
North Whitehall (k).....	58.97	73.50	66.77	66.41	29	90	29	80.33	5	38	4	49.67	5.2
Philadelphia.....	67.05	76.76	68.15	70.65	29	95	29	84.80	4	49	4	56.33	5.6
Pittsburg, [Marine Hos].....	64.83	72.96	65.16	67.65	29	91	29	84.33	4	41	4	45.67	5.2
Pocopson.....	64.97	76.97	64.33	68.76	29	93	29	81.67	4	46	5	53.33	5.7
Shamokin.....	56.57	72.30	62.17	63.68	29	95	29	81.67	5	39	11	47.00	5.3
Somerset.....	58.57	72.67	59.53	63.59	29	89	28	77.67	5	37	4	42.67	6.0
Tarentum.....	62.13	74.63	60.23	65.66	27	a 91	27	a 80.67	4	36	4	42.33	---
West Haverford.....	60.80	75.63	---	68.21	29	93	29	82.00	5	42	5	52.00	5.9
Worthington (l).....	58.47	70.10	69.23	65.93	29	88	27	78.67	11	37	4	44.67	---
MARYLAND—													
Annapolis.....	66.50	76.05	70.88	71.14	14	a 89	29	84.16	5	43	4	53.83	5.2
Baltimore (m).....	64.94	73.93	67.82	68.90	14	86	---	?	5	45	5	55.17	5.8
Bladensburg.....	64.08	79.80	65.69	69.86	3	92	28	79.67	5	43	---	?	5.5
Chestertown.....	67.47	74.79	65.57	69.28	29	91	29	83.33	5	45	5	52.00	5.0
Frederick.....	68.20	74.73	67.05	69.99	29	89	29	84.17	4	49	5	56.27	5.1
Leitersburg.....	64.97	77.43	64.77	69.06	29	94	29	83.00	5	35	5	50.00	4.7
Leonardtown.....	68.43	78.15	69.64	72.07	29	89	29	83.67	5	45	---	?	5.9
Sykesville.....	63.70	73.30	65.80	67.60	29	85	29	80.67	5	40	5	51.33	4.6
DISTRICT OF COLUMBIA—													
Washington.....	67.57	77.17	69.33	71.36	29	91	29	84.33	5	45	5	53.67	5.4
VIRGINIA—													
Crichton's Store (n).....	66.86	82.58	78.82	76.09	30	97	30	88.00	5	43	---	?	6.1
Cross Creek.....	55.86	75.57	61.00	64.14	28	a 93	28	a 81.00	5	30	4	43.33	---
Falmouth.....	69.53	77.77	66.60	71.30	29	96	29	85.00	4	47	4	55.00	---
Kanawha.....	62.96	77.20	65.38	68.51	29	91	---	?	5	42	4	52.00	5.1
Lewinsville.....	66.13	78.23	67.70	70.69	29	92	29	82.33	4	i 47	4	52.67	6.0
Lewisburg.....	63.53	77.10	69.17	69.93	27	a 90	29	81.33	5	38	5	50.67	4.1
Montross.....	65.73	76.17	67.10	69.67	29	90	29	82.67	5	41	5	46.67	5.7
Mont View.....	66.00	78.30	68.40	70.90	29	92	29	86.00	5	40	5	52.00	5.5

a Same temperature on the 29th.

b Observations taken at sunrise, 2 p. m., and sunset.

c Same temperature on the 27th.

d Same temperature on the 5th and 9th.

e Same temperature on the 11th.

f Incomplete.

g Daily maximum and minimum.

h Same temperature on the 28th.

i Same temperature on the 5th.

j Observations taken at 8 a. m., 2 p. m., and 10 p. m.

k Observations taken at sunrise, noon, and sunset.

l Observations taken at 6 a. m., noon, and 6 p. m.

m For the first half of the month.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—Continued.	°	°	°	°		°		°		°			
Point Pleasant.....	65.90	81.20	69.30	72.13	29	98	29	88.33	4	32	5	44.67	2.8
Poplar Grove.....	62.60	79.90	64.47	68.99	27	93	29	80.67	5	38	5	52.67	5.7
Portsmouth.....	66.23	80.50	66.17	70.97	25	a 93.5	29	81.17	5	45.5	5	49.83	3.3
Rose Hill.....						90½				45			
Rougemont.....	69.27	79.69	70.93	73.30	29	92	29	86.00	5	45		?	6.0
Smithfield.....	67.26	76.91	68.93	71.03	15	86	29	80.37	5	47	5	52.50	5.1
Westwood.....	67.69	83.50	69.50	73.56	29	90	29	86.00	5	44	5	52.67	---
Winchester.....	68.33	82.13	66.67	72.38	29	98	28	83.67	5	44	4	53.00	4.0
NORTH CAROLINA—													
Chapel Hill (b).....	67.76	83.44	69.88	73.69	29	97	29	86.33	5	50	5	56.33	---
Davidson College.....	66.65	78.36	70.21	71.74	29	87	29	79.53	5	49	5	56.00	4.1
Green Plains.....	67.97	84.90	69.04	73.97	21	c 96	30	85.00	5	48	5	55.33	---
Murfreesborough.....	70.10	81.62	72.43	74.72	20	91	30	84.33	5	48	5	54.33	3.5
SOUTH CAROLINA—													
Aiken.....	69.38	86.00	72.33	75.90	30	96	27	83.00	5	52		?	5.5
All Saints.....	72.73	79.60	73.60	75.31	30	87	20	79.67	5	57	5	63.67	---
Charleston.....	74.53	82.80	76.60	77.98	30	88	17	d 81.67	5	62	5	67.33	---
Columbia, [Barton] (e).....	68.37	84.10	74.97	75.81	30	92	30	80.67	5	50½	5	62.83	6.1
Columbia, [White].....	75.27	86.53	77.53	79.78	30	95	30	89.33	5	61	5	68.00	5.1
St. John's.....	72.15	81.30	71.60	75.02	30	88	30	80.33	5	57		?	6.3
GEORGIA—													
Athens.....	74.65	84.89	72.61	77.38	2	88	28	80.23	5	58	5	64.80	4.9
Atlanta.....	67.60	80.93	73.40	73.98	27	c 90	27	c 79.33	5	58	4	66.00	3.3
Augusta.....	75.28	90.18	76.00	80.49	30	100	30	84.67	5	f 68	5	74.33	6.0
Savannah.....	74.23	83.87	75.98	78.03	21	91	30	82.00	6	65	5	70.20	5.4
Sparta.....	67.90	87.10	74.30	67.43	30	90	28	g 81.33	6	55	5	66.67	5.2
Thomaston.....	73.93	85.03	80.10	79.69	1	c 93	2	h 85.33	5	i 65	5	72.00	5.3
Whitemarsh Island.....	76.17	82.31	75.73	78.07	9	c 88	30	83.00	6	67	5	69.00	5.2
FLORIDA—													
Alligator.....	76.03	90.30	78.67	81.67	11	j 98	16	88.00	5	j 70	6	71.67	3.4
Atsena.....	77.73	83.70	79.63	80.35	5	f 90	11	d 82.67	7	k 74	16	76.00	3.2
Belair (d).....	76.50	86.90	80.47	81.29	11	m 92	11	88.00	23	70	24	75.33	---
Gainesville (e).....	70.82	84.77	76.96	77.52	18	n 89	18	o 80.67	9	65	24	73.33	3.9
Jacksonville.....	78.20	86.60	77.40	80.73	4	94	17	85.67	9	70	5	74.67	4.0
Micanopy.....	76.46	88.88	77.59	80.98	2	p 95	22	86.00	6	70		?	4.1
St. Augustine.....	78.93	82.00	77.67	79.53	18	87	18	83.00	5	q 74	6	r 76.33	3.5
Salt Ponds (s).....	79.93	85.27		82.60	19	d 87	19	d 84.00	22	a 78	23	a 81.00	4.4
Seville.....	75.90				14	t 80			4	f 72			4.1
ALABAMA—													
Greene Springs.....	72.12	85.54	73.85	77.17	28	83	28	82.83	4	i 62	4	67.50	4.2
Greensborough.....	71.96	84.13	74.26	76.78	2	91	3	82.67	5	59	4	68.17	4.1
Montgomery.....	72.18	86.04	75.54	77.92	2	93	2	84.30	24	64	23	u 71.00	4.2
Selma.....	72.77	86.10	77.20	78.69	3	94	2	84.67	5	62	4	72.67	5.6
MISSISSIPPI—													
Columbus.....	72.49	88.20	75.35	78.68	27	h 95	26	84.53	5	57	4	66.87	3.9
Natchez.....	71.07	83.10	76.07	76.75	17	v 88	17	v 83.33	5	w 60	5	66.67	4.8
Paulding.....	74.99	89.41	78.97	81.12	2	97	2	88.17	5	60	4	70.83	4.0
LOUISIANA—													
New Orleans (x).....	83.97	85.60	86.37	85.31	2	92	18	g 88.00	5	76	5	79.33	---
TEXAS—													
Austin, [Palm].....	78.93	93.48	78.95	83.79	19	99	17	88.34	5	71	29	76.34	4.0
Austin, [Van Nostrand].....	77.53	93.15	80.34	83.67	21	101	21	88.58	5	73	28	77.67	4.2

a Same temperature on the 29th.  
b Observations interrupted from the 14th to the 27th, inclusive.  
c Same temperature on the 30th.  
d Same temperature on the 20th.  
e Observations taken at 5 a. m., 2 p. m., and 9 p. m.  
f Same temperature on the 6th.  
g Same temperature on the 2d.  
h Same temperature on the 28th.  
i Same temperature on the 23d.  
j Same temperature on the 15th.  
k Same temperature on the 24th.  
l Incomplete.

m Same temperature on the 13th.  
n Same temperature on the 20th and 21st.  
o Same temperature on the 4th and 21st.  
p Same temperature on the 4th.  
q Same temperature on the 22d.  
r Same temperature on the 8th.  
s Thermometer 2½ to 2½ degrees too high.  
t Same temperature on the 21st and 26th.  
u Same temperature on the 25th.  
v Same temperature on the 18th.  
w Same temperature on the 23d and 24th.  
x Observations taken at 9 a. m., noon, and 3 p. m.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—Continued.	°	°	°	°	°	□		□		°			
Larissa .....	75.60	87.70	77.88	80.39	2	a 94	20	85.33	6	b 66	4	72.00	3.9
New Braunfels .....	75.38	96.39	83.25	85.02	21	103	26	87.67	23	66	29	80.67	2.1
Northern tier of counties (c) .....	77.40	90.66	74.50	78.24									
Roundtop .....	74.00	95.00	77.00	82.00		101				66			
Sisterdale .....	77.85	93.65	79.07	83.52	21	102	21	88.36	12	d 72	30	76.23	3.4
Union Hill .....	72.93	88.07	73.73	78.24	21	96	21	83.33	5	64	27	e 72.00	3.8
Washington .....	76.40	89.17	74.50	80.02	3	f 95	27	84.67	4	d 68	29	71.33	3.1
Webberville .....	74.23	93.33	81.97	83.18	1	g 98	19	88.67	2	h 73	28	81.33	3.0
ARKANSAS—													
Washington (i) .....	68.90	85.13	-----	77.01	17	94	17	84.50	4	h 58	4	65.00	5.6
TENNESSEE—													
Glenwood .....	65.68	77.64	68.97	70.76	28	87	28	79.40	4	48	4	52.50	5.0
La Grange .....	71.48	81.45	77.71	76.88	29	89	?	?	5	55	-----	?	4.1
Memphis .....	75.27	83.27	75.33	77.96	27	j 93	27	86.67	5	58	4	61.67	3.7
KENTUCKY—													
Bardstown .....	66.86	79.34	70.08	72.09	28	94	28	86.00	4	46	4	52.00	3.7
Danville .....	70.03	81.90	69.83	73.92	27	j 92	27	83.67	5	52	4	59.00	3.2
Millersburg .....	69.30	78.03	71.43	72.92	28	92	27	j 84.33	5	46	5	56.67	4.6
Paris .....	64.90	76.47	68.00	69.79	28	91	28	83.67	5	45	4	49.67	4.1
Springdale (k) .....	58.15	83.45	72.60	71.40	27	j 96	27	j 84.33	5	39	4	53.67	4.0
OHIO—													
Avon .....	62.17	70.73	61.25	64.72	27	91	28	83.83	4	39	4	44.03	4.6
Bellefontaine .....	63.60	74.40	62.47	66.82	28	93	28	84.67	5	39	4	46.00	4.9
Bowling Green .....	60.96	73.65	63.31	65.97	27	j 89	28	81.60	4	40	4	44.90	4.9
Cincinnati, [Harper] .....	68.40	77.83	73.00	73.08	28	l 95	28	89.00	5	49	4	57.00	4.7
Cincinnati, [Phillips] .....	67.20	80.07	71.33	72.87	29	98	28	89.33	4	h 52	4	55.33	3.9
Cleveland .....	60.77	70.50	63.15	64.81	27	93	27	83.50	4	41	4	48.33	5.7
College Hill .....	68.53	77.17	64.73	70.14	27	92	29	82.67	4	46	4	52.33	3.5
Collingwood .....	59.80	74.67	63.63	66.03	28	94	28	84.67	4	40	4	47.33	-----
Freedom .....	66.47	72.27	60.80	66.51	14	m 89	27	83.33	4	34	4	38.00	5.1
Hillsborough .....	60.25	73.10	65.10	66.15	28	l 87	28	80.50	5	40	4	46.80	4.3
Hiram .....	61.40	72.55	60.34	64.76	27	89	28	80.00	4	37	4	40.33	6.1
Hudson (n) .....	62.03	70.09	63.37	65.16	28	88	28	82.57	4	41	4	42.47	5.0
Jackson, [Monroe county] (o) .....	64.11	75.57	62.57	67.42	28	95	-----	?	5	42	-----	?	?
Kelley's Island .....	61.16	70.06	62.20	64.47	27	85	27	78.33	4	39	4	43.67	4.3
Madison, [Atkins] .....	66.40	69.47	58.87	64.91	27	94	27	86.67	4	35	4	37.00	4.9
Madison, [King] .....	61.93	69.67	58.00	63.20	27	90	27	82.67	4	h 34	4	h 42.00	3.7
Montville .....	60.13	69.10	60.82	63.35	27	j 85	28	78.67	4	38	4	40.00	5.6
New Lisbon .....	61.73	76.83	62.03	66.86	28	95	28	85.33	5	31	4	43.00	2.8
Northwood .....													3.8
Portsmouth .....	66.23	81.53	68.45	72.07	28	97	29	86.33	5	44	4	55.33	3.4
Rockport .....	61.63	72.87	63.33	65.94	27	90	27	81.33	5	38	4	45.33	-----
Savannah .....	65.20	78.33	61.60	68.38	27	98	27	85.67	4	32	4	40.33	6.1
Troy .....	66.07	78.69	66.47	70.41	26	96	28	84.67	5	38	4	50.67	4.7
Urbana .....	63.38	76.55	63.86	67.93	28	92	27	l 83.33	4	42	4	49.33	5.0
Welchfield .....	64.97	73.36	55.40	64.58	27	j 94	27	84.00	4	32	4	37.33	3.4
Westerville .....	63.65	75.22	64.78	67.88	28	92	28	85.33	4	39	4	43.67	5.6
Windham .....	58.90	72.10	60.27	63.76	28	88	28	78.67	4	34	4	40.10	-----
MICHIGAN—													
Battle Creek .....	60.77	75.13	60.50	65.47	28	89	28	81.33	4	39	4	48.00	2.8
Detroit .....	64.30	77.90	64.90	69.03	27	j 92	28	85.33	1	p 53	1	59.67	4.3
Fort Gratiot (q) .....	55.14	65.46	63.74	61.55	28	87.8	28	80.22	11	34	4	38.87	5.5
Grand Rapids .....	60.40	78.13	59.60	66.04	28	93	28	83.33	3	l 37	3	46.00	4.6

a Same temperature on the 20th and 27th.

b Same temperature on the 23d.

c Observations taken at sunrise, 7 a. m., 2 p. m., 7 p. m., and 9 p. m.

Mean at sunrise, 70.32, and at 7 p. m., 78.29.

d Same temperature on the 22d.

e Same temperature on the 28th and 29th.

f Same temperature on the 17th.

g Same temperature on the 3d and 21st.

h Same temperature on the 5th.

i Observations taken at sunrise and 2 p. m.

j Same temperature on the 28th.

k Observations taken at 5 a. m., 2 p. m., and 7 p. m.

l Same temperature on the 29th.

m Same temperature on the 27th.

n The records of thermometer at this place are 0°.85 too high.

o Incomplete.

p Same temperature on the 16th.

q Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 61.87.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°		°		°	°	°	°		
Marquette	52.01	60.51	50.19	54.24	12	80	27	67.07	3	31	3	32.73	5.1
Monroe, [Whepley]													5.6
New Buffalo (a)	62.57	69.10	57.07	62.91	28	88	28	83.67	4	34	4	39.33	5.5
Ottawa Point (b)	53.10	62.27	60.30	58.64	27	76	27	71.00	4	36	4	42.25	5.2
Port Huron	60.00	70.96	56.87	62.61	27	92	28	82.67	4	32	4	38.33	---
St. Mary's	49.85	64.12	52.70	55.59	25	77	27	68.33	3	35	3	39.67	4.6
Thunder Bay Island (c)	51.18	55.56	53.83	53.61	29	71	27	64.25	4	35	4	41.75	5.4
Ypsilanti (d)	60.32	73.37	58.98	64.22	28	92	28	81.33	4	36	4	41.75	5.2
INDIANA—													
Aurora (e)	66.02	83.23	72.73	73.99	27	f100	27	89.00	5	33	4	g53.33	---
Cannellton	68.09	78.16	68.59	71.61	28	89	29	82.83	4	46	4	53.60	3.7
Logansport	64.40	76.63	64.47	68.50	28	95	28	87.33	3	h45	4	50.33	4.5
Mishawaka	57.77	75.50	61.63	64.97	28	90	28	82.00	4	38	4	42.67	3.4
New Harmony	70.10	79.83	70.33	73.42	27	f92	28	87.00	4	50	4	54.67	4.3
Richmond, [Austin] (i)	64.53	76.30		70.91	28	j92	29	86.00	5	48	4	52.00	6.0
Richmond, [Haines]	65.30	74.70	66.43	68.81	29	87	27	81.67	5	45	4	50.00	3.2
Richmond, [Moore]	62.22	73.48	65.63	67.11	28	88	28	81.80	5	42	4	48.50	4.8
ILLINOIS—													
Augusta	61.30	74.00	67.30	67.53	26	89	26	f82.00	4	42	4	50.33	3.6
Aurora	59.57	73.37	59.43	64.12	28	92	28	82.33	3	37	3	f45.00	4.5
Batavia, [Capon]	60.77	72.20	59.53	64.17	28	90	28	82.00	4	36	4	41.33	5.1
Batavia, [Mead]	58.20	75.40	58.36	63.99	28	93	28	82.33	3	h36	4	44.67	4.8
Carthage (k)	63.57	77.60	69.57	70.25	28	92	26	85.67	11	49	5	53.00	---
Edgington	58.97	74.70	64.13	65.93	28	89	28	81.33	4	g40	4	48.33	5.3
Elgin	59.63	71.90	58.67	63.40	28	90	28	81.67	3	35	4	42.00	4.7
Manchester (a)	63.70	75.17	66.23	68.37	28	90	28	83.00	4	42	4	48.67	4.6
Marengo	59.87	73.50	57.70	63.69	28	88	28	81.33	3	35	4	43.00	4.4
Ottawa	60.83	73.83	62.81	65.82	28	91	28	84.33	4	41	4	48.00	5.0
Pekin	62.43	77.60	63.46	67.84	28	92	28	82.67	4	40	4	51.67	4.4
Peoria	65.30	77.62	70.25	71.06	28	93	28	86.50	4	41	4	51.17	3.9
Riley	58.47	71.67	57.50	62.55	28	88	28	81.67	3	h35	4	41.00	3.1
Sandwich	62.30	76.93	61.73	66.98	13	f94	28	84.33	10	39	4	47.33	4.9
Upper Alton	64.53	77.00	66.88	69.47	13	88	27	81.67	4	40	4	48.67	2.8
West Salem	67.73	81.43	69.67	72.94	28	95	28	86.67	4	46	4	53.00	4.0
West Urbana	65.83	75.17	64.20	68.40	27	93	27	f84.67	3	40	4	45.00	4.8
Wheaton	62.90	71.01	59.49	64.47	28	90	28	83.00	3	36	4	42.00	5.1
Winnebago	59.88	72.56	59.23	63.89	13	f88	28	79.33	4	36	4	46.00	4.6
MISSOURI—													
St. Louis, [Engelmann]	69.48	79.82	70.65	73.32	27	f93	27	86.50	4	48	4	54.00	4.1
St. Louis, [Fendler]	67.43	78.97	68.65	71.68	27	f93	27	85.00	4	45	4	50.67	---
WISCONSIN—													
Appleton	58.63	69.23	58.73	62.20	28	84	28	79.00	4	36	3	43.33	4.3
Bay City	53.47	62.93	53.00	56.47	27	84	27	74.67	3	32	3	38.67	3.7
Beloit	60.47	75.77	59.07	65.10	28	91	26	f79.00	3	36	3	44.00	3.3
Delafield	60.37	67.85	57.96	62.06	26	l86		?	3	34		?	4.7
Green Bay	58.40	71.67	59.42	63.16	27	86	27	82.00	3	34	3	42.00	3.2
Kenosha	61.32	68.26	58.38	62.65	28	87	28	83.50	3	h39	4	42.83	2.6
Madison	60.53	71.13	61.30	64.32	26	84	27	76.67	4	39	3	47.00	4.7
Manitowoc	56.00	64.37	55.10	58.49	27	87	27	76.33	3	37	h	42.33	5.1
Milwaukee, [Larkin]													4.1
Milwaukee, [Pomeroy]	61.93	69.63	58.30	63.29	27	89	27	82.33	3	37	3	45.67	4.9
Milwaukee, [Winkler]	57.70	65.53	57.83	60.35	27	83	27	79.00	3	37	4	42.67	2.9
New Danemora	55.84	71.80	55.80	61.15	26	87		?	4	31	3	42.33	5.2
Platteville	59.97	74.23	61.90	65.37	26	92	26	79.33	4	41	4	52.00	4.7
Wausaw	61.70	72.80	60.60	65.03	4	81	21	77.00	4	37	3	46.33	5.6

a Observations taken at 7 a. m., 1 p. m., and 9 p. m.

b Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 58.5.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 53.88.

d Incomplete.

e Observations taken at 6 a. m., 2 p. m., and 9 p. m.

f Same temperature on the 96th.

g Same temperature on the 5th.

h Same temperature on the 4th.

i Observations taken at 6 a. m. and 1 p. m.

j Same temperature on the 29th.

k Observations taken at 7 a. m., 1 p. m., and 7 p. m.

l Same temperature on the 27th.



## No. 19.—THERMOMETER AND FACE OF SKY, JUNE, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
IOWA—	°	°	°	°		°		°		°		°	
Bellevue.....	61.80	73.83	61.87	65.83	26	a 86	27	78.33	3	40	4	50.00	4.8
Border Plains.....	64.47	76.03	63.53	68.01	7	b 89	28	82.33	3	45	3	50.00	5.5
Burlington.....	64.60	79.03	64.07	69.23	28	94	28	83.00	7	46	4	52.00	5.0
Dubuque.....	62.00	72.77	63.97	66.25	26	89	26	79.00	4	41	4	50.33	4.8
Fairfield.....	64.76	73.36	63.63	67.25	28	87	28	81.00	5	45	4	51.67	5.1
Forestville.....	60.03	70.21	58.03	62.76	27	92		?	4	42		?	3.4
Fort Madison (c).....	63.03	75.53	67.77	68.78	28	90	28	83.33	4	44	4	49.00	3.6
Muscatine.....	59.00	72.00	63.13	64.71	13	d 85	27	80.00	3	e 40	4	48.00	4.4
Pleasant Plain.....	64.17	76.37	63.20	67.91	27	a 96	28	84.33	4	44	4	50.00	4.5
Poultney.....	61.08	71.09	59.36	63.84	13	a 88	28	77.67	5	45	4	52.00	5.3
Rossville.....	60.73	71.27	59.95	63.98	27	90	26	77.57	3	41	3	46.67	4.9
MINNESOTA—													
Beaver Bay, [Clark].....	49.13	55.53	50.13	51.60	27	80	27	65.33	3	33	3	36.50	5.1
Beaver Bay, [Wieland].....	53.93	66.57	51.20	57.23	12	f 78	30	69.00	4	34	3	42.33	4.6
Burlington.....	49.57	63.43	50.23	54.41	27	82	27	70.00	3	e 32	3	41.00	4.6
Chatfield.....	59.73	73.10	58.60	63.81	28	88	26	80.00	3	38	3	46.33	5.0
Forest City.....	59.23	69.30	59.47	62.67	26	83	26	76.67	3	42	3	46.67	3.2
Hazlewood.....	59.21	71.29	60.55	63.63	6	84	28	74.67	2	g 44	3	52.33	4.8
Princeton.....	61.77	72.23	62.20	65.40	26	89	26	80.67	3	h 48	3	53.00	4.2
NEBRASKA—													
Bellevue.....	65.70	76.90	66.71	69.77	28	93	28	84.00	3	e 50	3	53.67	2.7
Brownville.....	69.97	85.07	69.20	74.75	27	96	28	89.00	4	48	4	54.67	4.9
Elkhorn.....	64.66	79.20	66.67	70.17	28	93	28	85.00	3	44	3	50.33	4.8
Nebraska City.....	68.56	77.48	68.30	71.45	14	90	28	84.13	3	50	3	53.33	5.0
Omaha, [Rain].....	63.13	76.73	66.36	68.74	28	90	28	83.00	3	e 50	3	52.33	4.8
KANSAS—													
Burlingame.....	66.96	82.00	68.40	72.45	19	98	19	84.00	3	50	3	53.33	3.6
Lawrence.....	70.97	81.27	68.97	73.74	29	94	28	86.00	3	54	3	57.33	4.4
Manhattan.....	69.20	86.83	71.23	75.75	13	97	28	88.67	3	54	4	61.33	4.2
Moneka.....	68.36	75.82		72.09	18	i 92	28	88.00	1	56		?	4.8
Neosha Falls.....	67.17	80.43	68.27	71.96	29	92	27	80.67	3	49	3	56.67	3.5
UTAH—													
Great Salt Lake City.....	69.00	84.00	76.00	76.33		98				68			
OREGON—													
Fort Vancouver.....	58.20	74.83	63.40	65.48									
Portland (j).....	56.63	77.77	70.87	68.41	22	101	21	k 87.00	1	42	15	59.67	
CALIFORNIA—													
Sacramento.....	70.00	81.86	72.70	74.85	16	96	22	87.00	3	58	3	63.67	0.5
San Francisco.....	57.30	68.87	55.67	60.61	15	86	18	71.67	2	l 52	11	55.33	2.2
Union Rancho.....	69.73	96.90	78.50	81.71	21	108m	23	96.67	1	n 53	4	66.67	0.8
MEXICO—													
Cordova (o).....	71.26	73.49	71.42	72.33		76.3			4	n 68.7			
Mirador (p).....	68.05	75.47	68.52	70.68					2	64.7			
Vera Cruz (q).....	78.31		80.75	79.53									
WEST INDIES—													
Nassau, Bahamas (r).....				85.06	30	88	30	87.50	9	s 82	13	82.00	
St. George's, Bermuda (t).....				74.08		82.7				67			
Turk's Island, Bahamas (j).....	78.90	81.33	79.57	79.93	26	u 84	23	81.67	3	v 76	5	w 76.67	
CENTRAL AMERICA—													
Guatemala (x).....				66.96	20	79.2			7	56.3			
SOUTH AMERICA—													
Catharina Sophia, Surinam (y).....	74.80	84.67	79.10	79.52	12	89	4	z 81.00	27	72	18	77.00	6.4

a Same temperature on the 28th.

b Same temperature on the 27th and 28th.

c Observations taken at 8 a. m., noon, and 7 p. m.

d Same temperature on the 26th and 27th.

e Same temperature on the 4th.

f Same temperature on the 19th, 20th, 27th, and 30th.

g Same temperature on the 3d and 4th.

h Same temperature on the 10th.

i Same temperature on the 26th and 29th.

j Observations taken at 6 a. m., noon, and 6 p. m.

k Same temperature on the 22d.

l Same temperature on the 8th, 9th, and 28th.

m Same temperature on the 24th.

n Same temperature on the 5th.

o Observations taken at 9 a. m., 12 m., 3, 6, and 9 p. m. Mean at 12 m., 73.00; mean at 6 p. m., 72.48.

p Observations taken at 7 a. m., 2 p. m., and 8 p. m.

q Observations taken at 6 a. m. to 8 a. m., and 9 p. m. to 11 p. m.

r Mean obtained from daily maximum and minimum.

s Same temperature on the 13th.

t Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

u Same temperature on the 27th.

v Same temperature on the 5th, 6th, and 8th.

w Same temperature on the 7th.

x Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.

y Observations taken at 6 a. m., 2 p. m., and 6 p. m.

z Same temperature on the 4th, 6th, 7th, and 12th.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Hamilton (a) .....	72.51	74.93	70.65	71.58	12	88	12	86.50	3	56	3	56.00	
Montreal .....	67.79	74.93	66.29	69.67	12	90	12	85.46	3	49	3	54.50	7.8
Moose Factory (b) .....				56.40									
Red River Settlement .....	65.26	78.23	64.67	69.39	11	91	14	79.00	25	51		?	4.4
St. John's .....	62.39	69.77	61.32	64.49	4	86	4	76.67	14	50	14	52.67	4.1
St. Martin (d) .....	64.41	79.25	65.53	69.73	12	97	23	85.30	4	36	4	57.33	3.6
Stanbridge .....	63.35	74.55	62.81	66.90	12	89	12	81.33	4	48	4	52.00	4.4
Toronto (d) .....	66.87	72.39	63.80	67.69	12	84	12	79.88	3	50	6	59.37	4.6
Windsor .....	61.44	74.44	61.63	65.84	12	83	12	72.67	4	53		?	5.6
MAINE—													
Belfast .....	65.13	77.19	71.19	71.17	12	88	13	80.00	3	55	4	61.00	
Cornish, [West] .....	62.38	74.42	63.29	66.60	12	87	12	80.00	4	50	4	54.00	3.4
Cornishville .....	66.26	75.81	67.03	69.70	12	88	12	82.00	4	52	4	55.67	3.8
Dexter .....													4.6
Gardiner .....	64.07	73.87	63.47	67.14	12	85	12	75.67	3	54	4	59.67	4.5
Lisbon .....	65.09	76.84	63.58	68.50	12	89	12	80.00	4	55	4	59.33	2.7
Perry .....	59.55	71.37	60.29	63.74	13	87	13	71.33	4	50	4	54.00	3.7
Portland .....	64.74	73.02	63.48	67.08	13	85	13	78.33	4	52	4	58.67	4.7
Steuben .....	62.29	71.74	58.39	64.14	10	82	13	72.67	4	51	4	55.00	4.9
NEW HAMPSHIRE—													
Shelburne (h) .....	54.62	83.20	65.32	67.71	12	99	12	80.47	5	40		?	6.0
Stratford .....	59.10	73.71	59.35	64.05	12	94	12	81.33	4	42	4	48.67	4.3
VERMONT—													
Brandon .....	62.47	75.72	63.71	67.30	11	90	12	81.33	4	48	4	52.16	4.5
Burlington .....	63.71	71.42	63.45	66.21	12	85	12	80.33	4	48	4	52.00	4.2
Craftsbury .....	59.71	71.58	61.84	64.38	12	87	12	79.00	4	46	4	49.00	4.2
Lunenburg .....													2.9
Rupert .....	63.74	80.52	69.68	71.31	12	96	12	82.67	5	56	4	62.00	3.9
St. Johnsbury .....	56.32	74.94	58.73	63.33	12	90	12	76.67	5	40	4	48.33	4.3
MASSACHUSETTS—													
Amherst .....	62.68	75.67	64.90	67.75	12	90	12	78.90	4	53	4	57.10	4.2
Cambridge .....	64.97	78.00	65.58	69.52	12	90	12	79.67	4	51	4	59.00	4.5
Florida .....													4.8
Lawrence .....	64.55	74.97	64.35	67.96	12	88	12	76.67	4	53	4	59.00	7.5
Mendon .....	67.00	76.22	65.81	69.68	12	90	12	81.67	5	54	4	59.33	4.2
Nantucket .....	67.56	73.35	64.73	68.55	17	80	20	74.00	4	54	4	58.83	4.1
New Bedford .....	65.07	75.03	64.56	68.22	12	83	12	74.80	4	54	4	58.50	5.7
Richmond .....	62.61	81.74	71.77	72.04	11	96	13	82.67	1	37	23	55.67	3.2
Westfield .....	61.29	75.61	64.06	66.99	12	90	12	79.33	6	52	4	56.67	4.7
Williamstown .....	62.14	72.37	63.89	66.13	11	93	11	84.26	5	46	4	54.08	4.8
Worcester .....	66.25	76.43	67.68	70.12	12	88	12	81.83	4	54	4	58.17	5.0
RHODE ISLAND—													
Providence (d) .....	63.50	78.20	65.80	69.17	12	90	12	77.67	4	54	4	58.00	4.1
CONNECTICUT—													
Columbia .....	62.68	76.16	62.39	67.08	13	93	12	80.00	3	52	4	58.00	4.3
Middletown .....	63.30	78.73	65.61	69.21	13	95	11	81.80	5	50	5	59.00	4.3
Pomfret .....	63.71	72.50	63.69	66.63	12	84	12	78.50	4	52	4	56.00	4.7
Saybrook .....	64.97	77.73	65.81	69.50	13	88	12	76.67	4	56	4	64.00	4.3
Wallingford .....	62.16	76.87	65.26	68.10	13	94	12	81.17	5	50	5	58.33	3.7
NEW YORK—													
Bellport .....	66.20	74.74	65.71	68.88	12	86	12	78.67	4	54	4	59.67	3.7
Beverly .....	64.17	74.61	64.48	67.75	13	88		?	4	54	4	56.00	4.1
Buffalo (o) .....	66.90	74.14	69.30	70.11	14	87	14	80.33	3	54	4	57.67	3.3
Flatbush .....	67.63	77.90	66.94	70.82	12	92	12	81.50	4	55	4	58.50	4.5
Nichols .....	64.77	81.55	61.90	69.44	19	95	19	80.33	4	46	4	52.60	4.4
Oswego .....	64.90	72.16	66.10	67.72	12	85	12	80.00	4	51	4	53.00	4.1

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at sunrise, 2 p. m., and 10 p. m.

c Same temperature on the 14th.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e Same temperature on the 13th.

f Same temperature on the 5th.

g Same temperature on the 17th.

h Observations taken at sunrise, noon, and 9 p. m.

i Same temperature on the 12th.

j Same temperature on the 3d.

k Same temperature on the 20th.

l Same temperature on the 9th.

m Same temperature on the 4th.

n Same temperature on the 27th.

o Observations taken at 8 a. m., 2 p. m., and 9 p. m.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—Continued.	°	°	°	°		°		°		°		°	
Penn Yan (a).....	57.74	78.65	65.84	67.41	11	95	13	80.67	4	b 42	4	49.67	5.3
Rochester, [Dewey].....	65.45	79.06	67.71	70.74	11	94	12	83.67	3	b 51	4	57.00	3.6
Wampsville.....	63.29	77.29	63.39	67.92	13	90	13	78.67	3	c 50	4	54.67	4.2
Waterford.....	66.69	78.20	67.38	70.76	12	91	12	84.54	4	53	---	?	3.9
NEW JERSEY—													
Freehold.....	66.10	81.68	69.19	72.32	13	99	12	83.33	4	55	---	?	---
Lambertville.....	68.54	83.64	67.49	73.22	13	100	12	85.37	4	53	4	59.23	5.4
Newark (d).....	---	---	---	70.23	13	91	13	83.13	5	52	4	60.37	---
PENNSYLVANIA—													
Bedford.....	62.22	82.00	69.07	71.10	12	e 94	18	82.33	6	42	6	52.00	2.9
Berwick.....	68.15	81.67	70.76	73.53	13	96	13	86.33	3	c 55	4	59.33	2.5
Cannonsburg.....	64.48	78.71	71.42	71.54	12	f 90	14	81.67	4	52	6	58.67	3.7
Carlisle.....	71.90	80.56	72.25	74.90	2	94	---	?	6	55	4	59.33	3.7
Chambersburg.....	72.61	84.48	72.42	76.50	13	98	12	87.67	4	g 56	6	62.33	3.7
Easton (h).....	69.06	80.77	66.45	72.09	13	96	13	84.00	3	c 55	4	59.00	4.6
Fleming.....	67.68	84.52	64.81	72.34	18	99	13	85.00	4	49	4	58.67	2.6
Gettysburg.....	67.90	83.97	71.97	74.61	13	97	13	87.83	4	54	4	60.67	3.6
Harrisburg, [Heisely].....	72.67	86.72	78.87	79.42	13	98	13	90.33	4	57	6	68.00	3.4
Harrisburg, [Hickok].....	68.27	83.06	74.37	75.23	13	95	13	86.83	4	b 56	---	?	3.9
Lewisburg.....	68.71	81.20	68.56	72.82	13	96	17	80.80	3	54	4	58.47	4.7
Morrisville.....	66.39	80.42	67.84	71.55	13	94	13	81.33	28	55	4	60.67	2.9
Mount Joy.....	74.31	89.40	74.76	79.49	12	103	13	89.67	4	60	4	66.67	3.4
Norristown.....	66.80	79.10	69.20	71.70	13	95	12	81.30	4	55	4	60.33	3.6
North Whitehall (i).....	63.23	78.45	72.87	71.52	13	91	13	81.67	4	48	4	59.00	4.0
Philadelphia.....	72.00	82.68	73.31	76.00	13	95	13	86.50	4	58	4	63.20	4.8
Pittsburg, [Marine Hospital].....	69.35	80.16	71.71	73.74	13	f 92	13	85.67	29	56	6	59.33	4.3
Pocopson.....	68.95	84.40	69.48	74.28	13	98	13	85.67	4	56	4	62.33	4.4
Shamokin.....	58.78	79.84	67.90	68.84	13	98	13	81.33	5	38	4	50.00	4.1
Somerset.....	62.77	79.57	65.42	69.25	14	96	14	82.33	4	47	6	53.33	4.3
Tarentum.....	67.04	81.08	65.25	71.12	12	94	13	82.67	3	50	7	56.67	---
West Haverford.....	66.42	81.64	---	74.03	13	95	13	85.50	5	g 52	1	b 61.00	---
Worthington.....	66.19	81.44	68.32	71.98	13	96	13	85.33	4	52	6	59.00	3.6
MARYLAND—													
Annapolis.....	70.77	81.65	76.92	76.45	13	94	13	87.33	4	57	4	64.00	2.6
Bladensburg.....	68.36	85.00	68.85	74.07	13	94	13	83.67	12	40 ?	---	?	5.6
Chestertown.....	71.32	81.55	72.05	74.97	13	95	13	86.33	5	56	5	62.50	4.4
Frederick.....	72.11	81.15	73.66	75.64	13	95	13	88.33	6	56	6	63.33	4.1
Leitersburg.....	67.32	81.94	70.68	73.31	13	96	13	86.00	7	48	4	59.67	3.5
Leonardtown.....	72.15	79.20	74.96	75.44	13	j 90	---	?	4	59	---	?	4.6
Sykesville.....	67.48	77.94	70.23	71.88	13	k 90	13	84.33	4	g 50	4	57.67	4.2
DISTRICT OF COLUMBIA—													
Washington.....	70.77	82.16	75.48	76.13	13	94	13	87.33	4	57	4	63.00	3.9
VIRGINIA—													
Crichton's Store (l).....	71.94	84.38	81.93	79.42	14	101	14	91.33	11	56	6	60.00	4.3
Cross Creek.....	63.17	84.53	66.45	71.38	12	m 97	12	82.00	4	46	4	58.00	---
Falmouth.....	75.26	86.39	72.65	78.10	14	n 98	14	87.33	6	57	11	63.67	---
Kanawha.....	68.27	83.90	71.85	74.67	18	95	18	83.33	4	b 57	4	61.33	4.0
Lewinsville.....	68.79	84.92	73.90	75.87	13	100	14	85.67	4	54	4	61.67	4.4
Lewisburg.....	71.10	85.03	71.65	75.93	14	o 92	14	80.33	31	50	31	64.00	2.3
Montross.....	70.77	80.90	71.23	74.30	13	93	13	83.67	4	57	4	62.33	4.1
Montview.....	67.94	81.19	71.00	73.38	14	96	14	85.33	4	b 54	4	58.00	3.7
Poplar Grove.....	67.87	86.45	67.97	74.10	13	j 99	14	83.33	5	55	6	61.00	4.1
Portsmouth.....	71.73	83.98	69.79	75.17	20	97.5	14	85.83	5	53.5	6	60.17	3.1
Rose Hill.....	---	---	---	---	---	91	---	---	---	56½	---	---	---
Rougemon.....	73.60	83.59	75.07	77.42	13	95	13	90.00	5	59	6	62.00	4.3
Smithfield.....	69.70	79.91	71.29	73.63	13	92	14	83.40	6	57	6	60.77	5.0
Westwood.....	70.26	86.04	73.35	76.55	14	100	14	89.00	4	59	6	62.00	---

a Observations taken at sunrise, 2 p. m., and sunset.

b Same temperature on the 5th.

c Same temperature on the 4th.

d Daily maximum and minimum.

e Same temperature on the 13th.

f Same temperature on the 14th.

g Same temperature on the 6th.

h Observations taken at 8 a. m., 2 p. m., and 10 p. m.

i Observations taken at sunrise, noon, and sunset.

j Same temperature on the 18th.

k Same temperature on the 12th.

l Observations taken at 6½ a. m., noon, and 6 p. m.

m Same temperature on the 13th and 14th.

n Same temperature on the 18th and 20th.

o Same temperature on the 17th.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NORTH CAROLINA—	°	°	°	°		°		°		°		°	
Chapel Hill	72.77	87.45	74.45	78.22	18	a 99	18	89.67	6	53	7	59.00	5.2
Green Plains	72.45	87.10	71.52	77.06	14	102	14	90.00	6	56	7	59.33	---
Murfreesborough (b)	73.33	88.33	77.41	79.82	14	95	14	86.67	4	c 61	---	?	3.0
SOUTH CAROLINA—													
Aiken	70.97	87.31	75.00	77.76	19	98	19	88.00	5	59	5	?	4.3
All Saints	74.84	82.79	75.87	77.83	19	a 92	18	d 85.00	8	60	8	66.00	---
Charleston, [Johnson]	75.52	85.00	79.23	79.92	19	94	19	87.33	5	e 64	8	68.00	---
Columbia, [Barton]	70.98	86.31	76.84	78.04	18	98	19	88.00	8	57	6	65.50	5.8
Columbia, [White]	76.39	88.16	78.26	80.94	19	100	18	d 89.67	8	62	8	67.33	3.1
St. John's	74.37	86.00	75.40	78.59	19	98	19	87.67	7	61	7	64.67	5.1
GEORGIA—													
Athens	73.08	84.52	76.10	77.90	20	95	18	86.00	5	62	7	68.30	4.4
Atlanta	70.97	83.74	73.61	76.11	14	f 92	18	g 84.00	5	h 62	10	64.67	3.3
Augusta	77.81	91.90	79.16	82.96	19	102	19	90.00	5	i 67	7	68.00	5.2
Clarksville	70.29	82.10	76.74	76.38	19	92	18	84.00	31	62	5	c 66.67	5.1
Savannah	75.50	86.86	77.40	79.92	19	100	26	86.87	8	61	8	64.83	5.3
Sparta	70.23	87.74	76.00	77.99	19	j 97	19	87.67	6	59	5	65.33	4.3
Thomaston	76.32	87.43	81.46	81.74	20	97	20	90.33	5	65	---	?	5.0
Whitemarsh Island	76.97	84.83	76.87	79.56	19	97	26	86.00	8	64	8	65.67	4.9
FLORIDA—													
Alligator	77.03	86.61	75.81	79.82	18	100	25	87.33	5	63	9	65.67	4.5
Atsena	78.87	83.58	79.94	80.79	18	87	18	85.00	5	68	5	72.33	4.5
Belair	78.39	86.81	79.77	81.66	19	95	19	k 87.33	5	66	9	70.67	---
Gainesville	73.38	83.91	78.38	78.56	26	90	17	82.67	9	67	---	?	3.7
Jacksonville	79.16	84.53	78.14	80.62	26	95	25	87.67	7	k 70	8	71.00	4.6
Micanopy	78.16	85.28	78.56	80.67	26	94	26	86.83	5	69	9	71.40	4.8
St. Augustine	80.42	84.39	79.10	81.30	28	95	23	87.33	5	l 73	8	74.00	3.7
Salt Ponds (m)	82.42	87.68	---	85.08	23	n 91	23	k 87.50	8	79	12	82.00	3.3
Seville	76.40	---	---	---	26	82	---	---	---	?	---	---	5.0
ALABAMA—													
Carlowlville	76.66	91.38	78.21	82.08	20	o 96	20	86.67	5	68	---	?	2.7
Cabawba	79.59	84.87	82.28	82.25	20	92	19	p 87.00	9	72	9	71.33	3.3
Greene Springs	74.58	85.83	75.70	78.70	19	j 94	20	83.50	9	65	9	69.00	3.5
Greensborough	74.45	85.69	75.23	78.46	13	q 93	19	85.67	9	64	9	66.83	3.8
Selma	74.87	87.48	78.39	80.25	20	98	19	88.67	9	62	9	65.67	5.7
MISSISSIPPI—													
Columbus	75.24	89.50	77.16	80.63	20	99	19	88.03	7	66	9	74.20	3.5
Natchez	74.81	86.48	78.74	80.01	14	91	20	k 83.67	11	68	10	73.33	4.1
Paulding	76.88	91.33	81.62	83.28	14	98	14	d 88.50	10	66	---	?	4.2
Westville (b)	80.25	93.80	89.80	87.95	1	99	---	?	---	?	---	?	4.8
LOUISIANA—													
New Orleans (r)	84.65	87.65	89.39	87.23	20	95	24	91.00	10	75	10	77.00	---
TEXAS—													
Austin, [Palm]	79.71	93.81	80.83	84.82	29	101	14	89.67	5	73	4	78.67	4.0
Austin, [Van Nostrand]	78.72	94.59	81.38	84.90	28	99	14	89.16	5	75	16	80.36	3.8
Gilmer (s)	70.32	90.43	84.62	81.79	20	99	24	88.33	12	59	12	74.00	---
Larissa	77.55	90.61	79.53	82.56	20	o 100	20	89.33	6	56½	---	?	3.9
New Braunfels	78.16	96.78	83.55	86.16	27	104	31	91.67	17	70	3	79.33	2.1
Northern tier of counties (t)	80.13	93.42	78.02	80.92	---	---	---	---	---	---	---	---	---
Roundtop	77.00	97.00	81.00	85.00	---	102	---	---	---	72	---	---	---
Sisterdale	80.45	95.04	79.24	84.91	14	103	10	90.83	4	74	3	78.06	3.3
Union Hill	74.03	90.19	76.78	80.33	31	97	31	86.00	10	u 70	2	v 74.33	3.8

a Same temperature on the 22d.

b Incomplete.

c Same temperature on the 6th.

d Same temperature on the 25th.

e Same temperature on the 8th.

f Same temperature on the 18th, 19th, and 20th.

g Same temperature on the 19th.

h Same temperature on the 6th, 7th, 8th, and 9th.

i Same temperature on the 7th.

j Same temperature on the 29th.

k Same temperature on the 24th.

l Same temperature on the 6th and 8th.

m Thermometer 2½ to 2¾ degrees too high.

n Same temperature on the 24th and 29th.

o Same temperature on the 21st.

p Same temperature on the 20th and 26th.

q Same temperature on the 19th and 20th.

r Observations taken at 9 a. m., noon, and 3 p. m.

s Observations taken at sunrise, 3 p. m., and sunset.

t Observations taken at sunrise, 7 a. m., 2 p. m., 7 p. m., and 9 p. m.

Mean at sunrise, 71.55; and at 7 p. m., 81.45.

u Same temperature on the 11th and 27th.

v Same temperature on the 3d.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
TEXAS—Continued.	°	°	°	°	°		°		°		°		
Washington.....	79. 10	90. 26	76. 40	81. 92	28	97	31	87. 33	13	72	5	75. 67	2. 6
Webberville.....	79. 45	94. 42	81. 87	84. 58	10	100	20	88. 33	11	a 75	4	82. 33	2. 7
ARKANSAS—													
Jacksonport.....	76. 27	89. 71	79. 71	81. 90	19	101	19	91. 00	28	67	27	72. 00	4. 5
Washington (b).....	71. 29	90. 45	-----	80. 87	20	102	20	90. 00	7	c 64	29	d 74. 00	4. 7
TENNESSEE—													
Glenwood.....	70. 04	84. 79	74. 54	76. 46	18	e 94	18	85. 17	5	56	4	65. 37	4. 1
Memphis.....	78. 65	89. 23	79. 52	82. 47	19	99	19	92. 33	27	67	27	72. 00	3. 6
KENTUCKY—													
Bardstown.....	74. 87	87. 31	76. 34	79. 51	14	103	14	91. 67	4	57	4	64. 67	3. 2
Danville.....	73. 70	86. 78	74. 96	78. 48	18	100	18	90. 00	4	f 64	4	69. 33	3. 2
Paris.....	70. 76	84. 84	74. 26	76. 62	12	97	18	88. 00	4	55	4	62. 33	5. 0
Springdale (g).....	65. 21	89. 16	79. 81	78. 06	14	101	16	87. 00	4	51	4	64. 67	4. 0
OHIO—													
Avon.....	70. 97	79. 17	68. 61	72. 92	18	94	14	84. 36	4	51	3	56. 00	3. 3
Bellefontaine.....	73. 48	83. 04	70. 65	75. 72	14	97	15	85. 67	3	57	4	61. 33	3. 8
Bowling Green.....	68. 52	80. 86	70. 36	73. 25	14	95	18	84. 00	3	52	4	58. 10	6. 3
Cincinnati, [Harper].....	74. 13	86. 94	80. 10	80. 39	17	101	14	h 89. 33	3	i 61	4	66. 33	3. 7
Cincinnati, [Phillips].....	72. 90	87. 77	77. 90	79. 52	15	j 100	16	88. 33	4	56	4	66. 00	2. 3
Cleveland.....	68. 35	78. 29	70. 81	72. 48	2	93	8	83. 33	3	54	3	58. 67	3. 7
College Hill.....	78. 10	85. 87	74. 03	79. 33	17	100	17	87. 67	24	k 66	24	67. 33	3. 1
Collingwood.....	68. 52	82. 39	70. 32	73. 74	11	l 96	12	84. 67	5	52	3	59. 67	-----
Freedom.....	74. 19	80. 71	63. 39	73. 76	14	94	14	86. 33	4	50	6	56. 00	4. 2
Hillsborough.....	66. 47	80. 89	72. 55	73. 30	18	93	17	83. 50	4	50	4	58. 67	2. 7
Hiram.....	71. 06	80. 77	68. 19	73. 34	14	95	14	86. 67	4	53	3	56. 33	4. 7
Hudson (m).....	66. 77	76. 64	67. 16	70. 19	2	89	-----	?	3	53	-----	?	3. 7
Jackson, [Monroe county] (n).....	73. 53	85. 67	69. 93	76. 38	15	98	-----	?	4	55	-----	?	3. 5
Kelley's Island.....	70. 58	78. 24	70. 87	73. 23	18	92	17	82. 67	3	54	3	55. 33	2. 9
Madison, [Atkins].....	74. 58	80. 35	64. 94	73. 29	18	99	18	88. 33	4	47	4	54. 67	2. 7
Madison, [King].....	71. 19	79. 32	64. 45	71. 65	18	97	2	86. 33	4	48	3	55. 67	5. 6
Montville.....	67. 94	78. 71	68. 48	71. 71	17	o 93	14	85. 00	3	49	3	54. 00	4. 3
New Lisbon.....	66. 82	83. 29	68. 12	72. 74	12	98	14	85. 00	3	i 53	4	58. 33	2. 5
Northwood.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2. 6
Portsmouth.....	71. 64	89. 24	74. 03	78. 30	17	103	17	89. 83	5	59	4	64. 67	2. 8
Rockport.....	69. 61	81. 71	71. 48	74. 27	13	p 94	13	89. 00	4	44	4	57. 33	-----
Savannah.....	71. 19	87. 97	68. 13	75. 76	14	104	14	90. 00	3	49	4	57. 00	3. 6
Troy.....	69. 90	88. 16	72. 71	76. 92	15	103	12	88. 00	4	50	3	63. 67	2. 4
Urbana.....	69. 32	85. 55	69. 77	74. 86	12	q 96	18	84. 67	4	53	27	60. 33	3. 9
Welchfield.....	71. 55	82. 71	66. 45	73. 57	14	100	14	89. 00	3	i 51	3	57. 33	2. 0
Westerville.....	70. 09	84. 29	72. 02	75. 47	15	96½	15?	?	3	50	4?	?	4. 1
Windham.....	64. 45	78. 10	66. 45	69. 67	17	92	12	80. 00	4	a 51	4	57. 33	-----
MICHIGAN—													
Battle Creek.....	68. 74	84. 16	68. 10	73. 67	17	99	17	86. 33	3	i 53	3	55. 67	1. 7
Detroit.....	70. 84	83. 90	68. 97	74. 57	12	e 97	12	p 88. 33	3	46	3	53. 33	4. 3
Fort Gratiot (r).....	62. 00	73. 84	71. 09	69. 29	11	92. 7	11	83. 87	4	45	3	49. 17	5. 5
Grand Rapids.....	70. 22	86. 93	67. 52	74. 59	17	101	17	88. 33	3	s 52	3	57. 33	5. 1
Lake George.....	60. 58	73. 69	64. 17	66. 15	15	99	12	80. 67	3	45	8	51. 33	5. 6
Marquette.....	63. 16	73. 19	60. 10	65. 48	10	93	12	80. 13	3	40	7	52. 57	3. 9
Monroe, [Bowlsby] (u).....	70. 30	82. 06	72. 20	74. 85	18	90	16	83. 90	29	61	28	65. 00	2. 1
Monroe, [Lane] (t).....	67. 19	77. 40	76. 56	73. 57	15	j 89. 5	18	84. 50	4	48. 5	4	58. 00	4. 0
Monroe, [Whelpley].....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3. 3
New Buffalo (u).....	71. 53	79. 20	65. 07	71. 93	18	93	17	86	3	46	3	53. 33	4. 8

a Same temperature on the 29th.

b Observations taken at sunrise and 2 p. m.

c Same temperature on the 8th, 29th, and 30th.

d Same temperature on the 30th.

e Same temperature on the 19th.

f Same temperature on the 5th.

g Observations taken at 5 a. m., 2 p. m., and 7 p. m.

h Same temperature on the 16th.

i Same temperature on the 4th.

j Same temperature on the 18th.

k Same temperature on the 25th.

l Same temperature on the 12th.

m Incomplete. The records of the thermometer at this place are 0°, 85° too high.

n Incomplete.

o Same temperature on the 14th.

p Same temperature on the 17th.

q Same temperature on the 13th, 14th, 17th, and 18th.

r Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 70.20.

s Same temperature on the 28th.

t Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 73.12.

u Observations taken at 7 a. m., 1 p. m., and 9 p. m.

## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°	□	°			°		°		
Ottawa Point (a) .....	62.53	71.39	70.22	68.26	18	83	18	79.00	3	b 47	3	51.00	5.2
Thunder Bay Island (c) .....	60.38	66.16	64.11	63.75	16	78.5	19	75.00	3	44	3	48.5	5.5
Ypsilanti .....	68.39	82.22	66.81	72.47	14	98	13	84.33	3	49	3	52.80	3.9
INDIANA—													
Aurora (d) .....	74.00	92.19	80.32	82.17	17	108	18	94.33	4	57	4	63.67	---
Cannelton .....	72.71	84.99	74.69	77.46	14	96	19	86.63	28	57	4	64.03	3.4
Logansport .....	71.03	88.03	77.39	78.82	17	102	17	92.67	4	46	4	59.67	3.7
Mishawakee .....	66.39	84.97	68.58	73.31	13	99	12	88.67	4	45	1	52.67	2.6
New Albany .....	74.38	89.52	77.52	80.47	18	100	13	89.67	4	57	4	65.33	4.1
New Harmony .....	75.10	86.03	77.33	79.49	14	e 96	18	90.33	28	62	4	66.33	3.9
Richmond .....				73.63			14	83.40			4	55.30	4.0?
Richmond, [Haines] .....	73.81	83.39	73.78	77.00	14	96	17	88.00	4	57	4	62.00	---
ILLINOIS—													
Augusta .....	68.87	81.80	73.48	74.71	16	93	15	84.67	4	53	4	63.33	2.4
Aurora .....	67.58	83.29	67.97	72.95	17	f 95	17	85.67	3	45	3	52.00	2.9
Batavia, [Mead] .....	67.45	89.12	68.06	74.88	11	106	17	91.00	3	44	3	53.33	3.5
Carthage (g) .....	72.40	86.03	79.00	79.14	14	98	15	90.67	4	54	1	63.00	---
Edgington .....	68.13	86.00	72.48	75.54	15	h 100	17	90.00	4	44	4	59.33	4.1
Elgin .....	67.81	83.19	68.39	73.13	17	100	17	83.33	3	47	3	52.00	3.6
Manchester (i) .....	71.68	82.93	72.06	75.56	15	94	18	85.67	4	52		?	3.6
Marengo .....	69.29	83.61	67.06	73.32	17	100	17	88.67	3	44	3	51.00	2.9
Naperville .....	68.74	86.19	70.03	74.99	17	101	17	89.00	4	42	1	53.67	2.7
Ottawa .....	68.30	84.70	73.13	75.38	18	101	16	86.67	7	45	3	54.00	3.7
Pekin .....	70.77	86.82	73.16	76.92	18	99	18	89.00	3	b 53	3	60.67	3.1
Peoria .....	73.00	87.06	77.42	79.16	15	104	15	90.00	3	57	3	62.67	3.4
Riley .....	68.26	82.55	67.26	72.69	17	97	17	87.00	3	48	3	52.33	2.5
Sandwich .....	71.12	87.51	70.83	76.49	11	j 100	17	90.00	1	48	3	56.67	3.5
Upper Alton .....	71.17	83.10	72.68	75.65	15	94	18	84.33	4	56	4	62.67	1.7
West Salem .....	73.52	89.55	75.94	79.67	17	f 101	18	90.33	28	59	4	66.67	3.7
West Urbana .....	74.71	86.74	73.23	78.23	15	98	17	89.67	1	50	3	57.67	3.5
Wheaton .....	72.26	82.47	68.51	74.41	17	96	17	88.67	3	45	3	50.67	3.6
Winnebago .....	67.60	83.78	68.27	73.22	16	j 95	17	86.50	4	38	3	54.00	3.1
MISSOURI—													
St. Louis, [Engelman] .....	76.94	86.27	76.87	80.03	18	97	14	90.00	5	64	26	68.83	2.6
St. Louis, [Fendler] .....	74.10	85.87	73.16	77.71	14	k 96	17	89.67	4	57	27	64.67	---
WISCONSIN—													
Appleton .....	66.52	81.45	67.48	71.82	16	95	13	84.00	3	48	3	54.00	2.5
Bay City .....	62.29	74.16	60.77	65.74	10	l 94	12	82.00	2	m 44	2	49.33	3.9
Beloit .....	69.58	87.19	69.45	75.41	13	98	17	86.33	3	48	1	54.67	2.4
Green Bay .....	68.94	83.58	72.32	74.95	16	99	13	88.67	3	48	3	54.00	2.7
Kenosha .....	71.30	75.29	72.12	72.91	12	88	17	83.00	3	55	3	55.83	1.5
Madison .....	72.48	82.00	73.04	75.84	17	93	17	86.33	3	51	3	54.00	2.6
Manitowoc .....	66.97	76.77	64.51	69.42	16	92	18	81.67	3	46	3	51.67	5.1
Milwaukee, [Larkin] .....													3.6
Milwaukee, [Winkler] .....	70.03	78.23	66.52	71.59	16	92	19	83.00	3	48	3	49.67	2.4
Platteville .....	69.26	86.22	72.58	76.02	16	97	17	87.67	3	b 56	3	63.00	2.7
Wausau .....	72.03	82.45	75.39	76.62	30	102	30	97.00	26	42	26	56.67	4.2
IOWA—													
Bellevue .....	71.07	86.16	68.87	75.37	16	101	16	88.00	26	n 53	3	63.33	3.8
Border Plains .....	72.76	87.68	72.42	77.62	15	h 97	16	89.00	4	49	4	59.00	4.7
Burlington .....	75.38	87.29	74.90	79.19	16	100	13	90.67	5	60	4	67.33	4.5
Dubuque .....	71.03	80.16	73.87	75.02	16	98	16	89.00	4	55	3	60.67	3.1
Fairfield .....	74.32	82.61	72.27	76.40	15	95	15	88.00	27	57	3	62.00	4.4
Forestville .....	69.65	84.48	67.55	73.89	15	101	15	88.33	1	52	4	60.67	2.5

a Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 68.90.

b Same temperature on the 4th.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 64.32.

d Observations taken at 6 a. m., 2 p. m., and 9 p. m.

e Same temperature on the 16th, 17th, and 18th.

f Same temperature on the 18th.

g Observations taken at 7 a. m., 1 p. m., and 7 p. m.

h Same temperature on the 16th.

i Observations taken at 7 a. m., 1 p. m., and 9 p. m.

j Same temperature on the 17th.

k Same temperature on the 17th and 18th.

l Same temperature on the 11th.

m Same temperature on the 3d.

n Same temperature on the 25th.



## No. 20.—THERMOMETER AND FACE OF SKY, JULY, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.	LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
Iowa—Continued.	°	°	°	°		°		°		°			
Fort Madison (a) .....	72.03	84.13	75.68	77.28	15	b 96	15	c 89.67	3	d 56	3	62.00	4.4
Muscatine .....	63.52	84.42	68.84	72.26	18	97	18	82.67	27	46	27	58.67	2.5
Pleasant Plain .....	73.26	86.06	70.32	76.55	15	100	17	87.67	27	57	27	64.33	3.1
Rossville .....	69.85	84.16	68.13	74.05	15	98	16	87.83	3	e 52	4	55.43	3.2
MINNESOTA—													
Beaver Bay, [Clark] .....	57.84	64.00	58.24	60.03	19	85	19	70.33	2	f 45	3	49.33	5.0
Beaver Bay, [Wieland] .....	66.71	77.95	63.06	69.24	12	97	12	83.67	25	45	2	54.33	3.8
Burlington .....	58.13	72.39	58.87	63.13	12	g 93	12	85.67	26	40	3	42.67	4.3
Chatfield .....	70.23	84.06	67.74	74.01	16	98	16	87.67	3	50	4	55.33	3.5
Forest City .....	67.68	79.77	69.52	72.32	16	94	16	85.67	3	53	4	56.00	2.1
Hazlewood .....	70.40	85.45	72.28	76.04	17	95	17	87.00	4	54	3	60.00	2.9
Princeton .....	71.58	83.22	71.06	75.29	16	101	16	90.67	26	54	4	57.67	3.3
NEBRASKA—													
Bellevue .....	71.94	84.45	73.58	76.67	14	98	14	88.67	27	58	27	65.33	1.5?
Elkhorn .....	71.32	89.09	73.84	78.08	15	102	15	88.00	6	d 60	23	66.67	3.4
Nebraska City .....	76.02	85.52	75.09	78.88	18	96	15	87.10	23	63	23	62.60	3.4
Omaha, [Rain] .....	72.67	84.58	74.67	77.31	14	95	14	86.33	24	60	23	64.33	3.5
KANSAS—													
Burlingame .....	72.26	88.45	72.32	77.68	18	100	18	85.33	5	60	26	66.67	2.2
Lawrence .....	77.68	88.94	77.03	81.22	17	99	14	91.00	26	63	26	67.33	3.4
Lecompton .....	73.13	89.48	79.00	80.54	19	101	19	89.33	25	h 70	25	75.67	2.2
Manhattan .....	75.16	94.23	76.45	81.95	2	g 104	14	g 90.00	23	62	26	72.00	3.7
Moneka .....	77.13	88.40	---	82.76	3	i 98	15	95.50	26	65	26	66.00	5.7
Neosho Falls .....	74.16	90.48	74.74	79.79	21	101	21	88.67	26	64	26	66.00	2.3
UTAH—													
Great Salt Lake City .....	74.00	87.00	77.00	79.33	---	100	---	---	---	68	---	---	---
OREGON—													
Portland (j) .....	59.71	79.39	64.13	67.74	21	92	21	76.00	12	48	12	58.00	3.5
CALIFORNIA—													
Monterey .....	58.23	67.59	58.37	61.36	---	?	---	?	22	53	23	57.13	---
Sacramento .....	65.16	74.06	68.00	69.07	7	87	6	79.67	24	k 60	25	63.33	0.7
San Francisco .....	54.52	64.29	53.90	57.57	5	75	5	64.67	21	l 51	24	53.67	3.8
Union Rancho .....	66.90	92.61	79.26	79.59	6	m 104	7	92.00	11	55	11	71.67	---
MEXICO—													
Cordova (n) .....	70.50	73.27	71.13	71.90	11	o 74.8	---	---	28	68.7	---	---	---
Mirador (p) .....	68.49	73.08	68.02	69.86	---	---	---	---	4	63.3	---	---	---
Vera Cruz (q) .....	80.50	---	80.55	80.52	---	---	---	---	---	---	---	---	---
WEST INDIES—													
Nassau, Bahamas (r) .....	---	---	---	86.95	---	?	---	?	---	?	---	?	---
St George's, Bermuda (s) .....	---	---	---	77.01	---	83	---	---	---	70.7	---	---	---
CENTRAL AMERICA—													
Guatemala (t) .....	---	---	---	67.19	29	80.6	---	---	13	57.4	---	---	---
SOUTH AMERICA—													
Catharina Sophia, Surinam (u) .....	74.98	86.10	79.82	80.30	18	92	17	v 82.67	11	w 73	30	76.67	5.1

a Observations taken at 6 a. m., noon, and 7 p. m.

b Same temperature on the 16th and 17th.

c Same temperature on the 17th.

d Same temperature on the 27th.

e Same temperature on the 26th.

f Same temperature on the 3d.

g Same temperature on the 15th.

h Same temperature on the 27th and 29th.

i Same temperature on the 15th and 19th.

j Observations taken at 6 a. m., noon, and 6 p. m.

k Same temperature on the 25th and 26th.

l Same temperature on the 29th.

m Same temperature on the 7th.

n Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 72.27; mean at 6 p. m., 72.34.

o Same temperature on the 16th.

p Observations taken at 7 a. m., 2 p. m., and 8 p. m.

q Observations taken from 7 a. m. to 9 a. m., and from 10 p. m. to

midnight; incomplete.

r Daily maximum and minimum.

s Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

t Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.

u Observations taken at 4 a. m., 2 p. m., and 6 p. m.

v Same temperature on the 18th.

w Same temperature on the 12th.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Hamilton (a) .....	70.00	75.81	69.66	69.83	14	78	14	77.00	28	58	28	59.50	4.2
Montreal .....	65.98	75.81	67.79	69.86	12	83	12	77.83	28	53	28	54.76	4.2
Moose Factory (b) .....				58.40									
Red River Settlement .....	59.60	74.67	56.94	63.74	11	c 86			31	40		?	3.3
St. John's .....	68.39	74.19	62.42	68.33	11	88	11	78.00	16	53	30	61.67	2.7
St. Martin (d) .....	63.05	79.92	64.65	69.21	3	91	3	78.17	30	36	30	52.37	
Stanbridge .....	62.00	73.90	62.45	66.12	11	85	11	75.00	20	e 45	28	52.67	4.2
Toronto (d) .....	60.87	72.96	63.71	65.85	7	81	15	72.90	30	46	29	56.28	4.0
Windsor .....	61.01	74.48	63.01	66.17	4	80	5	73.33	16	48	29	54.00	5.3
Wolfville .....	64.66	74.22	62.47	67.12	4	88	4	78.17	29	52	29	56.67	5.3
MAINE—													
Belfast (f) .....	67.48	76.00	69.39	70.96	10	85	5	80.67	29	54	29	58.67	
Cornish .....	61.22	73.71	62.03	65.65	4	84	4	76.33	28	48	29	54.67	3.3
Cornishville .....	63.36	75.09	65.52	67.99	4	85	4	77.33	29	50	29	55.00	4.1
Dexter .....													4.3
Gardiner .....	62.27	74.18	61.88	66.11	14	83	11	75.33	21	51	29	57.67	4.4
Lisbon .....	63.26	75.97	61.46	66.89	5	86	5	77.33	30	48	30	56.33	3.6
Perry .....	59.33	70.26	59.35	62.98	19	82	19	70.67	17	g 50	29	54.33	4.2
Portland .....	61.67	72.44	62.48	65.53	14	83	14	73.00	30	49	29	57.83	4.7
Steuben .....	60.23	71.00	58.48	63.24	11	83	14	70.33	30	46	30	55.00	5.1
Vassalborough .....				72.77			10	87.00			29	60.00	4.3
NEW HAMPSHIRE—													
Mount Washington .....	43.42	50.17	45.64	46.41	10	69	10	59.04	30	25	29	28.95	3.9
Shelburne (A) .....	54.19	81.06	63.42	66.22	4	88	4	76.63	21	40		?	7.0
Stratford .....	57.81	73.74	59.35	63.63	10	85	2	73.33	30	43	31	50.00	4.3
VERMONT—													
Brandon .....	62.21	76.84	64.23	67.76	2	i 87	3	79.00	30	43	29	54.67	4.1
Burlington .....	62.60	73.24	63.70	66.50	11	82	3	75.00	28	e 51	28	54.33	3.7
Craftsbury .....	55.81	72.61	62.71	63.71	3	j 83	3	74.00	29	45	28	50.00	3.3
Lunenburg .....				66.98	13	98	3	80.50	29	33	28	55.00	3.1
Rupert .....	64.71	79.23	69.42	71.12	14	98	14	78.67	29	k 56	29	k 61.33	3.8
St. Johnsbury .....	55.13	74.13	59.74	63.00	11	l 83	2	m 74.00	30	36	30	50.33	3.6
MASSACHUSETTS—													
Amherst .....	60.98	74.85	63.55	66.46	4	85	4	76.10	30	47	29	56.30	3.9
Cambridge .....	60.83	76.21	64.67	67.24	3	87	4	78.67	17	e 52	29	58.00	4.7
Lawrence .....	63.19	75.84	64.35	67.79	2	89	3	m 78.00	30	53	29	59.00	4.3
Mendon .....	62.81	75.55	63.93	67.44	3	86	4	80.00	29	48	29	56.33	2.3
Nantucket .....	67.83	73.25	67.04	69.37	14	81	14	74.67	29	58	29	63.00	3.8
New Bedford .....	65.03	74.27	63.82	67.71	3	81	4	73.67	29	52	29	57.00	4.6
Richmond .....	60.10	77.17	67.68	68.31	2	90	2	78.67	30	39	29	51.33	3.9
Westfield .....	59.55	74.94	62.39	65.63	4	87	4	76.00	30	46	30	56.33	4.3
Williamstown .....	60.13	72.29	43.90	58.77	4	82	4	74.86	30	47	30	55.33	5.2
Worcester .....	63.92	76.55	66.97	69.15	3	86	3	78.87	30	50	30	58.50	3.5
RHODE ISLAND—													
Providence (d) .....	66.10	77.00	64.50	69.20	14	85	14	77.00	29	48	29	58.33	4.3
CONNECTICUT—													
Columbia .....	62.23	75.26	62.48	66.66	14	85	4	76.00	30	40	29	55.67	3.9
Middletown .....	61.80	79.35	63.76	68.30	4	90	4	79.00	30	47	29	57.30	2.9
Pomfret .....	61.42	72.26	62.41	65.36	4	81	4	74.50	29	49	29	55.33	3.9
Saybrook .....	64.23	75.33	66.32	68.63	3	82	4	74.33	29	50	29	60.00	3.8
Wallingford .....	61.69	77.53	63.74	67.65	21	88	4	73.50	30	47	29	57.33	2.5
NEW YORK—													
Bellport .....	65.84	79.24	65.97	70.35	4	80	4	79.33	29	50	28	61.67	3.2
Beverly .....	63.03	73.63	66.14	67.60	4	85	4	76.33	30	48	30	57.67	3.7
Buffalo (n) .....	67.19	74.61	69.54	70.45	10	87	10	79.67	29	58	29	? 62.33	3.4
Flatbush .....	66.46	76.68	66.14	69.76	4	86	4	77.90	30	55	30	60.50	3.6

a Observations taken at 9 a. m. and 9 p. m.

b Observations taken at sunrise, 2 p. m., and 10 p. m.

c Same temperature on the 14th and 19th.

d Observations taken at 6 a. m., 2 p. m., and 10 p. m.

e Same temperature on the 30th.

f Observations taken at 7 a. m., noon, and 6 p. m.

g Same temperature on the 28th, 29th, and 30th.

A Observations taken at sunrise, noon, and 9 p. m.

i Same temperature on the 3d.

j Same temperature on the 11th.

k Same temperature on the 31st.

l Same temperature on the 10th and 13th.

m Same temperature on the 4th.

n Observations taken at 8 a. m., 2 p. m., and 9 p. m.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
New York—Continued.	°	°	°	°		°		°		°			
Nichols.....	63.48	79.42	60.71	67.87	3	a 90	3	78.33	29	45	28	54.67	4.
Oswego.....	65.87	73.81	65.65	68.44	3	86	11	78.33	28	b 56	28	58.00	3.8
Penn Yan (c).....	58.13	76.23	65.26	66.54	3	92	11	76.33	30	d 46	28	54.67	5.1
Rochester, [Dewey].....	63.77	76.77	69.13	69.89	11	91	11	80.67	30	55	31	58.33	3.4
Waterford.....	64.14	80.11	67.50	70.58	10	91	3	78.50	29	b 52	29	59.33	4.2
Wampsville.....	61.55	76.93	61.68	66.72	3	88	3	74.33	30	48	29	55.67	4.1
New Jersey—													
Freehold.....	64.20	78.46	67.96	70.21	4	95	4	81.33	30	50	29	? 59.00	----
Lambertville.....	66.09	82.29	65.14	71.17	4	96	4	83.33	29	52	29	58.33	6.0
Newark (e).....				68.73	4	88	4	78.00	30	47	30	57.63	----
Pennsylvania—													
Bedford.....	61.28	79.04	67.84	69.39	3	f 90	16	78.67	31	42	30	56.67	3.5
Berwick.....	65.50	78.47	64.87	70.95	3	89	3	80.33	30	48	29	59.00	2.9
Cannonsburg.....	63.42	76.39	69.87	69.89	15	g 85	15	75.67	30	52	29	62.00	4.4
Carlisle.....	67.00	78.00	69.12	71.37	15	86	10	79.67	29	56	26	60.67	3.8
Chambersburg.....	69.81	80.58	72.32	74.24	3	h 96	4	85.67	29	b 58	29	63.33	4.0
Easton (i).....	67.29	79.26	64.09	70.18	3	92	3	82.00	29	50	29	57.00	3.9
Fleming.....	64.26	80.58	62.74	69.19	9	94	4	78.33	29	b 47	29	54.67	3.8
Gettysburg.....	65.26	81.26	68.71	71.74	4	92	4	80.33	29	52	29	b 60.00	3.8
Harrisburg, [Heisely].....	70.20	81.62	75.03	75.62	4	93	4	85.00	30	57	29	65.00	4.2
Harrisburg, [Hickok].....	66.05	80.21	70.65	72.30	4	92.5	4	82.50	30	52	29	60.83	4.3
Lewisburg.....	66.13	77.74	65.92	69.93	3	89	4	78.97	30	47	30	59.20	4.4
Morrisville.....	64.87	79.10	66.87	70.28	3	92	4	80.00	29	55	29	61.67	2.4
Mount Joy.....	70.81	84.08	71.47	75.45	1	j 92	3	85.33	30	55	29	64.00	3.5
Norristown.....	64.76	77.89	68.33	70.33	4	91	4	80.67	30	50	29	58.50	3.5
North Whitehall (k).....	61.77	77.42	71.71	70.30	4	88	4	79.00	30	43	29	58.33	3.7
Philadelphia.....	69.03	82.16	72.39	74.53	4	95	4	84.33	29	55	29	63.33	4.9
Pittsburg, [Marine Hosp.].....	65.61	77.61	69.22	70.80	3	a 86	4	a 79.00	30	50	29	58.33	5.6
Pocopson.....	68.23	82.55	68.87	73.22	3	h 93	4	83.00	30	55	29	61.00	3.7
Shamokin.....	57.61	76.87	65.35	66.61	3	88	3	77.67	30	36	29	53.33	4.1
Somerset.....	61.00	77.94	63.56	67.50	10	90	10	78.00	21	47	29	53.67	4.8
West Haverford.....	65.52	81.48		73.50	4	92	4	83.50	29	54	29	61.50	----
Worthington.....	63.03	78.52	65.55	69.03	10	89	10	78.00	29	b 46	29	55.33	4.3
Maryland—													
Annapolis.....	69.02	80.35	75.73	75.03	4	96	4	86.83	29	55	29	64.16	3.2
Baltimore.....	70.23	80.83	74.43	75.16	4	95	4	84.67	29	b 58	29	64.00	4.1
Bladensburg.....	66.79	84.39	67.54	72.91	3	h 95	4	82.33	29	b 52		?	4.6
Frederick.....	68.01	78.56	70.97	72.51	4	92	4	83.83	30	52	29	61.17	4.3
Leitersburg.....	65.71	81.55	68.29	71.86	4	95	4	84.67	30	48	29	57.67	4.0
Leonardtown.....	71.55	78.57	73.11	74.41	4	90	4	83.33	29	62	29	64.00	4.6
Sykesville.....	66.35	77.10	68.58	70.68	4	88	4	79.67	29	51	29	59.00	3.9
District of Columbia—													
Washington.....	68.87	80.48	73.10	74.15	4	92	4	84.00	29	55	29	61.33	4.1
Virginia—													
Crichton's Store (m).....	69.59	83.15	79.84	77.53	3	h 97	3	88.00	30	57	29	65.33	5.2
Cross Creek.....	63.10	80.52	66.41	70.01	10	94	10	78.33	30	44	29	56.67	----
Falmouth.....	74.45	83.10	70.35	75.97	4	96	3	87.00	29	62	28	66.33	----
Lewinsville.....	67.77	82.95	69.98	73.57	4	95	3	83.16	30	55	29	64.16	4.4
Lewisburg (n).....	67.23	86.23	69.54	74.33	20	92	20	79.67	13	60	5	67.67	2.9
Montross.....	69.76	78.93	69.72	72.80	3	90	3	81.66	30	o 58	29	61.00	3.7
Mont View.....	67.29	82.07	69.97	73.11	5	94	5	82.67	29	b 56	29	64.00	5.0
Poplar Grove.....	68.26	84.39	67.48	73.38	3	92	3	f 79.00	30	52	30	60.00	4.8
Portsmouth.....	69.76	85.02	70.63	75.14	3	94.5	4	83.17	30	55.5	30	63.50	3.6
Rose Hill.....						82				52½			
Roquemont.....	71.37	82.43	74.10	75.97	3	h 92	3	84.67	29	57	29	63.67	5.3

a Same temperature on the 10th.  
b Same temperature on the 30th.  
c Observations taken at sunrise, 2 p. m., and sunset.  
d Same temperature on the 5th.  
e Daily maximum and minimum.  
f Same temperature on the 9th.  
g Same temperature on the 16th.  
h Same temperature on the 4th.

i Observations taken at 8 a. m., 2 p. m., and 10 p. m.  
j Same temperature on the 9th and 15th.  
k Observations taken at sunrise, noon, and sunset.  
l Same temperature on the 20th and 30th.  
m Observations taken at 6½ a. m., noon, and 6 p. m.  
n For the first 22 days of the month only.  
o Same temperature on the 29th.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	Mean temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—Continued.	°	°	°	°		°		°		°		°	
Smithfield .....	68.67	78.42	70.37	72.49	4	87	4	81.60	30	57	30	64.00	5.1
Westwood (a) .....	68.27	83.56	73.56	75.13	4	96	---	?	30	54	---	?	---
NORTH CAROLINA—													
Chapel Hill .....	69.65	84.16	71.58	75.13	3	97	3	84.67	3	60	29	63.00	5.6
Green Plains .....	70.45	83.16	69.42	74.34	4	96	4	86.00	30	58	29	64.00	---
Murfreesborough .....	70.42	82.40	73.67	75.50	4	d 91	4	85.33	30	57	29	63.67	3.7
SOUTH CAROLINA—													
Aiken .....	68.58	82.80	71.84	74.41	4	93	27	81.00	30	62	30	68.33	6.3
All Saints .....	73.50	80.03	73.73	75.75	28	87	5	81.33	30	65	30	69.33	4.2
Charleston .....	74.58	81.81	77.48	77.96	5	91	5	84.33	19	c 69	30	71.33	---
Columbia, [White] .....	73.23	82.16	76.52	77.30	3	94	2	87.33	21	65	30	72.33	5.9
St. John's (e) .....	70.23	79.95	71.55	73.91	19	f 86	---	?	30	64	30	67.00	5.7
GEORGIA—													
Athens (e) .....	68.36	79.71	70.43	72.83	20	89	---	?	31	60	31	67.47	4.6
Atlanta .....	69.16	78.65	71.55	73.12	4	d 88	4	82.00	24	g 62	30	68.67	4.9
Augusta .....	74.43	85.88	72.09	77.47	3	98	3	86.33	22	68	30	72.17	6.4
Clarksville .....	67.71	77.00	73.16	72.62	3	h 84	3	79.00	22	i 60	11	j 68.00	5.8
Savannah .....	73.91	82.33	75.84	77.36	6	90	29	82.47	30	69	30	69.80	6.3
Sparta .....	68.13	83.06	72.39	74.53	3	93	4	82.00	22	63	30	68.00	5.9
Thomaston .....	73.52	83.35	78.58	78.48	5	90	4	84.00	24	k 68	30	71.00	5.8
Whitemarsh Island .....	75.29	81.68	76.26	77.74	6	88	4	82.00	30	69	30	70.00	5.9
FLORIDA—													
Alligator .....	76.26	86.03	77.06	79.78	3	94	3	85.00	24	71	22	74.67	5.3
Atsena .....	76.39	81.29	77.77	78.48	4	86	6	m 81.67	19	72	17	74.67	6.1
Belair .....	79.68	87.26	77.90	81.61	27	n 92	2	85.33	11	70	6	73.33	---
Jacksonville .....	79.16	83.57	78.13	80.29	6	91	6	87.00	1	o 75	11	76.67	5.8
Micanopy .....	76.29	83.29	77.40	78.99	3	89	28	p 82.33	11	73	11	75.00	6.2
St. Augustine .....	81.26	82.90	78.42	80.86	29	90	29	84.33	19	75	13	77.67	5.6
Salt Ponds (q) .....	82.81	88.03	---	85.42	2	r 90	2	87.00	15	s 81	10	t 84.00	4.1
ALABAMA—													
Cahawba .....	79.00	81.87	80.81	80.56	20	86	20	83.33	30	71	30	74.00	4.3
Carlowville .....	76.39	91.23	76.90	81.51	16	u 96	24	v 85.00	12	l 73	12	l 77.67	4.1
Greene Springs .....	73.50	83.66	75.62	77.80	19	90½	31	?	31	65	---	?	5.4
Greensborough .....	73.30	83.84	75.80	77.65	3	89	3	81.00	30	65	30	72.67	4.4
Livingston .....	72.58	86.58	77.74	78.97	3	w 91	3	82.33	25	k 65	25	72.33	6.5
Selma .....	73.42	83.77	77.52	78.24	3	x 90	19	y 86.33	31	i 68	30	72.33	6.0
MISSISSIPPI—													
Columbus .....	73.28	86.70	75.86	78.61	2	93	2	83.37	30	62	30	69.90	4.0
Natchez .....	73.52	85.75	78.45	79.24	4	z 90	4	82.67	31	62	31	72.00	4.2
Paulding .....	76.34	90.82	81.16	82.77	4	96	1	88.50	30	65	30	74.00	3.8
Westville .....	77.26	88.29	86.31	83.95	21	95	---	?	31	66	30	77.00	4.5
LOUISIANA—													
New Orleans (aa) .....	84.55	86.55	87.68	86.26	20	93	4	90.33	31	77	30	79.00	---
TEXAS—													
Austin, [Palm] .....	79.55	95.26	82.45	85.75	14	101	6	89.67	18	71	20	77.33	3.2
Austin, [Van Nostrand] .....	78.98	96.28	83.53	86.26	11	100	12	90.67	23	72	16	79.67	3.5
Gilmer (bb) .....	69.52	93.03	---	81.27	21	104	21	f 89.00	24	56	24	74.50	2.2
Larissa .....	78.03	96.50	81.31	85.28	11	104	21	91.50	24	69	30	75.33	3.6
New Braunfels (cc) .....	78.50	99.25	87.79	88.51	11	104	13	92.00	20	j 72	19	82.00	2.9
Roundtop .....	79.00	99.50	84.00	87.50	---	104	---	---	---	72	---	---	---

a Observations interrupted from the 10th to the 20th of the month.

b Same temperature on the 13th.

c Same temperature on the 30th.

d Same temperature on the 5th.

e Incomplete.

f Same temperature on the 28th.

g Same temperature on the 25th and 30th.

h Same temperature on the 4th.

i Same temperature on the 25th and 26th.

j Same temperature on the 21st.

k Same temperature on the 30th and 31st.

l Same temperature on the 27th.

m Same temperature on the 7th.

n Same temperature on the 28th, 30th, and 31st.

o Same temperature on the 12th and 22d.

p Same temperature on the 31st.

q Thermometer 2½ to 2¼ degrees too high.

r Same temperature on the 6th.

s Same temperature on the 10th.

t Same temperature on the 15th and 27th.

u Same temperature on the 22d and 25th.

v Same temperature on the 25th and 29th.

w Same temperature on the 18th and 19th.

x Same temperature on the 19th and 20th.

y Same temperature on the 10th.

z Same temperature on the 8th, 9th, 19th, and 20th.

aa Observations taken at 9 a. m., noon, and 3 p. m.

bb Observations taken at sunrise and 2 p. m.

cc No observations after the 24th, except at 2 p. m. on the 30th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—Continued.	°	°	°	°		°		°		°		°	
Sisterdale .....	79.13	97.61	81.42	86.05	6	102	8	89.90	21	72	18	79.46	3.2
Union Hill .....	75.81	94.23	78.72	82.92	29	100	29	86.00	17	<i>a</i> 70	17	78.67	3.7
Washington .....	79.26	95.07	78.26	84.20	13	103	13	89.67	14	<i>b</i> 71	17	78.00	2.7
Webberville .....	79.26	95.32	82.84	85.81	10	<i>c</i> 98	12	89.67	18	72	16	<i>d</i> 81.00	2.3
ARKANSAS—													
Jacksonport .....	75.60	85.48	76.42	79.17	17	93	—	?	30	66	—	?	5.2
Washington ( <i>e</i> ) .....	71.65	89.06	—	80.35	12	95	28	86.00	24	60	24	73.00	5.0
TENNESSEE—													
Glenwood .....	67.51	79.48	70.65	72.55	16	86	17	79.23	30	56	30	64.10	4.9
Memphis .....	74.10	84.52	75.65	78.09	2	92	3	83.33	30	<i>f</i> 64	30	68.00	5.1
KENTUCKY—													
Bardstown .....	69.71	80.50	70.18	73.46	3	<i>g</i> 88	2	80.00	30	57	29	61.33	4.3
Lexington ( <i>h</i> ) .....	69.39	79.48	69.74	72.87	8	88	3	79.67	29	56	29	60.67	4.8
Paris .....	66.07	78.50	69.52	71.36	3	<i>i</i> 87	3	79.67	30	51	29	58.00	4.4
Springdale ( <i>j</i> ) .....	63.23	79.19	75.39	72.60	8	91½	2	80.00	30	48	29	63.00	4.8
OHIO—													
Avon .....	66.83	76.86	67.46	70.38	19	88	15	78.56	30	52	29	59.67	3.7
Bellefontaine .....	70.80	81.61	67.42	73.28	16	94	16	82.33	29	51	29	57.00	4.6
Bowling Green .....	63.72	77.85	67.53	69.70	2	<i>k</i> 86	10	77.00	29	<i>l</i> 50	29	56.53	3.5
Cincinnati, [Harper] .....	70.19	82.87	72.61	75.22	16	97	16	84.00	29	53	29	60.00	4.1
Cincinnati, [Phillips] .....	69.65	82.39	74.87	75.64	11	94	9	83.33	30	54	29	61.33	4.0
Cleveland .....	65.74	76.13	68.92	70.26	9	82	10	75.00	30	55	29	60.83	4.1
College Hill .....	69.55	78.65	67.74	71.98	9	<i>g</i> 90	15	84.67?	29	<i>m</i> 50	29	56.00	—
Collingwood .....	66.65	82.29	67.55	72.16	15	95	17	80.67	29	51	29	63.67	—
Elk Run .....	63.81	78.06	66.31	69.39	10	89	10	77.33	30	44	29	56.67	4.0
Freedom .....	68.93	77.41	63.96	70.10	10	86	3	79.00	29	49	29	55.67	4.3
Hillsborough .....	65.21	75.81	68.55	69.86	9	89	9	80.33	29	48	29	55.67	3.1
Hudson ( <i>n</i> ) .....	65.27	77.00	67.94	70.07	10	87	10	78.30	30	51	29	57.67	4.2
Jackson, [Monroe Co.] ( <i>o</i> ) .....	69.31	79.80	66.20	71.71	10	92	—	?	29	53	—	?	3.6
Kelley's Island .....	69.39	76.97	70.06	72.14	9	<i>g</i> 85	16	79.33?	28	53	29	62.00	2.9
Madison, [Atkins] .....	71.70	77.06	63.52	70.76	3	87	3	79.67	31	50	29	58.00	3.4
Madison, [King] .....	67.00	76.23	62.00	68.41	3	<i>p</i> 84	3	75.00	29	52	29	56.67	2.9
Montville .....	65.32	75.68	65.84	68.95	10	84	10	77.50	29	52	29	57.50	5.0
New Lisbon .....	64.35	81.32	65.19	70.29	10	92	10	82.00	29	<i>l</i> 48	29	59.00	2.7
Northwood .....	—	—	—	—	—	—	—	—	—	—	—	—	3.4
Portsmouth .....	68.00	83.79	69.38	73.72	9	96	3	81.67	29	52	29	60.67	4.0
Rockport .....	67.00	79.00	70.13	72.04	3	87	3	79.00	29	57	31	64.67	—
Savannah .....	68.58	85.71	66.68	73.66	3	<i>k</i> 98	3	83.00	29	48	29	60.67	5.0
Troy .....	68.10	80.16	70.39	72.88	10	95	2	82.67	29	48	29	56.00	4.8
Urbana .....	64.71	82.58	66.35	71.21	16	95	13	82.33	29	48	29	56.33	4.3
Welchfield .....	67.68	80.61	64.26	70.85	8	93	3	80.67	29	49	29	55.00	2.6
Westerville .....	65.90	79.29	68.69	71.29	9	91	10	83.00	30	50	29	56.00	4.4
Windham .....	61.45	76.32	65.36	67.71	10	87	10	75.00	29	45	29	54.00	—
MICHIGAN—													
Battle Creek .....	64.55	81.55	65.87	70.66	9	93	15	80.00	29	48	29	58.67	2.0
Detroit .....	68.81	82.06	69.35	73.41	9	92	9	84.00	28	57	27	63.00	5.0
Fort Gratiot ( <i>q</i> ) .....	60.32	75.97	71.81	69.05	10	89	9	79.00	29	47	?	?	4.9
Grand Rapids .....	63.77	83.77	63.23	70.26	2	<i>r</i> 96	14	81.00	29	45	29	55.33	3.5
Lake George .....	58.80	77.91	63.37	66.69	2	94	16	76.17	31	47	31	54.00	5.3
Marquette .....	61.39	72.48	59.21	64.36	9	97	9	81.03	29	40	28	51.10	3.8
Monroe, [Bowlsby] .....	65.84	77.84	70.39	71.36	15	86	15	78.67	28	45	28	58.33	2.8
Monroe, [Whelpley] .....	—	—	—	—	—	—	—	—	—	—	—	—	3.2
Monroe Piers ( <i>s</i> ) .....	65.18	76.50	75.21	71.96	15	85	10	79.90	29	48.5	29	60.00	4.2

*a* Same temperature on the 18th and 19th.*b* Same temperature on the 17th.*c* Same temperature on the 11th, 13th, and 29th.*d* Same temperature on the 18th.*e* Observations taken at sunrise and 2 p. m.*f* Same temperature on the 31st.*g* Same temperature on the 16th.*h* Observations taken at 7 a. m., 3 p. m., and 9 p. m.*i* Same temperature on the 25th.*j* Observations taken at 5 a. m., 2 p. m., and 6 p. m.*k* Same temperature on the 10th.*l* Same temperature on the 30th.*m* Same temperature on the 29th, 30th, and 31st.*n* The records of the thermometer at this place are 0°.85 too high.*o* Incomplete.*p* Same temperature on the 9th.*q* Incomplete. Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 69.99.*r* Same temperature on the 15th and 16th.*s* Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 70.94.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°		°		°		°		°	
New Buffalo.....	65.39	74.52	61.47	67.13	■	86	9	76.67	29	a 46	29	52.00	4.3
Ontonagon (b).....	65.39	71.14	-----	68.57	9	86	■	80.50	29	47	29	53.50	4.8
Ottawa Point (c).....	62.81	73.03	71.33	68.66	■	81	9	d 76.00	28	48	28	56.00	4.8
Thunder Bay Island (e).....	61.52	68.69	66.32	65.66	■	76	17	71.12	27	f 51	28	54.75	5.0
Ypsilanti.....	64.18	79.53	65.70	69.82	8	93	8	78.33	29	50	-----	?	4.4
INDIANA—													
Aurora (g).....	69.00	84.00	73.55	75.52	■	98	16	86.67	30	49	29	56.00	-----
Cannelton.....	69.67	80.76	70.52	73.65	18	89	18	81.23	30	58	30	63.37	4.3
Logansport.....	66.58	83.13	72.32	74.01	9	92	■	82.33	30	54	28	64.00	5.5
Mishawaka.....	67.48	81.84	62.84	70.72	■	95	9	80.67	29	48	29	55.67	3.3
New Albany.....	64.92	82.60	70.70	72.74	17	h 90	17	80.33	30	54	?	?	4.0
New Harmony.....	71.29	81.87	72.68	75.28	16	i 90	9	81.00	30	50	29	64.33	4.2
Richmond (j).....	67.21	79.64	-----	73.42	16	91	16	81.50	28	k 54	29	63.00	6.0
Richmond, [Haines] (h).....	69.29	78.65	71.45	73.13	9	d 86	9	81.33	29	53	29	58.33	3.4
ILLINOIS—													
Augusta.....	65.42	79.03	70.00	71.48	■	m 87	12	78.67	29	52	29	60.00	2.7
Aurora.....	64.06	79.90	65.42	69.79	17	90	14	78.67	29	52	29	57.67	3.0
Batavia, [Mead].....	63.68	84.58	64.29	70.85	14	101	14	83.33	28	k 49	28	59.67	3.6
Carthage (n).....	70.39	82.90	71.74	75.01	12	94	13	83.33	29	52	29	62.00	-----
Edgington.....	65.52	83.71	69.32	72.85	17	96	17	81.33	28	k 52	28	60.00	3.6
Elgin.....	64.48	81.52	66.48	70.83	14	94	14	80.00	29	50	29	58.67	3.8
Manchester (o).....	69.00	80.38	69.12	72.83	13	88	12	79.33	29	50	29	62.00	3.9
Marengo.....	64.52	79.97	64.10	69.53	13	p 91	9	79.33	29	46	29	54.67	3.6
Naperville.....	67.61	80.68	68.35	72.21	14	94	■	86.00	29	49	29	59.00	3.3
Ottawa.....	66.50	80.09	71.18	72.59	■	91	-----	?	28	50	-----	?	4.0
Pekin.....	67.48	81.81	69.77	73.02	15	90	11	81.00	29	51	29	59.67	3.3
Peoria.....	68.98	82.21	73.47	74.89	12	93	12	84.33	29	54	28	63.17	3.8
Riley.....	62.42	80.39	64.58	69.13	14	94	11	86.33	29	46	29	55.00	2.7
Sandwich.....	65.97	80.90	67.77	71.55	9	q 94	11	81.33	28	k 48	28	59.00	3.2
Upper Alton.....	67.58	81.00	70.68	73.09	17	90	12	78.00	29	55	29	63.00	2.4
West Salem.....	70.71	85.81	73.06	76.53	16	95	9	p 82.33	30	60	29	67.00	3.6
West Urbana.....	68.81	81.10	70.65	73.52	9	p 91	9	84.33	28	k 58	29	64.00	3.6
Wheaton.....	67.90	80.35	65.44	71.23	9	91	9	80.83	28	k 52	28	59.17	4.0
Winnebago.....	64.95	81.45	66.52	70.97	12	94	15	81.67	29	47	28	56.50	3.1
MISSOURI													
Cassville.....	72.29	80.00	76.00	76.10	7	r 86	6	r 81.67	24	60	31	67.67	5.0
Paris.....	67.52	79.16	70.87	72.52	12	q 88	12	79.67	29	57	29	61.33	3.8
St. Louis, [Engelmann].....	72.32	83.56	74.37	76.75	14	92	14	84.17	29	60	29	66.50	3.3
St. Louis, [Fendler].....	69.77	83.48	71.13	74.79	17	92	13	82.33	30	58	29	64.67	-----
Stockton (s).....	77.58	81.84	81.16	80.19	■	t 90	8	87.33	30	u 69	30	71.00	4.4
WISCONSIN—													
Appleton.....	66.71	80.35	65.45	70.84	9	v 90	8	81.33	30	47	29	55.33	2.4
Bay City.....	56.84	67.16	56.84	60.28	■	82	■	72.67	28	42	28	45.33	3.0
Beloit.....	66.90	83.90	69.07	73.29	13	96	14	83.67	29	44	28	58.00	2.9
Green Bay.....	66.00	81.74	67.16	71.63	10	96	10	88.67	28	45	28	50.33	2.0
Janesville.....	59.10	83.90	-----	71.50	17	96	20	?	29	41	28	54.00	3.1
Kenosha.....	69.17	74.13	71.55	71.62	8	81	10	78.17	28	59	28	60.33	2.2
Manitowoc.....	64.10	74.71	63.45	67.42	13	86	9	75.67	29	46	28	53.67	4.3
Milwaukee, [Larkin].....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.1
Milwaukee, [Winkler].....	68.65	77.45	66.00	70.70	8	92	8	81.67	29	55	28	58.67	3.7
Platteville.....	66.39	83.43	68.77	72.86	10	w 96	13	83.33	29	51	28	61.00	3.9

a Same temperature on the 30th.

b Observations taken at 9 a. m. and 3 p. m.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 67.48.

d Same temperature on the 15th.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 66.13.

f Same temperature on the 28th and 29th.

g Observations taken at 6 a. m., 2 p. m., and 9 p. m.

h Same temperature on the 14th.

i Same temperature on the 17th and 18th.

j Observations taken at 6 a. m. and 1 p. m.

k Same temperature on the 29th.

l Observations taken at 7 a. m., noon, and 9 p. m.

m Same temperature on the 12th, 13th, 15th, 16th, and 17th.

n Observations taken at 7 a. m., 1 p. m., and 7 p. m.

o Observations taken at 7 a. m., 1 p. m., and 9 p. m.

p Same temperature on the 14th.

q Same temperature on the 17th.

r Same temperature on the 10th and 11th.

s Observations taken at 9 a. m., 2 p. m., and 4 p. m.

t Same temperature on the 12th.

u Same temperature on the 31st.

v Same temperature on the 10th, 17th, and 18th.

w Same temperature on the 13th and 17th.



## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Rocky Run.....	64.35	85.65	67.13	72.38	16	101	14	84.67	29	44	28	56.00	3.7
Superior (u).....	54.81	69.19	68.13	63.64	19	81	10	71.00	28	43	28	51.50	---
Wausau.....	62.87	75.45	63.84	67.39	16	98	16	89.00	28	48	28	56.67	3.8
IOWA—													
Bellevue.....	65.68	84.77	67.03	72.49	15	b 96	15	c 81.33	29	48	28	61.33	4.2
Border Plains.....	67.87	83.52	68.13	73.17	8	98	7	d 84.67	26	55	27	e 64.00	4.5
Burlington.....	71.00	81.80	71.41	74.74	14	91	14	84.33	31	58	27	66.33	5.2
Dubuque.....	67.71	81.45	70.74	73.30	15	93	13	f 83.00	29	54	28	61.00	3.6
Fairfield.....	69.93	78.25	68.61	72.26	4	98	12	82.00	29	56	29	62.00	4.5
Forestville.....	63.03	81.71	64.70	69.81	17	97	11	82.00	28	51	28	56.00	2.4
Fort Madison (g).....	67.03	81.68	72.35	73.69	9	h 92	13	83.00	29	50	29	61.00	3.0
Lyons City.....													3.2
Muscataine.....	62.39	80.84	68.97	70.73	17	92	9	79.00	29	42	29	56.67	3.0
Pleasant Plain.....	70.00	81.58	66.97	72.85	17	96	16	83.33	31	55	28	62.00	3.4
Rossville.....	67.65	83.69	65.75	72.36	14	99	14	84.57	31	48	31	57.23	4.4
MINNESOTA—													
Beaver Bay, [Clark].....	59.16	63.28	58.24	60.23	6	71	6	68.33	27	47	28	49.83	4.0
Beaver Bay, [Wieland].....													3.3
Burlington.....	56.48	72.61	56.29	61.79	6	87	5	69.67	28	43	27	52.00	2.9
Chatfield.....	65.03	80.45	63.81	69.76	8	94	8	83.67	31	48	31	56.00	4.1
Fofest City.....	61.81	74.61	63.81	66.74	7	90	7	80.33	31	50	28	i 58.00	2.0
Hazlewood.....	64.34	78.63	67.00	69.99	7	96	7	85.33	31	51	31	61.00	4.3
Princeton.....	64.74	76.83	64.32	68.63	11	93	6	84.33	27	50	27	55.33	3.6
NEBRASKA—													
Bellevue.....	68.48	81.03	69.57	73.03	7	j 93	7	82.67	19	58	27	65.00	2.8
Elkhorn.....	66.45	83.68	69.35	73.16	7	96	7	84.67	24	57	23	64.33	4.0
Nebraska City.....	71.72	81.25	71.87	74.95	8	92	8	85.10	31	57	31	57.50	4.3
Omaha, [Rain].....	69.64	80.77	71.55	73.99	8	93	7	84.00	1	k 58	31	64.67	4.2
KANSAS—													
Burlingame.....	69.97	83.06	69.03	74.02	17	94	8	81.33	23	58	23	65.33	3.6
Lecompton.....	73.45	86.26	76.26	78.66	8	97	9	86.00	27	66	3	74.00	2.6
Manhattan.....	71.61	87.90	74.32	77.94	7	98	7	86.67	23	58	31	68.33	5.0
Moneka.....	75.26	83.13		69.40	21	99	8	l 88.50	20	64	28	68.00	5.8
Neosho Falls.....	73.10	86.58	73.91	77.86	7	m 94	7	n 83.67	23	61	24	66.67	3.1
Wyandott City.....	71.24	84.00	76.71	77.32	22	92	17	82.33	30	61	31	65.00	3.6
UTAH—													
Great Salt Lake City.....	70.00	84.00	76.00	76.67	---	93	---		---	62	---		---
OREGON—													
Portland.....	61.26	76.16	60.03	65.82	21	95	21	78.33	15	48	14	56.33	6.2
CALIFORNIA—													
Auburn.....				90.39	---		---		---		---		0.9
Monterey.....	59.90	68.74	59.89	62.78	5	74½	5	66.47	---	?	---	?	---
Sacramento.....	62.48	72.29	66.69	67.16	20	85	7	75.33	26	58	25	o 62.33	0.4
San Francisco.....	56.87	65.81	55.74	59.47	7	76	7	65.00	30	k 52	25	55.00	4.8
Union Rancho.....	65.43	90.17	75.07	76.89	19	99	30	84.33	14	p 60	24	69.00	0.6
MEXICO—													
Cordova (g).....	72.64	76.15	73.47	74.37	26	79.2	---		5	70.9	---		---
Mirador (r).....	70.16	77.36	70.77	72.76	---		---		20	66.2	---		---
Vera Cruz (s).....	80.95		82.74	81.84	---	?	---	?	---	?	---	?	---
WEST INDIES—													
Nassau, Bahamas (t).....				87.70	17	u 90	17	u 89.50	23	85	23	85.00	---
St. George's, Bermuda (v).....				78.07	---	86	---		---	73.2	---		---

a Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 62.42.

b Same temperature on the 16th and 17th.

c Same temperature on the 16th.

d Same temperature on the 8th.

e Same temperature on the 28th.

f Same temperature on the 15th.

g Observations taken at 6 a. m., noon, and 7 p. m.

h Same temperature on the 10th, 12th, and 17th.

i Same temperature on the 29th.

j Same temperature on the 8th, 9th, and 14th.

k Same temperature on the 31st.

l Same temperature on the 11th.

m Same temperature on the 10th.

n Same temperature on the 8th, 10th, and 11th.

o Same temperature on the 26th.

p Same temperature on the 18th and 25th.

q Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 74.84; mean at 6 p. m., 74.73.

r Observations taken at 7 a. m., 2 p. m., and 8 p. m.

s Observations taken at 7 a. m. to 8 a. m., and 10 p. m. to 11 p. m.

Incomplete.

t Mean obtained from maximum and minimum.

u Same temperature on the 16th, 19th, 20th, and 31st.

v Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

## No. 21.—THERMOMETER AND FACE OF SKY, AUGUST, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CENTRAL AMERICA— Guatemala (a) -----	■	■	○	○	30	82		○	1	57. 2		○	
SOUTH AMERICA— Catharina Sophia, Surinam (b)	74. 88	87. 68	79. 61	80. 72	18	92	7	82. 67	24	72. 5	8	76. 00	4. 6

a Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.

b Observations taken at 6 a. m., 2 p. m., and 6 p. m.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Fort Simpson .....	41.63	51.10	43.37	45.37	10	72	10	62.67	29	30	30	33.00	6.7
Hamilton (a) .....	58.36		58.73	58.54	11	75	11	70.00	14	b 46	15	47.00	
Montreal .....	53.07	60.82	55.67	56.52	9	71	12	64.83	15	40	14	43.43	6.5
Red River Settlement .....	49.12	62.86	48.23	53.40	7	76		?	19	33		?	5.4
St. John's .....	56.13	62.30	52.20	56.88	13	73	13	68.00	23	32	24	44.00	5.0
St. Martin (c) .....	49.65	62.50	53.13	55.09	19	77	9	67.83	16	34	14	41.80	
Stanbridge .....	49.93	60.33	53.27	54.51	27	72	11	75.67	15	32	15	37.67	6.7
Toronto (e) .....	50.35	60.18	53.88	54.80	11	73	10	63.27	15	36	15	43.08	6.5
Windsor .....	50.55	63.60	52.96	55.50	12	76	12	66.33	30	33.5	15	43.17	5.9
Wolfville .....	53.60	62.38	50.46	55.48	13	77	13	67.00	17	37	16	45.00	5.6
MAINE—													
Belfast (d) .....	56.25	63.14	56.68	58.69	10	75	1	69.00	21	43	21	44.00	5.6
Cornish, [West] .....	50.80	60.11	52.73	54.55	20	71	20	64.00	15	35	15	e 40.67	4.8
Cornishville .....	53.80	63.23	55.67	57.56	20	73	20	66.33	15	36	15	42.67	5.0
Dexter .....													5.9
Gardiner .....	52.18	62.63	53.05	55.95	12	73	12	66.33	30	38	15	45.00	6.1
Lisbon .....	51.60	65.63	53.67	56.97	20	78	12	67.67	30	35	16	44.67	4.6
Perry .....	50.46	61.25	49.61	53.77	8	72	13	64.33	15	f 36	15	42.67	4.2
Portland .....	51.88	61.85	54.12	55.95	20	75	?	?	15	38	15	43.50	5.9
Steuben .....	51.43	61.36	50.29	54.36	12	72	12	63.67	30	35	15	40.67	5.9
Vassalborough .....				55.10									5.5
NEW HAMPSHIRE—													
Claremont .....	53.40	65.60	56.03	58.34	27	74	11	67.33	15	39	15	44.33	5.6
Mount Washington (g) .....	32.04	35.33	34.09	33.82	11	51	11	49.45	15	10	14	18.67	4.2
Shelburne (h) .....													7.1
Stratford .....	48.03	59.50	50.17	52.57	27	71	27	63.33	15	i 30	15	35.33	6.1
VERMONT—													
Brandon .....	51.90	63.56	53.83	56.43	19	j 74	11	65.83	15	32	15	39.67	5.5
Burlington .....	51.78	58.95	53.62	54.78	19	69	11	64.00	15	33	15	37.33	6.1
Craftsbury .....	49.37	59.20	52.13	53.57	19	73	11	63.00	15	30	15	36.00	6.1
Lunenburg .....	40.80	73.50		57.15	26	87	12	67.00	15	i 23	16	41.50	5.6
Rupert .....	55.67	66.33	60.60	60.87	19	k 72	19	l 67.33	15	36	14	49.33	5.3
St. Johnsbury .....	47.58	61.83	50.72	53.38	27	75	12	63.00	15	31	15	37.33	6.0
MASSACHUSETTS—													
Amherst .....	51.48	64.79	55.05	57.11	27	74	20	67.00	16	38	15	44.33	4.7
Cambridge .....	55.15	62.86	56.50	58.17	12	78	20	m 68.33	16	f 41	15	46.33	5.2
Lawrence .....	53.77	65.00	55.70	58.16	12	n 75	11	o 67.00	30	38	15	46.67	5.2
Mendon .....	55.06	66.37	56.37	59.27	13	j 76	11	68.33	14	p 42	15	47.33	5.0
Nantucket .....	62.53	67.29	60.86	63.56		75	11	70.00	15	48	15	52.50	5.0
New Bedford .....	56.20	65.21	56.98	59.46	4	75	12	67.70	15	41	15	46.33	6.1
Westfield .....	50.50	65.73	54.33	56.85	27	76	11	67.67	15	i 37	15	43.33	5.4
Williamstown .....	50.45	61.32	53.46	55.08	27	73	11	65.81	15	37	15	41.91	5.9
Worcester .....	53.48	64.75	56.12	58.12	27	75	11	68.17	16	40	15	45.17	5.3
RHODE ISLAND—													
Providence (c) .....	54.30	67.70	56.90	59.63	4	q 78	20	69.67	15	i 39	15	46.33	5.2
CONNECTICUT—													
Columbia .....	54.87	65.77	54.40	58.35	18	l 76	12	69.33	15	36	16	44.00	5.1
Middletown .....	53.05	68.93	56.04	59.34	12	r 79	20	69.87	16	37	15	46.47	4.8
Pomfret .....	52.19	61.71	59.86	57.92	13	r 71	11	r 65.67	16	38	15	43.50	5.3
Saybrook .....	56.80	67.68	59.27	61.25	11	78	11	70.67	15	42	15	49.33	4.8
Wallingford .....	52.72	67.30	55.98	58.67	26	76	11	68.67	16	39	15	45.83	4.5
NEW YORK—													
Bellport .....	58.78	65.10	59.52	61.13	4	75	11	70.33	16	44	15	48.67	4.4
Beverly .....	55.13	65.29	57.62	59.35	4	s 72	11	69.00	15	42	15	47.00	4.8

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature on the 15th.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Observations taken at 7 a. m., noon, and 6 p. m.

e Same temperature on the 21st.

f Same temperature on the 30th.

g For the first half of the month only.

h Observations taken at sunrise, noon, and 9 p. m.

i Same temperature on the 16th.

j Same temperature on the 27th.

k Same temperature on the 26th and 27th.

l Same temperature on the 26th.

m Same temperature on the 11th and 12th.

n Same temperature on the 13th and 27th.

o Same temperature on the 12th.

p Same temperature on the 15th and 16th.

q Same temperature on the 20th and 27th.

r Same temperature on the 20th.

s Same temperature on the 11th.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.	LOWEST DEG.		COLDEST DAY.			
					Date	Temp.	Date, M'n temp.	Date.	Temp.	Date.	Mean temp		
NEW YORK—Continued.	°	°	°	°		°		°		°			
Buffalo (a) .....	57.24	62.57	59.69	59.83	19	73	11	?	15	44	15	47.67	4.7
Flatbush.....	58.38	67.80	58.84	61.67	11	77	11	70.00	15	46	15	48.30	5.2
Nichols.....	53.57	68.10	54.70	58.79	27	79	20	67.67	14	b 37	15	43.33	5.9
Oswego.....	56.20	63.27	56.77	58.75	11	76	11	69.00	15	41	15	43.67	6.2
Penn Yan (c).....	50.93	64.93	57.33	57.73	19	79	11	67.33	15	34	15	44.00	3.3
Rochester, [Dewey] .....	54.80	66.00	57.70	59.50	19	79	10	68.00	15	43	15	47.00	5.6
Wampsville.....	53.03	64.23	53.63	56.96	27	77	11	68.33	15	34	15	40.67	6.3
Waterford.....	54.33	66.50	58.06	59.63	27	76	11	d 68.00	16	40	15	e 48.00	5.3
NEW JERSEY—													
Freehold.....	57.27	68.92	60.27	62.15	4	f 78	11	70.67	15	44	15	51.00	---
Lambertville.....	57.79	72.02	59.13	62.98	11	81	11	72.43	15	45	15	51.63	4 6
Newark (g).....				61.05	11	76	11	70.62	15	42	15	49.75	---
PENNSYLVANIA—													
Bedford.....	55.83	70.46	60.67	62.32	■	80	10	70.00	15	42	15	56.33	5.2
Berwick (h).....	58.72	66.77	60.10	61.86	19	76	11	68.67	15	44	15	51.00	5.4
Cannonsburg.....	57.45	69.33	63.07	63.28	■	78	10	70.67	14	46	14	56.33	6.5
Carlisle.....	60.72	69.52	62.81	64.35	10	78	11	75.00	15	49	16	53.33	6.2
Chambersburg.....	60.77	70.10	65.10	65.32	11	79	11	74.67	15	52	16	53.67	6.0
Easton (i).....	58.69	68.26	57.07	61.34	9	j 76	28	67.00	14	45	16	49.67	5.5
Fleming.....	55.80	72.23	57.43	61.82	■	k 81	20	70.67	15	42	15	49.33	5.4
Gettysburg.....	57.95	71.23	62.23	63.80	10	80	11	71.67	15	47	15	55.00	5.5
Harrisburg, [Heisely].....	62.20	71.93	66.40	66.84	10	81	10	74.67	15	49	16	56.00	5.2
Harrisburg, [Hickok].....	58.87	70.75	63.10	64.24	10	81	10	72.50	15	45	15	53.17	5.7
Lewisburg.....	56.36	68.03	58.29	60.96	10	76	10	68.97	15	43	15	48.60	6.3
Morrisville.....	57.27	69.53	59.40	62.07	11	d 77	11	69.67	15	44	15	52.00	4.2
Mount Joy.....	62.25	73.92	64.60	66.92	10	87	10	73.67	15	48	15	58.00	3.9
Nazareth.....													6.6
Norristown.....	59.06	67.65	61.52	62.74	10	76	10	68.00	15	48	15	53.33	4.7
North Whitehall (m).....	54.03	68.80	62.30	61.71	26	80	28	70.33	15	40	15	e 49.00	5.3
Philadelphia.....	61.02	72.88	64.65	66.18	28	81	11	73.33	15	48	15	56.50	6.1
Pittsburg, [Marine Hospital].....	57.73	68.33	62.10	62.72	11	78	11	72.33	6	45	14	55.33	6.1
Pocopson.....	60.83	72.12	61.38	64.78	12	81	4	70.67	15	51	15	e 58.00	5.2
Shamokin.....	52.27	66.63	58.43	59.11	3	77	11	68.33	15	32	15	43.33	5.5
Somerset.....	54.43	68.63	57.40	60.15	19	80	11	67.33	8	n 45	14	51.67	7.0
Tarentum.....	55.93	70.27	57.57	61.26	3	79	11	71.33	6	o 45	■	52.67	5.6
West Haverford.....	58.97	71.30		65.13	4	80	11	73.50	15	44	15	52.00	---
Worthington.....	56.40	69.60	59.90	61.97	■	80	21	71.00	15	43	14	52.67	5.6
MARYLAND—													
Annapolis.....	62.40	72.83	69.57	68.27	11	82	11	75.16	14	52	15	58.83	4.6
Bladensburg.....	69.61	74.52	61.78	65.64	4	83		?	15	51		?	6.7
Frederick.....	60.05	69.24	64.90	64.73	20	87	20	75.23	15	51	16	56.67	5.6
Leitersburg.....	59.43	72.86	62.40	64.90	10	82	11	76.67	15	o 46	15	55.33	5.4
Leonardtown.....	67.27	72.85	68.71	69.61	12	82	11	76.67	15	50	15	61.33	6.1
Sykesville.....	60.43	71.07	63.10	64.87	4	78	21	71.33	15	49	5	56.33	5.2
DISTRICT OF COLUMBIA—													
Washington.....	62.47	72.50	66.73	67.23	4	80	4	74.33	15	52	15	57.33	5.6
VIRGINIA—													
Orrington's Store (p).....	66.14	75.68	74.14	71.99	3	85	3	77.00	24	q 60	25	63.00	5.1
Cross Creek.....	53.21	71.07	59.16	61.15	4	r 81	11	72.67	6	n 38	14	52.67	---
Falmouth.....	66.77	74.80	65.90	69.16	2	s 84	3	78.00	15	52	5	59.33	---
Lewinsville.....	61.72	73.52	64.17	66.47	■	82	11	74.67	15	49	15	56.67	4.8
Lewisburg.....	52.47	75.67	55.73	61.29	6	t 79	9	k 64.67	24	u 34	24	52.33	3.5
Montross.....	63.27	72.07	64.67	66.67	11	80	11	72.67	14	54	5	60.33	5.6

a Observations taken at 8 a. m., 2 p. m., and 9 p. m.

b Same temperature on the 15th.

c Observations taken at sunrise, 2 p. m., and sunset.

d Same temperature on the 12th.

e Same temperature on the 16th.

f Same temperature on the 10th and 11th.

g Daily maximum and minimum.

h Incomplete.

i Observations taken at 8 a. m., 2 p. m., and 10 p. m.

j Same temperature on the 10th and 28th.

k Same temperature on the 10th.

l Same temperature on the 11th.

m Observations taken at sunrise, noon, and sunset.

n Same temperature on the 14th.

o Same temperature on the 8th.

p Observations taken at 7½ a. m., noon, and 6 p. m.

q Same temperature on the 25th and 27th.

r Same temperature on the 9th.

s Same temperature on the 27th.

t Same temperature on the 9th and 10th.

u Same temperature on the 25th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—Continued.	°	°	°	°		°		°		°		°	
Mont View.....	61. 27	73. 47	64. 27	66. 34	11	82	11	74. 00	5	a 56	5	56. 67	4. 8
Poplar Grove.....	61. 20	74. 20	62. 40	65. 93	9	b 84	10	73. 33	14	50	14	58. 33	6. 5
Portsmouth.....	64. 33	79. 40	64. 83	69. 52	4	87. 5	4	76. 50	10	53. 5	6	63. 17	2. 9
Rose Hill.....						86				52			
Rougemont.....	64. 56	75. 64	67. 54	69. 25	12	86	4	75. 67	15	56	5	59. 67	6. 3
Smithfield.....	63. 88	74. 54	65. 74	68. 05	4	81		?	10	54		?	4. 9
Westwood.....	64. 45	72. 26	68. 22	68. 31	4	83		?	8	58		?	
NORTH CAROLINA—													
Chapel Hill.....	65. 70	79. 03	67. 63	70. 79	4	c 88	4	78. 00	6	b 60	6	64. 67	5. 0
Green Plains.....	64. 60	78. 60	64. 33	69. 18	12	86	12	73. 33	5	d 60	11	62. 67	
Murfreesborough.....	65. 19	73. 21	68. 29	68. 90	20	85		?	10	56		?	3. 7
SOUTH CAROLINA—													
Aiken.....	67. 04	82. 69	68. 52	72. 75	27	93	5	81. 67	13	60		?	3. 7
All Saints.....	69. 73	78. 50	70. 97	73. 07	12	85	16	80. 67	14	62	7	67. 00	1. 9
Charleston.....	72. 10	80. 67	75. 87	76. 21	12	86	16	81. 33	23	e 66	7	70. 00	
Columbia, [White].....	70. 13	81. 63	72. 23	74. 67	12	89	4	81. 67	24	59	6	67. 67	3. 0
St. John's.....	67. 64	81. 77	71. 37	73. 59	5	f 88	12	80. 67	11	g 60	23	68. 00	3. 4
GEORGIA—													
Athens.....	64. 84	77. 04	68. 75	70. 21	4	85	12	75. 40	24	57	22	63. 30	4. 0
Atlanta.....	63. 00	76. 60	67. 33	68. 98	3	h 84	3	76. 67	24	52	21	60. 67	2. 8
Augusta.....	70. 10	85. 84	72. 40	76. 11	4	96	4	83. 67	23	62	22	70. 33	3. 7
Clarksville.....	62. 47	75. 37	69. 07	68. 97	3	i 80	5	75. 33	24	j 51	24	61. 00	3. 9
Savannah.....	71. 71	82. 19	74. 67	76. 19	5	90	5	83. 00	25	64	7	69. 60	4. 1
Sparta.....	63. 67	81. 40	69. 43	71. 50	4	92	4	k 78. 33	23	e 54	22	62. 33	3. 5
Thomaston.....	69. 07	80. 19	76. 22	75. 16	14	86	13	80. 33	22	60	22	67. 67	4. 1
Whitemarsh Island.....	72. 80	80. 68	74. 63	76. 04	4	l 86	4	81. 33	24	67	7	70. 00	4. 1
FLORIDA—													
Alligator.....	74. 17	86. 73	77. 20	79. 37	2	m 93	4	84. 67	25	66	21	75. 00	3. 5
Atsena.....	75. 97	83. 13	78. 43	79. 18	8	n 88	14	82. 00	22	o 70	22	74. 67	3. 0
Belair.....	75. 32	89. 07	75. 07	79. 82	1	p 92	8	86. 00	21	q 67	21	j 73. 67	
Jacksonville.....	77. 73	85. 43	77. 47	80. 21	4	k 92	4	86. 33	22	r 70	22	75. 00	3. 8
Micanopy.....	73. 22	84. 47	75. 41	77. 70	6	91	4	82. 10	22	65	21	72. 33	3. 9
St. Augustine.....	77. 81	83. 77	80. 03	80. 54	17	90	13	85. 00	22	74	22	77. 33	3. 9
Salt Ponds (s).....	81. 40	87. 10		84. 25	4	91	4	87. 00	8	t 80	11	u 82. 00	3. 5
Warrington.....	77. 70	85. 70	80. 80	81. 40	11	v 92	5	w 87. 00	22	65	22	71. 00	2. 5
ALABAMA—													
Cahawba.....	71. 93	79. 52	74. 72	75. 39	12	86	4	83. 33	23	55	22	?	2. 2
Carlowville.....	68. 80	82. 20	72. 00	74. 33	1	90	1	81. 33	22	e 60	10	69. 00	2. 8
Greene Springs.....	67. 20	82. 39	70. 65	74. 41		?		?		?		?	
Greensborough.....	66. 85	80. 80	71. 83	73. 16	3	90	3	79. 67	22	55	21	62. 67	2. 6
Selma.....	68. 17	81. 70	73. 90	74. 59	3	92	3	81. 00	22	56	21	62. 33	3. 3
MISSISSIPPI—													
Columbus.....	66. 41	81. 47	70. 76	72. 88	3	90	2	78. 73	23	56	21	61. 70	3. 9
Natchez.....	69. 20	82. 30	74. 27	75. 26	9	88	10	80. 33	22	55	21	63. 33	4. 1
Paulding.....	71. 62	86. 36	77. 82	78. 60	3	96	3	86. 00	22	56		?	3. 5
Westville.....	71. 30	84. 18	79. 55	78. 34	17	94	17	85. 67	22	51	21	64. 67	4. 3
LOUISIANA—													
New Orleans (x).....	79. 73?	82. 90	84. 40	82. 34	12	91	12	87. 00	21	68	21	70. 33	
TEXAS—													
Austin, [Palm].....	73. 05	83. 55	73. 69	76. 76	3	96	2	85. 33	5	60	5	60. 33	6. 2
Austin, [Van Nostrand].....	72. 00	85. 01	74. 05	77. 02	3	98	1	86. 16	21	y 60	5	62. 16	5. 2

a Same temperature on the 6th, 7th, 8th, 9th, 15th, and 16th.

b Same temperature on the 10th.

c Same temperature on the 11th.

d Same temperature on the 6th, 7th, 8th, 9th, 10th, 14th, 15th, and 30th.

e Same temperature on the 24th.

f Same temperature on the 12th and 30th.

g Same temperature on the 24th and 25th.

h Same temperature on the 28th.

i Same temperature on the 5th, 11th, 12th, and 28th.

j Same temperature on the 26th.

k Same temperature on the 5th.

l Same temperature on the 13th.

m Same temperature on the 4th.

n Same temperature on the 9th.

o Same temperature on the 25th.

p Same temperature on the 3d, 4th, 7th, 8th, 10th, 11th, and 12th.

q Same temperature on the 26th, 27th, and 28th.

r Same temperature on the 26th and 27th.

s Thermometer  $2\frac{1}{2}$  to  $2\frac{3}{4}$  degrees too high.

t Same temperature on the 10th, 11th, 12th, 13th, 14th, 15th, 24th, 25th, and 28th.

u Same temperature on the 12th and 14th.

v Same temperature on the 7th.

w Same temperature on the 6th.

x Observations taken at 9 a. m., noon, and 3 p. m.

y Same temperature on the 22d.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—Continued.	■	○	○	○		○		■		■		■	
Gilmer (a) .....	66.63	84.03	-----	75.33	12	93	16	82.00	21	48	21	82.00	5.1
Larissa .....	70.72	84.03	73.96	76.24	2	97	17	82.83	21	56	20	63.67	4.8
New Braunfels .....	73.53	89.40	78.07	80.32	3	100	3	89.00	21	57	21	70.00	1.8
Roundtop .....	72.00	89.00	77.00	79.33	-----	101	-----	-----	-----	58	-----	-----	-----
Sisterdale .....	71.20	85.79	71.97	76.32	1	98	2	86.53	21	52	21	65.90	5.1
Union Hill .....	70.47	84.47	74.73	76.56	3	96	12	83.67	21	57	20	66.67	4.8
Washington .....	74.13	86.53	72.07	77.58	3	98	3	86.00	21	58	5	69.00	4.1
Webberville .....	75.27	85.20	75.47	78.65	11	97	1	87.00	21	55	5	62.67	4.9
ARKANSAS—													
Washington (a) .....	66.63	81.53	-----	74.08	17	92	10	82.50	21	c 52	20	d 65.00	-----
TENNESSEE—													
Glenwood .....	62.58	75.40	66.00	67.99	18	82	18	77.47	15	55	21	57.13	6.6
Memphis .....	64.65	77.90	69.73	70.76	18	89	18	80.67	20	e 56	21	58.33	4.8
KENTUCKY—													
Bardstown .....	62.29	74.74	64.60	67.21	18	86	10	75.67	14	55	22	?	5.6
Danville .....	64.11	76.28	66.50	68.96	18	87	11	76.00	14	55	23	62.00	5.0
Lexington .....	61.33	72.33	63.47	69.04	18	83	10	73.67	14	53	21	c 59.00	5.8
Paris .....	59.70	70.41	62.83	64.32	10	80	10	74.00	14	47	14	57.00	5.2
Springdale (f) .....	57.82	74.67	69.50	67.33	18	87	10	76.67	14	43	14	58.67	5.5
OHIO—													
Avon .....	59.10	68.23	58.81	62.05	9	81	19	72.67	14	45	14	51.00	6.0
Bellefontaine .....	57.40	70.86	58.71	62.32	11	80	11	72.00	15	44	15	52.33	5.7
Bowling Green .....	56.81	68.47	58.10	61.13	30	78	10	70.40	11	g 46	7	53.00	5.8
Cincinnati, [Harper] .....	60.73	74.70	64.83	66.75	18	86	18	75.67	14	51	21	60.67	5.3
Cincinnati, [Phillips] .....	63.23	74.87	66.97	68.36	9	86	10	78.67	11	h 56	21	62.00	4.9
Cleveland .....	57.87	68.38	61.75	62.67	19	79	11	71.00	15	46	15	53.80	6.7
College Hill .....	60.67	70.10	61.47	64.08	18	82	11	75.00	5	i 52	6	56.67	5.9
Collingwood .....	57.87	70.47	58.33	62.22	11	j 80	11	72.33	23	45	15	55.33	-----
Elk Run .....	57.50	70.12	59.63	62.42	9	k 79	10	72.00	15	43	14	54.33	5.8
Freedom .....	57.03	68.36	57.86	61.08	19	79	19	70.33	7	l 40	14	49.67	5.5
Hillsborough .....	56.78	67.73	61.23	61.90	30	77	10	70.80	14	46	5	53.33	5.3
Hudson (m) .....	56.54	66.70	59.73	60.99	11	76	11	69.20	15	43	14	50.60	6.1
Iberia (n) .....	59.19	69.40	60.69	63.09	18	80	19	70.67	15	47	15	55.00	6.3
Jackson, [Monroe county] (o) .....	59.50	74.11	60.92	64.84	10	80	10	?	13	51	?	?	-----
Kelley's Island .....	59.83	66.06	60.93	62.27	18	76	10	70.67	14	51	14	54.33	5.0
Madison, [Atkins] .....	59.40	68.28	58.72	62.13	9	82	10	71.33	?	?	?	?	5.9
Madison, [King] .....	57.73	66.50	56.87	60.37	9	82	10	71.00	11	47	14	52.00	4.8
Montville .....	56.90	65.60	59.25	60.58	11	75	10	p 68.67	14	44	15	48.80	6.0
New Lisbon .....	56.13	70.70	59.06	61.96	9	q 80	21	p 72.00	11	40	5	54.00	4.2
Northwood .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.4
Portsmouth .....	61.50	76.43	62.37	66.77	10	88	10	77.33	14	50	14	h 61.00	5.1
Rockport .....	60.23	69.10	61.87	63.73	12	81	10	74.33	14	r 46	14	54.00	-----
Savannah .....	58.17	72.30	59.60	63.36	3	84	30	73.67	14	45	14	54.33	6.6
Troy .....	58.70	72.97	62.07	64.58	11	84	11	74.33	14	44	14	55.67	4.9
Urbana .....	56.50	72.47	60.50	63.16	11	p 82	11	72.00	11	43	14	55.00	6.3
Welchfield .....	56.60	67.97	55.93	60.17	19	80	19	69.33	14	40	14	48.33	4.4
Westerville .....	57.93	71.25	61.28	63.49	9	82	30	72.67	14	47	14	53.17	5.9
Windham .....	55.07	67.97	59.27	60.77	9	77	10	68.00	8	r 42	14	49.33	-----
MICHIGAN—													
Battle Creek .....	54.97	68.90	58.50	60.79	9	82	10	73.33	4	g 42	20	50.00	4.2
Corunna .....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6.3
Detroit .....	57.27	67.83	58.53	61.21	1	77	10	72.67	1	42	14	52.00	5.1
Grand Haven .....	54.80	64.07	59.33	59.40	11	81	9	70.33	15	44	14	50.33	5.6

a Observations taken at sunrise and 2 p. m.

b Same temperature on the 13th.

c Same temperature on the 22d.

d Same temperature on the 21st and 22d.

e Same temperature on the 21st.

f Observations taken at 5 a. m., 2 p. m., and 6 p. m.

g Same temperature on the 6th.

h Same temperature on the 7th.

i Same temperature on the 6th and 7th.

j Same temperature on the 17th and 29th.

k Same temperature on the 22d and 28th.

l Same temperature on the 14th.

m The records of thermometer at this place are 0°.85 too high.

n For the last 16 days of the month only.

o Incomplete.

p Same temperature on the 30th.

q Same temperature on the 10th, 22d, and 30th.

r Same temperature on the 15th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	W'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—Continued.	°	°	°	°	°		°		°		°		
Grand Rapids.....	54. 67	68. 99	56. 83	60. 15	9	86	9	a 73. 33	3	b 42	20	49. 00	5. 6
Lake George.....	47. 15	62. 62	52. 87	54. 21	17	c 73	24	61. 67	14	30	14	39. 00	6. 6
Marquette.....	50. 02	61. 33	50. 06	53. 80	29	74	10	66. 10	6	d 30	14	40. 67	5. 2
Monroe, [Bowlby].....	57. 93	69. 07	61. 93	62. 98	26	77	10	71. 31	4	45	14	52. 33	4. 9
Monroe, [Whelpley].....													4. 5
Monroe Piers (e).....	56. 25	64. 63	63. 00	60. 89	10	72	10	70. 25	4	45	14	51. 37	5. 8
New Buffalo.....	56. 70	66. 32	56. 03	59. 68	9	82	9	70. 33	6	40	5	51. 67	6. 3
Ontonagon (f).....	54. 70	60. 38		57. 54	28	76	9	g 69. 00	21	41	2	46. 00	5. 4
Ottawa Point (h).....	52. 97	62. 53	60. 03	57. 86	12	73	10	68. 00	15	39	14	46. 50	6. 8
Thunder Bay Island (i).....	51. 80	58. 07	55. 02	55. 15	12	71	10	65. 50	14	36	14	41. 25	7. 2
Ypsilanti.....	53. 96	67. 52	55. 12	58. 87	18	79	10	70. 25	14	42	14	48. 33	5. 9
INDIANA—													
Aurora (j).....	59. 83	75. 73	64. 97	66. 84	18	90	18	80. 00	14	44	22	60. 67	---
Cannelton.....	64. 07	73. 94	64. 90	67. 63	18	86	18	78. 40	14	53	14	59. 67	5. 2
Logansport.....	59. 87	71. 97	63. 33	65. 06	1	88	1	76. 00	6	47	14	k 56. 67	5. 8
Michigan City (l).....	56. 97	63. 40	62. 40	60. 84	9	81	9	73. 25	6	38	20	50. 50	3. 5
Mishawaka.....	53. 57	69. 30	55. 60	59. 49	9	85	9	72. 33	7	36	5	50. 33	4. 6
New Albany.....	61. 67	75. 61	65. 14	67. 47	10	84	10	77. 67	14	51	14	59. 00	5. 5
New Harmony.....	63. 03	74. 13	66. 13	67. 76	18	86	9	77. 00	14	53	14	58. 00	6. 4
Richmond.....	59. 96	70. 29		65. 12	9	79	11	71. 00	14	50	14	b 58. 00	7. 6
Richmond, [Haines] (m).....	62. 50	70. 60	66. 33	66. 48	18	80	10	74. 67	6	n 49	6	58. 00	4. 7
ILLINOIS—													
Augusta.....	56. 40	69. 03	60. 93	62. 12	10	83	10	77. 33	4	o 45	20	48. 67	4. 7
Aurora.....	54. 53	69. 43	56. 63	60. 20	9	83	10	74. 67	7	44	20	49. 67	4. 7
Batavia, [Mead].....	54. 60	72. 67	57. 67	61. 64	29	85	10	76. 00	2	35	20	51. 00	5. 3
Carthage (p).....	58. 97	72. 79	61. 32	64. 36	27	86	24	74. 00	20	46	20	49. 33	---
Edgington.....	55. 40	72. 40	60. 60	62. 80	10	88	10	75. 33	21	42	20	49. 33	5. 3
Elgin.....	53. 50	69. 30	56. 27	59. 69	9	82	10	73. 67	7	41	20	49. 00	5. 7
Galena.....													4. 8
Manchester (q).....	58. 86	70. 16	61. 03	63. 35	25	82	10	72. 00	20	46	20	49. 33	5. 8
Marengo.....	57. 57	68. 54	56. 79	60. 97	10	83	10	76. 33	2	40	20	51. 00	4. 5
Naperville (r).....	54. 76	68. 50	57. 62	60. 29	17	78		?	4	46		?	6. 0
Ottawa.....	54. 69	68. 91	59. 71	61. 10	10	87	10	75. 33	2	44	20	51. 67	6. 1
Pekin.....	58. 03	71. 27	61. 20	63. 50	10	85	10	76. 33	4	45	20	52. 00	5. 2
Peoria.....	59. 82	72. 15	63. 92	65. 30	10	86	10	77. 67	4	44	20	53. 33	4. 9
Riley.....	55. 83	69. 24	56. 67	60. 58	10	82	10	77. 00	6	44	20	52. 67	4. 2
Sandwich.....	55. 73	72. 46	59. 75	62. 64	10	86	10	79. 67	2	s 46	20	52. 00	5. 1
Upper Alton.....	59. 20	72. 23	61. 50	64. 31	10	84	10	75. 67	20	47	20	51. 33	3. 9
West Salem.....	62. 80	76. 87	65. 87	68. 51	18	90	9	78. 67	4	53	21	57. 00	5. 6
West Urbana.....	58. 57	70. 63	61. 17	63. 46	9	91	9	80. 33	2	45	20	55. 67	5. 6
Wheaton.....	55. 79	67. 76	56. 53	60. 03	9	84	10	74. 17	1	47	20	51. 17	5. 8
Winnebago.....	53. 10	69. 48	56. 55	59. 71	10	85	10	74. 67	5	41	5	50. 33	4. 7
Woodstock.....	56. 38	70. 36	57. 24	61. 33	10	90	10	78. 67	21	42	20	k 48. 67	5. 7
MISSOURI—													
Cassville.....	65. 23	72. 07	66. 23	67. 84	29	85	28	79. 33	5	52	4	t 55. 00	6. 2
Paris.....	57. 70	69. 67	61. 73	63. 03	10	82	10	76. 67	20	46	20	48. 67	5. 3
St. Louis, [Engelmann].....	62. 68	73. 52	64. 98	67. 06	10	g 82	10	76. 67	20	48	20	51. 50	5. 1
St. Louis, [Fendler].....	60. 52	73. 27	62. 90	65. 56	10	86	10	77. 33	20	48	20	51. 33	---
Stockton.....	65. 70	74. 00	66. 39	68. 70	16	u 86	10	78. 00	5	54	5	56. 67	5. 8
WISCONSIN—													
Appleton.....	53. 57	65. 43	54. 33	57. 78	10	80	10	70. 67	20	40	20	46. 00	3. 8

a Same temperature on the 10th.

b Same temperature on the 15th.

c Same temperature on the 24th.

d Same temperature on the 22d.

e Observations taken at 6 a. m., 9 a. m., 3 p. m. and 9 p. m. Mean at 9 a. m., 59. 67.

f Observations taken at 9 a. m. and 3 p. m.

g Same temperature on the 28th.

h Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 56. 13.

i Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 55. 73.

j Observations taken at 6 a. m., 2 p. m., and 9 p. m.

k Same temperature on the 21st.

l Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 60. 60.

m Observations taken at 6 a. m., noon, and 9 p. m.

n Same temperature on the 7th.

o Same temperature on the 20th.

p Observations taken at 7 a. m., 1 p. m., and 7 p. m.

q Observations taken at 7 a. m., 1 p. m., and 9 p. m.

r Incomplete.

s Same temperature on the 3d, 7th, and 14th.

t Same temperature on the 5th.

u Same temperature on the 17th.

## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—Continued.	°	°	°	°		°		°		°		°	
Bay City .....	46.03	56.77	47.10	49.97	9	72	9	64.67	21	30	20	36.33	3.9
Beloit .....	53.27	69.87	55.93	59.69	10	87	10	75.33	5	37	5	51.00	3.6
Green Bay .....	53.50	65.93	55.67	58.37	10	85	10	75.00	2	38	19	46.33	4.5
Janesville .....	48.28	71.86	58.21	59.45	10	87	10	74.67	6	34	8	51.67	3.9
Kenosha .....	57.62	66.09	59.43	61.05	9	a 84	10	74.67	6	47½	20	52.17	4.4
Manitowoc .....	52.37	62.97	55.17	56.84	10	79	10	71.67	2	40	14	46.67	5.9
Milwaukee, [Lapham] .....	55.53	63.97	58.10	59.20	12	81	10	75.33	7	45	14	50.67	---
Milwaukee, [Larkin] .....													6.2
Milwaukee, [Winkler] .....	56.53	66.00	56.60	59.71	12	83	10	74.67	3	b 47	21	50.67	4.2
Platteville .....	54.50	67.83	58.67	60.33	10	81	10	74.00	21	40	21	49.33	5.0
Rocky Run .....	52.73	71.50	58.50	60.91	8	c 84	10	76.67	1	d 41	14	52.00	5.0
Superior, [Stunts] (e) .....	46.13	57.76	56.10	52.91	12	71	12	63.00	20	30	20	43.50	4.4
Wausau .....	51.27	67.00	54.30	57.52	24	85	10	73.00	5	37	21	44.67	4.9
IOWA—													
Bellevue .....	53.33	71.60	57.77	60.90	11	88	11	76.33	2	f 36	20	50.00	4.8
Border Plains .....	57.47	74.07	58.57	63.37	10	g 87	23	75.00	20	42	4	50.67	4.6
Burlington .....	60.13	71.93	60.43	64.16	13	85	10	74.67	21	46	20	52.00	5.7
Dubuque .....	55.10	68.21	58.90	60.74	10	83	10	71.67	21	42	21	50.67	4.6
Fairfield .....	56.52	70.30	58.97	61.93	10	87	10	77.00	20	43	4	48.00?	5.6
Forestville .....	55.04	69.30	54.59	59.64	10	84	10	?	3	i 40	3	46.67	3.7
Fort Madison (j) .....	56.33	71.33	63.23	63.63	25	89	10	78.67	21	43	20	49.33	4.2
Lyons City .....													4.5
Muscataine .....	52.23	69.53	58.90	60.22	10	87	10	76.00	11	k 34	21	49.00	3.4
Pleasant Plain .....	56.40	71.11	58.80	62.10	10	88	10	77.67	20	k 44	20	50.33	5.3
Rossville .....	52.98	69.67	54.33	58.99	10	88	10	74.07	20	36	3	45.43	4.7
MINNESOTA—													
Beaver Bay, [Clark] .....	47.18	55.65	48.45	50.43	12	72	12	60.50	21	35	14	39.33	4.7
Beaver Bay, [Wieland] .....	48.47	62.33	47.47	52.76	9	75	9	67.00	20	k 33	14	39.67	4.3
Burlington .....	47.80	59.40	49.10	52.10	9	71	12	63.33	21	33	21	40.33	4.3
Chatfield .....	51.33	69.93	54.47	58.58	10	85	10	72.00	11	35	20	44.67	4.8
Forest City .....	50.87	65.97	53.03	56.62	9	78	9	67.33	6	35	4	45.33	2.8
Hazlewood .....	50.96	67.68	57.24	58.63	11	80	11	71.33	4	38	4	45.67	3.8
Princeton .....	52.73	67.50	55.06	58.43	24	81	9	69.33	20	40	3	47.33	4.6
NEBRASKA—													
Bellevue .....	55.45	72.50	59.93	62.63	17	92	17	78.67	20	k 39	4	49.00	3.4
Elkhorn .....	55.50	74.80	59.73	63.34	17	95	17	79.00	20	36	4	46.67	5.0
Nebraska .....	53.35	71.37	59.98	63.23	17	93	17	80.53	23	40	4	49.40	5.2
Omaha, [Rain] .....	54.83	72.23	60.70	62.58	17	88	17	77.33	20	32	20	42.60	5.4
KANSAS—													
Burlingame .....	59.33	75.37	63.47	66.06	11	l 90	16	79.33	19	m 42	19	51.33	5.0
Leavenworth City .....													4.9
Lecompton .....	64.70	78.00	66.67	69.79	16	97	10	83.67	20	52	4	57.67	3.3
Manhattan .....	60.73	78.23	62.56	67.17	17	96	17	86.33	21	36	20	52.67	5.6
Moneka .....	63.03	74.70		68.87	17	90	17	85.00	5	50	5	55.50	6.9
Neosho Falls .....	61.67	77.30	65.63	68.20	10	n 91	17	81.33	20	46	4	54.67	4.6
Wiandott City .....	62.46	74.46	71.30	69.41	17	89	17	83.00	20	47	19	55.67	5.2
UTAH—													
Great Salt Lake City .....	55.00	69.00	60.00	61.33									
CALIFORNIA—													
Auburn .....				81.53									2.8
Sacramento .....	60.37	71.67	65.63	65.89	18	82	18	72.00	7	o 56	11	61.67	1.4
San Francisco .....	57.33	67.37	57.50	60.73	18	89	30	74.67	25	51	25	54.67	3.7
Santa Clara .....	56.32	75.00	58.55	63.29	19	95	19	74.17	22	51	10	58.83	2.4
Union Rancho .....	62.82	85.00	70.50	72.77	19	96	19	83.67	7	50	7	64.67	1.5

a Same temperature on the 10th.

b Same temperature on the 19th and 21st.

c Same temperature on the 10th, 23d, and 24th.

d Same temperature on the 6th.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean at 9 a. m., 51.63.

f Same temperature on the 5th.

g Same temperature on the 12th.

h Same temperature on the 9th.

i Same temperature on the 4th.

j Observations taken at 6 a. m., noon, and 7 p. m.

k Same temperature on the 21st.

l Same temperature on the 16th.

m Same temperature on the 20th.

n Same temperature on the 16th and 17th.

o Same temperature on the 28th.



## No. 22.—THERMOMETER AND FACE OF SKY, SEPTEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MEXICO—	○	○	○	○		☐		○		○		○	
Cordova (a) -----	70. 75	73. 49	70. 97	71. 97	1	b 76. 6	-----	-----	11	c 69. 1	-----	-----	-----
Mirador (d) -----	67. 98	75. 31	67. 80	70. 36	-----	-----	-----	-----	22	63	-----	-----	-----
WEST INDIES—													
St. George's, Bermuda (e) -----	-----	-----	-----	77. 00	-----	83. 6	-----	-----	-----	70. 7	-----	-----	-----
CENTRAL AMERICA—													
Guatemala (f) -----	-----	-----	-----	65. 73	16	78. 4	-----	-----	4	57. 2	-----	-----	-----
SOUTH AMERICA—													
Catharina Sophia, Surinam(g) -----	75. 72	87. 47	79. 42	80. 87	8	92	5	b82. 67	-----	i 74	7	78. 67	4. 8

*a* Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 72.43; mean at 6 p. m., 72.69.

*b* Same temperature on the 4th.

*c* Same temperature on the 23d.

*d* Observations taken at 7 a. m., 2 p. m., and 8 p. m.

*e* Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

*f* Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.

*g* Observations taken at 6 a. m., 2 p. m., and 6 p. m. Incomplete.

*h* Same temperature on the 6th.

*i* Same temperature on the 9th, 10th, and 12th.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°		°	
Fort Rae (a).....	23.29	30.51	24.09	25.96	4	b 45	7	639.00	22	5	22	8.67	4.
Fort Simpson.....	22.42	28.55	23.03	24.67	5	44	5	37.00	19	5	19	9.67	6.2
Hamilton (c).....	45.58	46.29	45.93	45.93	5	d 68	4	68.00	26	30	26	31.00	
Montreal.....	40.46	47.80	43.13	43.46	5	76	4	63.40	26	24	21	28.80	6.2
Red River Settlement.....	30.10	42.63	32.12	34.95	2	64	2	52.50	18	12	23	24.33	4.5
St. John's.....	43.84	47.42	43.84	45.03	3	64	3	59.67	10	28	17	34.33	6.9
St. Martin (e).....	36.30	49.16	40.03	41.83	5	79	5	63.83	26	21	26	26.73	
Stanbridge.....	36.90	46.06	39.55	40.84	5	79	5	66.33	26	19	26	23.33	6.8
Toronto (e).....	38.78	48.86	41.27	42.97	5	55	3	60.40	27	22	26	27.87	6.4
Windsor.....	40.80	49.67	41.50	43.99	4	72	14	61.50	26	27	26	29.70	7.1
Wolfville.....	40.86	47.62	37.36	41.95	14	70	2	62.67	26	27	26	32.33	7.2
MAINE—													
Belfast (f).....	40.42	47.81	42.66	43.63	4	71	4	64.83	28	22	27	27.33	5.7
Cornish, [West].....	35.93	48.16	39.54	41.21	4	74	4	64.33	26	16	25	21.66	3.9
Cornishville.....	39.19	48.74	41.48	43.14	4	74	4	66.00	26	18	26	23.67	4.5
Dexter.....	38.73	49.20	41.39	43.11	4	74	4	60.00	27	20	26	25.00	6.2
Gardiner.....	37.64	52.03	42.36	44.01	4	79	4	66.00	27	18	26	27.00	5.0
Lisbon.....	37.81	53.70	40.67	44.06	4	76	4	62.00	27	21	24	25.67	4.0
Newcastle.....	37.87	48.24	39.06	41.72	4	73	4	61.33	26	19	26	?	4.8
Portland.....	39.52	49.57	42.21	43.77	4	76	4	62.69	26	22	26	27.00	5.1
Steuben.....	38.10	46.71	40.68	41.83	14	62	14	56.67	27	25	26	27.33	5.3
Topsham.....	36.76	49.16	39.16	37.96	4	58	4	55.00	22	g 24	26	25.00	4.8
Vassalborough.....				42.48									6.3
NEW HAMPSHIRE—													
Claremont.....	37.16	52.03	41.40	43.53	4	77	4	62.33	26	h 21	26	26.00	5.2
Shelburne.....	33.81	44.52	37.10	38.48	5	76	5	60.33	26	16	26	21.00	6.7
Stratford.....													5.5
VERMONT—													
Brandon.....	37.48	49.82	41.32	42.87	5	80	4	66.16	27	19	26	24.33	5.9
Burlington.....	39.70	44.14	40.70	41.51	5	74	5	65.83	26	20	26	23.83	6.5
Craftsbury.....	34.94	44.26	38.26	39.15	5	75	5	64.00	26	16	26	20.00	6.2
Lunenburg.....	34.52	43.92	36.75	38.40	4	72	4	59.33	26	12	26	17.33	6.4
Rupert.....	41.22	50.77	44.71	45.57	5	78	5	70.00	26	18	26	27.33	5.4
St. Johnsbury.....	34.42	47.13	37.68	39.74	4	76	4	59.00	26	18	26	21.00	6.5
MASSACHUSETTS—													
Amherst.....	39.61	52.80	44.66	45.69	4	75	4	61.10	26	25	26	30.80	4.9
Bridgewater.....	42.00	51.57	46.25	46.61	4	69	4	61.67	26	27	26	32.42	4.7
Cambridge.....	42.16	52.55	45.10	46.60	4	77	4	65.33	26	25	26	30.67	4.3
Lawrence.....	40.58	52.87	43.87	45.77	4	73	4	63.33	22	27	26	31.33	5.1
Mendon.....	40.65	51.65	43.83	45.38	2	67	2	61.00	26	24	24	30.00	3.7
Nantucket.....	49.96	55.42	50.55	51.98	3	j 68	2	63.67	21	h 36	26	38.17	4.5
New Bedford.....	43.73	53.78	45.15	47.55	5	70	4	61.67	27	25	21	33.33	5.2
Westfield.....	38.71	52.72	43.55	45.00	4	80	5	60.33	26	26	26	30.33	5.3
Williamstown.....	38.24	49.39	41.95	43.19	5	75	5	61.06	26	20	26	27.20	6.0
Worcester.....	41.35	52.58	44.20	46.04	4	76	5	?	26	23½	26	29.83	4.6
RHODE ISLAND—													
Providence (k).....	42.71	55.45	45.80	47.99	4	78	4	63.67	22	l 29	26	33.33	4.3
CONNECTICUT—													
Columbia.....	41.87	54.97	43.16	46.67	5	78	14	63.67	26	26	21	31.00	4.2
Middletown.....	40.98	56.83	44.57	47.46	5	81	5	64.20	26	26	26	32.67	3.7
Pomfret.....	40.13	50.23	42.32	44.23	5	72	5	62.10	26	23	26	29.10	4.7
Saybrook.....	45.68	53.48	47.16	48.77	1	69	2	64.00	21	l 30	21	35.00	4.3
Wallingford.....	40.71	56.20	44.27	47.06	5	80	5	62.50	30	25½	26	33.00	3.7
NEW YORK—													
Bellport.....	45.97	54.03	47.10	49.03	5	68	1	65.67	27	32	27	36.00	4.2
Beverly.....	43.13	53.92	45.00	47.35	4	71	4	?	26	26	26	31.67	4.8

a Observations taken at 7 a. m., 2 p. m., and 7 p. m.

b Same temperature on the 6th.

c Observations taken at 9 a. m. and 9 p. m.

d Same temperature on the 4th.

e Observations taken at 6 a. m., 2 p. m., and 10 p. m.

f Observations taken at 7 a. m., noon, and 6 p. m.

g Same temperature on the 26th and 27th.

h Same temperature on the 27th.

i Same temperature on the 5th.

j Same temperature on the 4th and 5th.

k Observations taken at sunrise, 2 p. m., and 10 p. m.

l Same temperature on the 26th.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'temp.	Date.	Temp.	Date	Mean temp	
NEW YORK—Continued.	°	°	°	°		°		°		°			
Buffalo (a) .....	45.38	49.82	47.23	47.48	5	68	4	65.33	26	29	26	31.67	5.3
Cazenovia .....	37.50	47.10	40.22	41.61	5	76	4	63.50	26	16	26	25.50	6.8
Charlotte (b) .....	41.80	50.64	49.38	46.88	5	76	4	68.75	26	27	26	32.00	7.2
Flatbush .....	44.80	55.63	47.16	49.21	14	75	14	63.00	27	29	26	33.67	4.7
Fort Niagara (c) .....	43.55	50.22	48.42	46.83	4	73	4	65.75	26	25	26	29.50	7.4
Nichols .....	39.26	53.68	42.06	45.00	4	82	4	64.33	26	21	26	28.00	6.0
Oswego .....	42.68	49.65	45.32	45.88	5	76	4	64.67	26	22	26	31.00	6.3
Penn Yan (d) .....	38.90	49.52	43.61	44.01	4	e78	4	68.00	26	21	26	26.33	3.1
Rochester, [Dewey] .....	42.58	51.06	45.74	46.46	4	e76	4	69.00	26	27	26	32.00	6.1
Sackett's Harbor (f) .....	41.95	49.03	48.01	45.91	5	75	5	69.88	26	23	26	30.37	5.4
Wampsville .....	39.52	49.68	41.58	43.58	5	77	5	65.33	26	18	26	26.00	6.8
Waterford .....	41.47	53.38	45.71	46.85	5	79	4	65.33	26	24	26	32.67	5.1
NEW JERSEY—													
Freehold .....	43.00	53.23	46.38	47.54	4	e76	5	64.33	27	28	26	32.67	---
Lambertville .....	42.59	57.34	46.09	48.67	4	78	4	63.67	24	29	26	33.97	5.1
Newark (g) .....	---	---	---	48.61	14	72	14	63.37	27	29	26	35.62	---
Woodstown .....	42.71	49.90	43.39	45.33	1	h67	1	63.00	26	i30	27	33.33	3.7
PENNSYLVANIA—													
Altoona .....	42.29	53.06	45.32	46.89	4	76	4	68.33	27	29	21	32.00	5.0
Bedford .....	40.35	51.52	43.77	45.21	12	71	1	61.00	24	29	28	33.67	4.9
Berwick .....	42.78	53.04	46.23	47.37	8	71	1	61.67	26	28	26	31.33	4.1
Cannonsburg .....	44.07	56.61	50.06	50.25	5	75	5	65.00	28	32	28	36.33	5.7
Carlisle (j) .....	47.82	59.05	52.87	53.25	5	73	---	?	---	?	---	?	3.6
Chambersburg .....	42.65	56.87	47.97	49.16	4	e76	1	65.00	24	30	22	35.00	4.9
Easton (k) .....	43.94	55.43	44.16	47.84	5	79	5	62.83	26	27½	26	31.17	5.3
Fleming .....	40.48	55.58	42.38	46.15	4	e78	5	63.00	27	26	21	i33.00	4.5
Gettysburg .....	44.48	56.71	48.61	49.93	5	76	1	63.33	31	32	22	37.00	3.9
Harrisburg, [Heisely] .....	48.03	57.58	51.63	52.41	4	e76	4	65.67	26	31	26	35.33	4.9
Harrisburg, [Hickok] .....	45.13	56.58	49.97	50.56	4	e77	5	63.83	26	i31	26	33.67	5.2
Lewisburg .....	41.12	53.80	44.92	46.61	4	76	4	60.90	26	26	26	28.93	6.1
Morrisville .....	42.10	56.35	45.26	47.90	5	78	14	64.00	22	26	26	31.67	3.2
Mount Joy .....	46.00	58.86	46.53	50.46	4	79	5	65.67	26	30	26	34.67	4.2
Nazareth .....	46.16	56.36	49.50	50.67	2	72	2	63.33	26	l32	27	35.00	5.3
Norristown .....	43.75	55.92	47.61	49.09	4	e73	8	62.80	27	30	26	33.33	4.8
North Whitehall (m) .....	40.58	56.13	49.71	48.81	4	82	5	65.33	27	28	26	33.00	5.1
Philadelphia .....	46.98	59.11	50.87	52.32	5	80	5	68.00	27	32	27	35.80	5.4
Pittsburg, [Marine Hospital] .....	43.67	53.51	47.51	48.23	4	72	5	62.33	26	32	27	36.33	6.0
Pocopson .....	41.74	57.90	47.29	49.98	5	80	1	64.67	27	n30	26	33.33	4.3
Sewickleyville .....	40.52	53.30	42.81	45.54	4	e72	4	59.67	27	28	28	32.67	5.4
Shamokin .....	38.13	53.45	46.03	45.87	4	e78	1	59.33	25	22	26	28.67	4.9
Somerset .....	39.52	53.61	43.81	45.65	4	74	3	59.67	22	o28	27	32.00	6.1
Tarentum .....	41.23	54.71	43.21	46.38	4	74	4	64.33	27	23	21	i35.00	5.4
West Haverford .....	46.05	56.68	---	51.36	5	76	5	70.00	27	27	27	31.50	5.0
Worthington .....	40.48	55.84	45.45	47.26	4	e80	5	64.67	21	p27	26	30.67	5.4
MARYLAND—													
Annapolis .....	46.50	58.60	54.00	53.03	4	76	1	68.83	28	32	27	39.16	4.2
Bladensburg (q) .....	47.95	55.63	47.81	50.46	4	76	---	?	30	34	---	?	5.2
Chestertown .....	47.06	55.46	48.20	50.24	5	76	---	?	26	i31	---	---	4.3
Frederick .....	45.25	55.95	47.85	49.68	5	73	1	64.33	28	32	27	37.00	4.6
Leitersburg .....	42.97	57.63	45.23	48.61	4	e74	1	67.33	24	r28	21	?	4.6
Sykesville .....	45.35	57.71	48.03	50.36	5	77	1	65.33	27	29	27	33.00	4.0
DISTRICT OF COLUMBIA—													
Washington .....	47.87	56.16	51.09	51.71	5	76	1	68.67	27	s35	27	38.33	4.3

a Observations taken at 8 a. m., 2 p. m., and 9 p. m.

b Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 46.83.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 45.12.

d Observations taken at sunrise, 2 p. m., and sunset.

e Same temperature on the 5th.

f Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 44.67.

g Daily maximum and minimum.

h Same temperature on the 18th.

i Same temperature on the 27th.

j For the first 21 days of the month only.

k Observations taken at 8 a. m., 2 p. m., and 10 p. m.

l Same temperature on the 27th and 28th.

m Observations taken at sunrise, noon, and sunset.

n Same temperature on the 28th.

o Same temperature on the 24th and 27th.

p Same temperature on the 26th.

q Incomplete.

r Same temperature on the 31st.

s Same temperature on the 28th and 29th.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date	Temp.	Date	M'n temp.	Date	Temp.	Date	Mean temp.	
VIRGINIA—	°	°	°	°		°		°		°		°	
Crichton's Store (a) .....	51.84	64.04	63.00	59.63	5	b 79	14	74.00	28	35	28	44.67	3.2
Cross Creek .....	38.41	58.36	43.41	46.73	1	80	1	64.67	21	24	21	31.00	----
Falmouth .....	50.48	62.97	51.65	55.03	4	86	4	73.33	22	34	22	40.00	----
Lewinsville .....	50.61	59.50	50.79	53.63	5	78	5	73.50	29	35	22	38.33	3.4
Lewisburg .....	40.74	58.00	46.32	48.35	1	69	1	61.67	31	20	31	29.67	3.7
Montross .....	42.29	52.68	44.61	46.53	10	67	10	60.00	14	22	14	29.33	3.5
Mont View .....	44.19	60.45	49.23	51.29	5	b 78	14	65.00	22	c 30	22	d 38.00	3.1
Poplar Grove .....	43.87	62.74	46.35	50.99	26	80	25	67.00	21	25	21	35.00	4.1
Portsmouth .....	48.98	65.18	50.21	54.79	5	79.5	5	65.83	21	e 33.5	21	42.83	2.2
Rose Hill .....						71				51			
Rougemont .....	48.48	63.08	52.07	54.54	1	f 78	1	g 70.00	28	32	28	40.00	4.1
Smithfield .....	46.72	63.46	30.65	53.61	5	76	14	67.70	30	27	21	38.10	3.5
Westwood .....	46.94	63.77	53.41	54.70	1	79	1	b 69.33	28	30	-----	?	----
Winchester .....	46.63	59.81	49.68	52.05	5	77	1	67.33	21	32	20	38.00	3.7
NORTH CAROLINA—													
Chapel Hill .....	49.29	67.13	54.45	56.96	5	h 80	1	68.67	22	i 33	21	i 41.67	3.1
Davidson College .....	46.01	62.29	51.81	53.37	5	75	-----	?	30	29	30	37.33	2.1
Green Plains .....	46.87	64.55	47.39	52.94	1	b 78	1	68.00	30	28	21	35.33	----
Marfreesborough .....	49.03	65.21	54.89	56.38	5	b 78	2	?	22	32	?	?	2.3
SOUTH CAROLINA—													
Aiken .....	53.93	71.67	55.17	60.26	25	j 83	25	k 69.67	29	33	29	41.67	2.3
All Saints .....	57.22	68.93	59.20	61.78	1	79	8	l 72.33	30	40	29	45.67	----
Charleston .....	59.19	70.48	65.26	64.98	1	80	1	74.33	30	40	30	49.00	----
St. John's .....	53.78	70.23	58.20	60.74	1	80	1	72.00	31	29	30	41.00	2.9
GEORGIA—													
Atlanta .....	49.97	67.42	56.03	57.81	26	80	1	69.33	28	m 34	29	40.00	2.1
Augusta .....	55.97	78.45	60.00	64.81	1	90	1	75.67	31	35	31	49.17	2.0
Clarksville .....	44.52	67.97	53.74	55.41	25	j 80	1	k 66.67	30	n 25	31	38.33	2.1
Savannah .....	58.28	71.40	64.42	64.70	n	81	1	73.93	30	39	30	47.67	3.1
Sparta .....	49.35	70.84	56.19	58.79	1	o 80	1	p 70.00	31	28	30	39.67	2.9
Thomaston .....	56.48	70.69	65.74	64.30	1	82	1	76.67	30	n 37	30	47.00	2.4
Whitemarsh Island .....	60.07	68.89	63.73	64.23	8	j 80	17	74.00	30	n 41	30	48.33	3.2
FLORIDA—													
Alligator .....	61.23	76.26	64.74	67.41	15	q 88	17	78.67	30	44	28	49.67	3.0
Atsena .....	64.61	75.74	69.26	69.87	2	86	2	78.00	30	46	29	55.00	4.2
Belair .....	63.44	75.70	66.74	68.63	14	r 86	2	s 78.00	31	42	31	50.67	----
Gainesville (t) .....	62.17	75.00	67.90	68.36	2	p 83	1	u 77.00	30	45	30	54.00	5.3
Jacksonville .....	66.61	76.41	67.19	70.07	7	85	1	78.66	29	50	29	54.66	4.5
Micanopy .....	62.74	77.07	66.06	68.62	8	86	1	77.40	30	45	30	53.83	4.5
St. Augustine .....	72.90	76.68	71.97	73.85	8	84	1	81.33	28	56	28	59.33	4.8
Salt Ponds (v) .....	79.00	85.16	-----	82.08	16	w 88	16	l 85.00	30	70	30	73.50	5.3
Warrington .....	65.00	79.26	63.50	69.25	5	89	1	z 80.00	30	40	29	47.33	2.7
ALABAMA—													
Cahawba .....	53.87	-----	54.36	54.11	-----	-----	-----	-----	-----	-----	-----	-----	1.9
Carlowville .....	55.35	73.39	62.32	63.69	4	82	4	74.67	30	32	30	44.00	3.0
Greene Springs .....	53.65	69.77	57.21	60.21	6	y 79	-----	?	31	31	-----	?	1.9
Greensborough (z) .....	52.93	72.22	57.28	60.81	26	84	-----	?	30	31	31	40.83	1.9
Orville .....	54.35	71.03	60.52	61.97	26	81	26	72.33	30	n 34	31	39.33	2.6
MISSISSIPPI—													
Columbus .....	50.30	69.32	56.71	58.78	5	j 80	14	71.77	30	29	30	38.89	2.3
Hernando .....	51.79	69.35	56.41	59.18	24	j 82	14	73.67	30	29	30	38.00	2.6
Natchez .....	55.87	70.19	62.84	62.97	17	82	17	78.00	30	32	30	42.67	3.5
Westville .....	57.00	74.13	60.80	63.98	3	87	7	77.67	30	32	30	?	?

a Observations taken at 8 a. m., noon, and 5 p. m.

b Same temperature on the 14th.

c Same temperature on the 28th, 29th, and 30th.

d Same temperature on the 28th and 31st.

e Same temperature on the 22d.

f Same temperature on the 5th and 13th.

g Same temperature on the 4th.

h Same temperature on the 25th.

i Same temperature on the 29th.

j Same temperature on the 26th.

k Same temperature on the 1st.

l Same temperature on the 12th.

m Same temperature on the 29th and 30th.

n Same temperature on the 31st.

o Same temperature on the 6th, 7th, 13th, 14th, 25th, and 23th.

p Same temperature on the 13th.

q Same temperature on the 17th.

r Same temperature on the 2d, 3d, and 4th.

s Same temperature on the 3d and 4th.

t Observations taken at 6 a. m., 2 p. m., and 9 p. m.

u Same temperature on the 2d.

v Thermometer 24 to 24 degrees too high.

w Same temperature on the 17th and 18th.

x Same temperature on the 5th.

y Same temperature on the 24th.

z Incomplete.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Meantemp.	
LOUISIANA—	°	°	°	°		°		°		°			
New Orleans .....	65.32	74.74	68.65	69.57	17	87	17	81.33	30	44	30	50.00	----
TEXAS—													
Austin, [Palm] .....	56.93	72.64	60.55	63.37	17	85	16	76.00	28	39	28	44.67	3.5
Austin, [Van Nostrand] .....	58.00	75.03	62.48	65.17	17	87	17	76.67	31	40	28	47.67	3.5
Bonham .....	54.51	74.68	59.84	63.01	25	a 86	14	74.00	29	32	29	41.00	2.9
Dallas .....	60.00	73.71	68.87	67.53	17	87	16	81.00	31	46	27	b 52.67	1.6
Gilmer (c) .....	49.65	78.23	-----	63.94	24	a 92	17	81.00	28	32	30	45.50	2.0
Larissa .....	57.69	74.52	64.40	65.54	17	87	16	77.00	28	36½	-----	?	2.5
New Braunfels .....	60.84	77.55	67.39	68.59	8	d 87	17	81.33	28	44	27	52.00	1.1
Roundtop .....	58.00	80.00	67.00	68.33	-----	93	-----	-----	-----	39	-----	-----	-----
Sisterdale .....	55.40	75.35	58.42	63.06	17	89	17	77.26	31	36	28	45.33	3.6
Union Hill .....	59.26	76.16	66.81	67.41	17	90	17	78.67	30	42	28	48.67	4.1
Washington .....	58.97	77.40	59.55	65.31	17	90	17	80.00	29	e 38	30	46.00	3.3
Webberville .....	59.65	75.58	64.10	66.44	7	d 88	16	f 78.67	28	41	28	48.33	2.7
ARKANSAS—													
Spring Hill (g) .....	53.80	71.21	-----	62.50	17	87	17	81.50	28	h 32	28	h 42.00	----
Washington (i) .....	50.90	71.77	-----	61.34	14	d 84	17	79.00	30	32	28	j 43.00	----
TENNESSEE—													
Glenwood .....	46.56	64.72	51.81	54.36	26	84	25	69.17	30	24	29	36.33	3.4
Memphis .....	50.29	66.16	55.90	57.45	26	79	26	68.33	29	25	30	37.00	1.9
Pomona .....	45.55	69.55	50.66	55.25	3	82	26	67.33	31	25	29	35.33	----
KENTUCKY—													
Bardstown .....	44.90	62.15	49.94	52.33	5	a 75	17	65.67	29	26	29	31.67	3.3
Danville .....	49.32	66.41	53.67	56.47	3	k 78	17	68.00	21	l 32	29	39.67	2.3
Lexington .....	45.06	59.45	50.13	51.55	3	k 73	5	63.33	28	h 29	29	36.33	3.7
Paris .....	43.33	58.55	48.74	50.21	3	72	14	66.33	28	26	29	36.00	3.8
Springdale (m) .....	42.19	63.39	56.21	53.93	4	79	17	67.67	29	21	28	35.00	3.9
OHIO—													
Avon .....	44.32	52.66	44.54	47.17	4	78	4	68.33	22	n 34	31	36.77	4.9
Bellefontaine .....	42.81	55.52	43.98	47.44	4	76	4	65.33	20	25	30	32.50	5.2
Bowling Green .....	41.27	56.73	45.85	47.95	4	76	13	66.60	21	27	27	34.80	4.9
Brecksville .....	44.06	56.16	46.84	49.02	3	o 70	13	61.00	8	k 30	20	35.00	4.8
Cincinnati, [Harper] .....	45.45	60.90	50.10	52.15	8	p 78	4	q 66.00	21	26	21	r 37.33	3.9
Cincinnati, [Phillips] .....	46.87	62.23	54.00	54.37	3	k 80	3	68.67	21	32	28	40.00	3.3
Cleveland .....	45.34	54.60	49.25	49.73	4	80	4	70.17	22	r 34	31	36.17	6.4
College Hill (s) .....	45.03	58.77	47.55	50.45	4	t 72	4	u 63.33	21	28	27	36.67	3.5
Collingwood .....	44.32	56.64	46.20	49.05	3	v 80	4	70.33	20	w 28	27	34.67	----
Elk Run .....	40.51	54.54	45.19	46.75	4	80	17	67.00	27	28	27	33.33	5.8
Freedom .....	40.39	52.52	44.77	45.89	4	p 72	4	63.33	27	e 28	21	32.33	5.3
Hillsborough .....	42.80	55.70	49.00	49.17	3	p 71	4	63.00	28	27	28	35.00	3.6
Hudson .....	43.55	52.1	46.52	47.39	5	71	4	64.07	27	31	27	34.70	6.0
Iberia .....	41.90	55.16	45.29	47.65	3	v 78	4	64.67	10	x 29	27	33.67	4.8
Jackson, [Monroe county] ..	41.19	54.29	45.33	46.94	3	72½	?	?	28	27	?	?	4.0
Kelley's Island .....	46.84	53.22	49.58	49.88	4	71	4	65.33	27	32	27	36.67	5.0
Madison, [Atkins] .....	44.82	53.86	46.86	48.51	3	v 73	4	66.33	19	32	21	35.67	5.9
Madison, [King] .....	43.90	53.35	44.61	47.29	4	78	4	70.67	27	28	26	32.67	6.2
Mount Union (y) .....	47.44	57.00	46.74	50.39	4	p 78	4	65.67	10	z 33	?	?	3.7
Montville .....	42.50	52.45	45.02	46.46	13	88	4	63.67	27	31	30	34.17	5.6
New Lisbon .....	40.42	55.87	44.58	46.96	2	p 74	17	61.67	24	r 28	21	32.67	4.9
Portsmouth .....	45.16	63.45	49.19	52.60	3	79	3	p 63.00	21	b 28	28	39.33	3.1
Ripley .....	50.32	-----	56.54	53.43	1	aa 68	14	63.50	28	34	28	h 39.00	----
Rockport .....	46.19	56.23	50.06	50.83	4	80	4	70.00	10	30	31	37.00	----

a Same temperature on the 26th.  
 b Same temperature on the 28th.  
 c Observations taken at sunrise and 2 p. m.  
 d Same temperature on the 17th.  
 e Same temperature on the 30th and 31st.  
 f Same temperature on the 18th.  
 g Observations taken at 7 a. m. and 3 p. m.  
 h Same temperature on the 29th.  
 i Observations taken at sunrise and 3 p. m.  
 j Same temperature on the 30th.  
 k Same temperature on the 4th and 5th.  
 l Same temperature on the 28th and 29th.  
 m Observations taken at 7 a. m., 2 p. m., and 5 p. m.  
 n Same temperature on the 31st.

o Same temperature on the 12th, 23d, 28th, and 31st.  
 p Same temperature on the 5th.  
 q Same temperature on the 13th.  
 r Same temperature on the 27th.  
 s Observations taken at 9 a. m., 2 p. m., and 9 p. m.  
 t Same temperature on the 25th.  
 u Same temperature on the 5th and 13th.  
 v Same temperature on the 4th.  
 w Same temperature on the 21st and 27th.  
 x Same temperature on the 21st.  
 y Incomplete.  
 z Same temperature on the 21st and 29d.  
 aa Same temperature on the 2d and 17th.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
OHIO—Continued.	°	°	°	°		°		°		°		°	
Savannah .....	40.16	56.00	44.71	46.96	3	80	4	65.67	21	a 27	21	32.33	5.6
Troy .....	39.48	56.74	46.45	47.56	3	77	13	b 62.33	21	22	21	34.67	3.9
Urbana (c) .....	39.13	59.29	45.06	47.83	■	80	17	65.00	21	22	29	33.00	4.5
Welchfield .....	40.87	52.61	42.52	45.33	■	76	4	64.67	27	d 26	26	31.67	5.0
Westerville .....	42.17	56.68	46.81	48.55	3	e 76	4	64.33	28	27	29	?	4.5
Windham .....	40.87	53.06	46.06	46.66	■	77	5	66.33	10	f 29	27	34.67	---
MICHIGAN—													
Battle Creek .....	42.10	53.71	43.20	46.34	4	78	4	68.00	21	g 28	27	33.33	4.1
Detroit .....	44.61	54.23	43.06	47.30	4	h 78	4	67.67	27	28	27	32.00	5.6
Grand Haven .....	44.03	50.45	46.45	46.98	4	70	4	65.67	27	28	27	33.67	5.9
Grand Rapids .....	39.06	52.77	41.87	44.57	4	82	4	69.33	27	23	28	32.33	5.2
Marquette .....	38.68	46.09	38.42	41.06	3	85	3	68.76	25	27	30	31.50	6.4
Monroe, [Bowlsby] .....	43.74	54.45	47.42	48.54	4	78	4	70.33	■	f 29	27	31.33	4.1
Monroe, [Whelpley] .....													5.4
Monroe Piers (i) .....	42.77	52.37	50.17	47.69	3	74	4	65.75	27	28	27	33.25	5.4
New Buffalo (j) .....	42.20	53.71	44.45	46.79	4	76	4	66.67	31	24	31	33.00	5.9
Ontonagon (k) .....	42.14	46.39	---	44.26	■	72	3	70.50	25	29	26	31.50	6.7
Ottawa Point (h) .....	41.35	48.96	47.06	45.00	3	72	4	65.00	27	26	26	31.25	6.5
Thunder Bay Island (m) .....	40.52	45.35	43.27	43.13	■	71	3	61.12	20	f 29	26	32.50	6.6
Ypsilanti .....	39.21	51.80	42.15	44.39	4	78	4	64.67	21	n 27	27	31.33	5.3
INDIANA—													
Aurora (o) .....	43.84	64.52	53.23	53.86	13	92	13	72.67	31	22	31	37.33	---
Cannelton .....	48.17	63.06	49.21	53.48	3	76	17	66.90	29	31	29	34.07	3.9
Logansport .....	44.45	60.10	48.03	50.86	4	80	4	71.33	21	23	31	36.00	4.8
Michigan City (p) .....	44.29	49.19	49.43	47.44	12	68	13	60.75	21	32	21	q 37.00	2.3
Mishawaka .....	40.22	55.39	42.90	46.17	■	76	4	66.00	21	29	20	34.33	4.4
New Albany .....	44.81	63.44	50.53	52.93	5	78	17	67.33	21	a 29	29	37.33	3.8
New Harmony .....	45.70	62.20	50.70	52.87	4	75	13	66.33	30	27	31	35.00	3.3
Richmond, [Haines] (r) .....	45.58	60.65	50.90	52.38	3	s 75	3	69.67	21	24	28	35.33	5.4
ILLINOIS—													
Augusta .....	42.54	59.70	47.51	49.92	3	79	3	66.33	31	20	28	32.00	2.9
Aurora .....	40.25	56.39	43.10	46.58	3	79	3	63.33	31	25	31	32.00	3.7
Bitavia, [Mead] .....	40.12	59.35	44.16	47.88	3	84	3	67.00	31	22	28	d 32.33	4.4
Edgington .....	42.77	60.58	47.48	50.28	■	83	■	66.67	31	22	28	33.33	3.7
Elgin .....	38.52	56.45	43.00	45.99	3	82	4	65.67	31	20	31	29.67	4.6
Galena .....													3.5
Manchester (j) .....	45.16	65.22	47.58	52.65	3	b 81	13	65.00	31	22	31	35.00	3.7
Marengo .....	42.21	55.11	43.26	46.86	3	79	4	68.33	28	d 23	18	d 30.00	3.5
Naperville .....	42.28	56.24	44.00	47.51	3	78	3	66.67?	18	23	31	33.33	4.0
Ottawa .....	39.04	57.23	46.10	47.46	3	79	3	65.67	31	21	31	31.33	4.7
Pekin .....	43.19	59.10	49.16	50.48	12	79	3	64.33	31	24	31	33.00	3.7
Peoria .....	44.02	59.85	50.35	51.41	2	79	3	67.33	31	25	31	33.00	3.3
Riley .....	42.06	57.45	41.10	46.87	3	83	4	68.00	31	15	31	28.00	3.4
Sandwich .....	40.42	59.03	46.33	48.59	3	82	3	68.00	31	22	31	31.33	3.6
West Salem .....	46.26	64.94	52.16	54.45	4	80	13	66.33	30	27	29	36.67	3.0
West Urbana .....	43.77	60.19	46.81	50.26	17	u 77	8	v 64.33	28	25	28	31.00	4.2
Wheaton .....	40.52	55.73	43.85	46.90	3	79	3	65.33	31	27	31	29.67	5.2
Winnebago .....	39.29	56.82	43.29	46.47	3	84	■	68.67	31	22	28	d 31.00	3.8
Woodstock .....	41.45	60.03	47.04	49.51	3	82	3	68.33	28	20	?	?	5.1
MISSOURI—													
Cassville .....	55.87	65.94	60.42	60.74	25	79	25	71.67	30	32	30	35.67	3.1
Paris .....	43.48	60.90	49.94	51.44	3	80	■	66.00	30	d 22	28	32.00	2.8

a Same temperature on the 28th.

b Same temperature on the 17th.

c The records of thermometer at this place are 0°.85 too high.

d Same temperature on the 31st.

e Same temperature on the 4th and 5th.

f Same temperature on the 27th.

g Same temperature on the 29th.

h Same temperature on the 5th.

i Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 45.45.

j Observations taken at 7 a. m., 1 p. m., and 9 p. m.

k Observations taken at 9 a. m. and 3 p. m.

l Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 42.61.

m Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 43.40.

n Same temperature on the 27th and 30th.

o Observations taken at 6 a. m., 3 p. m., and 9 p. m.

p Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 46.80.

q Same temperature on the 24th and 31st.

r Observations taken at 7 a. m., noon, and 9 p. m.

s Same temperature on the 4th and 13th.

t Same temperature on the 17th and 25th.

u Same temperature on the 24th.

v Same temperature on the 4th and 13th.



## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
MISSOURI—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
St. Louis, [Engelmann]-----	47.43	63.68	52.03	54.39	4	80	4	66.67	31	27	29	35.17	2.8
St. Louis, [Fendler]-----	44.07	63.93	48.58	52.19	24	81	4	65.33	31	19	31	31.80	---
Stockton-----	52.93	65.25	53.86	57.35	13	a 80	?	?	29	26	29	31.32	3.0
Warrenton-----	44.18	61.79	46.97	50.98	7	b 76	?	?	31	20	31	30.00	2.6
WISCONSIN—													
Appleton-----	39.77	52.03	42.90	44.90	3	82	3	66.67	27	24	27	30.33	4.0
Bay City-----	32.39	41.06	33.74	35.73	3	72	3	57.33	21	18	20	26.67	---
Beloit-----	38.42	55.58	42.58	45.53	3	82	3	66.67	31	18	31	28.33	3.5
Delafield-----	43.07	56.96	45.61	48.55	15	78	---	?	31	26	31	35.00	5.3
Green Bay-----	40.55	54.29	43.90	46.25	3	84	4	66.67	20	26	22	29.33	7.1
Janesville (c)-----	32.29	53.12	39.87	41.76	12	72	---	?	31	19	31	30.33	3.7
Kenosha-----	43.40	55.82	46.11	48.44	3	81	4	67.67	27	29	27	34.67	3.6
Manitowoc-----	40.61	52.71	44.94	46.09	3	83	3	67.67	27	d 28	27	34.67	5.7
Milwaukee, [Lapham]-----	44.26	54.07	47.79	48.71	3	79	3	68.00	28	30	27	35.33	---
Milwaukee, [Larkin]-----	41.67	---	41.54	41.60	12	63	---	?	28	30	28	e 30.00	6.0
Milwaukee, [Winkler]-----	43.08	55.44	44.35	47.62	3	83	4	69.67	28	28	27	33.67	4.0
Pardeeville-----	37.81	55.55	46.41	46.59	3	83	3	70.33	20	24	---	?	5.8
Platteville-----	41.09	57.39	45.33	47.94	3	82	4	70.00	31	21	31	31.33	3.8
Rocky Run-----	40.23	57.03	44.97	47.41	4	86	4	72.33	27	e 26	27	32.33	4.6
Superior, [Mann]-----	34.11	40.94	36.18	37.08	---	---	---	---	---	---	---	---	7.6
Superior City, [Stuntz] (f)---	35.29	46.64	44.16	41.34	3	81	3	66.75	31	20	31	29.75	5.0
Wausau-----	37.45	51.77	42.23	43.82	3	85	4	67.00	20	22	27	g 30.67	5.8
IOWA—													
Bellevue-----	38.90	62.13	44.00	48.34	3	88	3	71.33	31	14	31	30.33	4.2
Burlington-----	45.71	60.55	46.74	51.00	3	82	3	69.33	31	26	31	33.00	4.2
Dubuque-----	41.74	56.74	47.29	48.59	3	84	4	70.33	31	21	31	34.33	3.8
Fairfield-----	44.39	59.52	46.79	50.23	3	81	3	67.33	31	27	28	31.33	4.1
Fayette Village-----	35.81	55.78	41.26	44.28	4	80	4	64.00	31	11	30	e 29.33	3.7
Forestville-----	39.87	57.00	44.00	50.29	3	83	3	65.67	31	18	30	30.33	2.6
Fort Madison (h)-----	42.22	57.83	48.45	49.50	3	78	3	66.00	31	21	28	e 32.67	3.2
Muscatine-----	39.77	59.32	43.39	47.49	3	82	3	68.00	31	14	31	29.33	2.4
Pleasant Plain-----	41.94	59.06	45.48	48.83	3	80	3	68.00	31	14	28	31.00	3.4
Rossville-----	37.80	55.60	42.43	45.28	3	85	3	69.20	31	12	31	30.77	3.8
MINNESOTA—													
Beaver Bay, [Clark]-----	35.79	44.89	38.06	39.58	3	79	3	63.67	20	22	30	30.33	5.1
Beaver Bay, [Wieland]-----	34.19	45.61	35.45	38.42	3	82	3	65.67	20	13	29	28.00	5.1
Burlington-----	33.35	47.64	37.52	39.50	3	82	3	63.67	20	21	27	29.67	5.5
Chatfield-----	38.39	55.87	43.06	45.77	3	86	3	68.67	31	16	30	30.33	3.8
Forest City-----	36.03	53.61	39.81	43.15	3	80	3	62.00	18	18	27	30.67	2.0
Hazlewood (c)-----	37.00	49.00	40.17	42.06	15	72	---	?	18	24	28	30.33	4.5
Princeton-----	36.67	52.19	41.87	43.58	3	80	3	63.33	31	21	28	31.00	4.9
NEBRASKA—													
Bellevue-----	42.20	62.40	47.03	50.54	4	82	3	65.67	20	23	28	31.00	2.3
Brownville-----	44.71	69.35	50.26	54.77	2	91	3	75.33	30	17	30	31.33	2.8
Elkhorn-----	40.19	62.26	47.19	49.88	3	88	3	69.00	28	i 20	28	27.67	2.8
Nebraska City-----	44.94	61.32	48.32	51.53	3	84	3	69.00	28	23	28	30.10	2.5
Omaha, [Rain]-----	42.96	62.33	48.77	51.35	3	88	3	71.33	30	16	28	30.33	3.7
KANSAS—													
Burlingame-----	44.93	65.87	50.35	53.72	25	86	25	70.67	29	22	29	32.00	1.8
Denver City-----	37.42	67.68	41.80	48.97	6	j 78	6	60.33	28	g 17	28	28.67	1.8
Lecompton-----	50.32	69.74	53.90	57.99	22	k 86	8	70.33	26	g 32	27	40.00	1.9
Manhattan (c)-----	41.48	70.96	52.52	54.99	2	l 84	2	67.33	18	28	18	43.67	4.0
Neosho Falls-----	45.68	66.68	51.48	54.61	3	82	13	66.00	29	20	29	32.67	2.2
Wyandott City-----	44.65	64.10	57.13	55.29	3	82	24	72.67	28	28	28	35.33	4.6
UTAH—													
Great Salt Lake City-----	48.00	66.00	56.00	56.67	---	76	---	---	---	39	---	---	---

a Same temperature on the 22d and 25th.

b Same temperature on the 24th.

c Incomplete.

d Same temperature on the 28th.

e Same temperature on the 31st.

f Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 39.29.

g Same temperature on the 29th.

h Observations taken at 6 a. m., noon, and 7 p. m.

i Same temperature on the 30th.

j Same temperature on the 15th.

k Same temperature on the 23d.

l Same temperature on the 6th.

## No. 23.—THERMOMETER AND FACE OF SKY, OCTOBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.	
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.		
CALIFORNIA—	°	°	°	°		°		°		°		°		
Auburn				81.65										1.1
Monterey	55.51	68.11	55.69	59.77	1	95	1	75.49	31	49	16	54.50		
Sacramento	56.19	70.22	63.61	63.34	2	83	2	73.00	11	49	17	56.67		1.3
San Francisco	55.22	68.00	57.55	60.26	2	92	1	76.33	16	a 51	5	b 54.33		2.4
Santa Clara	51.66	74.84	58.51	61.67	2	95	1	75.00	16	41	16	53.33		2.3
Union Rancho	52.51	81.61	63.03	65.72	3	93	2	75.00	17	44	16	a 57.33		0.8
MEXICO—														
Cordova (c)	69.82	72.05	70.03	70.91	17	76.6			31	63				
Mirador (d)	66.43	72.82	66.52	68.59					31	59				
WEST INDIES—														
St. George's, Bermuda (e)				72.4		81.5				64				
Turk's Island	80.58	83.77	81.26	81.87	7	f 86	10	g 83.33	22	h 77	22	77.33		
CENTRAL AMERICA—														
Guatemala (i)				66.04	25	j 77			30	53.8				
SOUTH AMERICA—														
Cathar'a Sophia, Surinam (k)	74.95	88.19	79.97	81.04	18	92	20	83.00	30	72	29	77.67		4.1

*a* Same temperature on the 17th.*b* Same temperature on the 10th.*c* Observations taken at 9 a. m., 12 m., 3, 6, and 9 p. m. Mean at 12 m., 71.36; mean at 6 p. m., 71.10.*d* Observations taken at 7 a. m., 2 p. m., and 8 p. m.*e* Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.*f* Same temperature on the 9th, 10th, 11th and 12th.*g* Same temperature on the 11th and 12th.*h* Same temperature on the 23d.*i* Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.*j* Same temperature on the 21st.*k* Observations taken at 6 a. m., 2 p. m., and 6 p. m.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Fort Rae (a).....	—7.87	—1.53	—4.67	—4.68	1	30	1	26.33	30	—37	30	32.33	3.6
Fort Simpson.....	—5.33	0.53	—3.37	—2.72	3	b 20	3	16.33	30	—35	30	—29.00	3.9
Hamilton (c).....	39.54		41.60	40.57	4	64	4	58.50	13	d 30	14	e 31.00	
Montreal.....	30.58	35.69	33.24	33.17	9	56	9	50.10	29	13	29	16.43	7.9
Red River Settlement.....	13.87	21.57	15.44	16.96	2	34	7	32.00	31	—21	31	—14.33	5.7
St. John's.....	33.20	35.07	32.83	33.70	20	56	20	51.33	31	17	31	22.33	5.1
St. Martin (f).....	25.89	38.25	28.07	30.74	18	54	18	45.67	25	7	29	13.97	
Stanbridge.....	31.37	37.80	32.93	34.03	19	61	9	52.33	29	10	29	17.00	7.6
Toronto (f).....	36.43	42.17	38.63	39.08	5	61	4	51.15	24	24	24	27.37	8.1
Windsor.....	32.13	40.28	34.72	35.71	18	62.5	19	53.80	31	11	29	18.30	7.2
Wolfville.....	33.45	41.19	33.81	36.15	18	63	18	55.67	29	14	29	21.67	8.0
MAINE—													
Bangor.....	32.30	41.60	32.22	35.37	18	60	---	?	29	14	29	20.00	5.5
Belfast (g).....	32.67	39.48	34.80	35.65	9	58	19	54.00	29	14	29	15.33	6.9
Cornish, [West].....	30.10	40.50	32.80	34.47	9	62	19	54.00	25	14	29	20.00	5.0
Cornishville.....	33.63	41.90	35.53	37.02	9	64	9	55.33	25	16	25	23.33	5.7
Dexter.....													6.8
Gardiner.....	31.35	40.52	33.63	35.17	19	57	19	54.33	7	19	29	21.67	6.7
Lisbon.....	31.48	43.13	34.80	36.47	9	64	19	56.33	28	17	29	23.67	6.1
Perry.....	32.57	38.17	33.77	34.84	18	60	19	51.33	29	14	29	19.33	6.3
Portland.....	34.55	41.52	36.65	37.57	9	58	19	51.16	25	24	21	28.16	6.3
Steuben.....	33.97	40.43	35.03	36.48	9	60	19	52.33	7	20	21	25.00	7.1
Topsham.....	31.20		31.70	31.45	13	46	13	42.00	29	17	29	17.50	6.3
Vassalborough.....	34.04	39.96	35.23	36.41	18	65	18	52.33	29	18	29	21.33	5.9
NEW HAMPSHIRE—													
Claremont.....	34.10	47.23	37.63	39.65	19	66	19	60.67	7	h 20	25	25.67	5.8
Shelburne (i).....													6.4
Stratford.....	29.73	38.43	31.40	33.19	9	j 58	19	56.67	29	11	29	17.67	7.1
VERMONT—													
Brandon.....	33.86	42.65	36.74	37.75	5	66	19	58.67	29	18	29	25.50	6.6
Burlington.....	33.02	38.60	35.80	35.81	19	60	19	55.33	29	12	29	20.67	7.2
Craftsbury.....	29.47	37.97	33.17	33.54	5	61	19	55.00	29	9	29	18.00	6.9
Lunenburg.....	28.68	38.65	33.19	33.51	9	k 58	?	?	29	10	29	17.67	6.5
Rupert.....	35.60	45.00	40.27	40.29	5	66	18	59.33	29	26	29	29.33	5.7
St. Johnsbury.....	29.43	40.59	32.21	34.05	5	62	19	54.33	29	10	29	17.67	6.8
MASSACHUSETTS—													
Amherst.....	37.03	47.67	39.64	41.45	13	66	5	56.33	7	25	25	30.50	5.4
Bridgewater.....	37.17	48.93	41.92	42.67	5	69	13	60.92	15	25	24	31.92	5.6
Cambridge.....	37.07	48.31	41.29	42.22	5	69	5	59.67	21	27	21	31.67	5.2
Lawrence.....	35.20	46.58	39.58	40.45	9	68	13	59.67	16	23	25	30.67	5.5
Mendon.....	36.10	49.03	38.43	41.19	5	70	20	61.00	26	22	26	28.00	4.4
Nantucket.....	44.58	50.32	44.27	46.39	10	66	10	58.00	24	l 36	24	b 37.00	4.0
New Bedford.....	39.08	49.18	40.77	43.01	5	62	10	56.33	21	26	24	31.70	5.2
Richmond.....	31.90	44.20	36.30	37.47	5	m 64	9	52.00	24	23	24	26.67	6.3
Westfield.....	34.33	47.07	37.40	39.60	5	70	19	59.00	21	24	25	28.67	5.7
Williamstown.....	35.38	43.88	37.24	38.83	5	69	19	58.46	16	21	25	26.67	6.7
Worcester.....	37.40	48.14	38.64	41.39	5	68	19	59.17	21	25	?	?	4.4
RHODE ISLAND—													
Providence (n).....	39.10	50.20	40.70	43.33	5	70	19	57.67	25	29	24	32.67	4.7
CONNECTICUT—													
Columbia.....	35.97	48.27	35.70	39.98	5	o 68	5	61.33	14	p 24	24	28.00	4.2
Middletown.....	36.04	57.08	39.18	44.10	5	71	19	60.30	16	q 25	25	32.03	3.5
Pomfret.....	36.38	45.83	37.98	40.06	5	65	19	57.33	21	23	25	28.83	5.1
Saybrook.....	39.31	48.07	42.21	43.20	10	60	19	56.00	25	26	25	33.67	5.2
Wallingford.....	35.30	49.60	39.02	41.31	5	69	19	58.17	15	22½	24	31.00	3.6

a Observations taken at 7 a. m., 2 p. m., and 7 p. m.

b Same temperature on the 25th.

c Observations taken at 9 a. m. and 9 p. m.

d Same temperature on the 14th, 20th, and 25th.

e Same temperature on the 20th.

f Observations taken at 6 a. m., 2 p. m., and 10 p. m.

g Observations taken at 7 a. m., noon, and 6 p. m.

h Same temperature on the 29th.

i Incomplete.

j Same temperature on the 10th, 13th, and 19th.

k Same temperature on the 12th.

l Same temperature on the 25th and 29th.

m Same temperature on the 9th and 16th.

n Observations taken at sunrise, 2 p. m., and 10 p. m.

o Same temperature on the 9th.

p Same temperature on the 21st, 24th, and 25th.

q Same temperature on the 21st.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—	°	°	°	°		°		°		°		°	
Bellport .....	42.17	48.40	42.53	44.37	10	a 58	18	56.00	15	b 30	24	34.00	4.5
Beverly .....	37.60	48.06	40.00	41.89	5	64	—	?	16	c 25	—	?	4.8
Buffalo (d) .....	41.17	44.82	43.33	43.11	8	59	4	57.00	13	28	—	?	6.5
Charlotte (e) .....	37.80	44.60	43.03	41.43	4	67	—	60.00	25	27	24	28.25	8.0
Flatbush .....	39.50	49.92	42.49	43.97	5	66	19	56.93	15	c 27	25	32.90	4.5
Fort Niagara (f) .....	37.60	42.33	41.36	40.04	4	65	4	60.00	25	25	25	b 29.00	7.6
Nichols .....	34.97	47.30	37.50	39.92	9	66	19	56.00	16	18	24	27.33	6.3
Oswego .....	38.40	46.17	41.00	41.86	4	70	4	g 57.33	25	25	25	30.00	7.4
Penn Yan (h) .....	34.23	44.77	40.40	39.80	4	67	5	59.67	24	i 24	24	25.33	2.8
Rochester, [Dewey] .....	38.33	44.97	40.37	41.22	4	68	4	59.00	14	27	24	28.00	7.6
Sackett's Harbor (j) .....	37.27	42.25	41.10	39.82	4	60.5	5	56.50	25	23	21	26.62	7.5
Wampsville .....	36.33	44.37	38.57	39.76	9	65	5	56.00	21	c 25	20	27.33	7.0
Waterford .....	36.60	46.63	40.30	41.18	19	67	19	59.67	7	k 25	25	28.33	5.8
NEW JERSEY—													
Freehold .....	41.47	51.32	44.50	45.76	5	70	5	59.00	25	29	14	32.33	—
Lambertville .....	38.21	50.77	41.91	43.63	5	71	19	59.73	16	25	14	32.67	5.3
Newark (l) .....	—	—	—	44.27	5	66	19	59.50	15	22	25	32.63	—
Woodstown .....	42.97	57.27	43.27	47.84	9	76	19	59.33	14	28	14	55.38	3.3
PENNSYLVANIA—													
Altoona .....	36.90	49.30	41.20	42.47	5	69	5	63.00	14	22	14	27.33	4.0
Bedford .....	36.13	48.33	42.90	42.52	5	64	5	56.00	14	k 22	15	27.00	3.7
Berwick .....	39.03	49.30	41.30	43.21	10	64	10	58.33	16	28	14	30.67	3.5
Cannonsburg .....	38.80	50.93	45.60	45.11	4	68	5	59.33	14	16	13	25.67	4.2
Chambersburg .....	37.23	51.03	42.30	43.52	5	70	10	58.33	14	24	14	32.33	4.6
Easton (m) .....	38.37	50.37	38.93	42.56	5	69	19	57.67	13	25	14	30.50	4.9
Fleming .....	33.40	49.56	38.10	40.35	5	70	5	n 56.33	16	18	14	27.00	4.2
Gettysburg .....	36.50	50.58	40.07	42.38	5	72	10	53.33	15	18	14	29.00	3.7
Harrisburg, [Heisely] .....	41.77	51.71	45.63	46.37	5	n 64	10	g 58.67	15	28	25	35.67	3.9
Harrisburg, [Hickok] .....	39.47	51.24	42.85	44.52	5	70	19	59.00	15	k 27	14	31.00	4.6
Lewisburg .....	36.68	47.69	39.24	41.20	5	69	5	55.33	17	19	15	27.83	6.0
Morrisville .....	36.97	50.27	40.57	42.60	—	64	19	57.67	14	o 24	24	31.00	3.4
Mount Joy .....	38.75	53.70	43.60	45.35	5	71	18	61.17	15	24	25	34.17	—
Nazareth (p) .....	40.09	50.78	44.48	45.12	5	70	5	59.33	15	27	—	?	6.0
Norristown .....	39.15	51.21	43.56	44.64	19	62	19	60.00	15	25	14	31.80	3.5
North Whitehall (q) .....	36.60	48.63	42.60	42.61	5	g 65	19	60.67	16	21	14	o 30.67	4.6
Philadelphia .....	42.63	53.35	46.48	47.49	5	68	19	61.00	14	30	14	33.67	5.1
Pittsburg, [Marine Hosp.] ..	36.10	48.60	41.23	41.98	4	63	18	51.00	14	21	14	27.67	6.5
Pocopson .....	38.55	52.86	42.52	44.64	5	68	19	58.33	15	24	14	31.50	3.7
Sewickleyville .....	32.73	47.83	37.90	39.49	4	68	5	59.33	14	17	14	?	4.8
Shamokin .....	35.80	49.13	40.87	41.93	5	68	10	59.33	16	18	14	28.00	5.8
Somerset .....	36.00	49.40	41.00	42.13	4	69	5	59.33	14	15	13	24.00	5.3
Tarentum .....	33.43	50.03	39.73	41.06	4	r 69	5	56.67	29	20	14	27.00	4.7
West Haverford .....	40.67	51.07	—	45.87	5	66	19	61.00	14	c 26	14	29.50	3.8
Worthington .....	34.67	50.83	40.40	41.97	4	73	18	55.00	14	19	13	28.00	4.9
MARYLAND—													
Annapolis .....	41.68	53.15	48.25	47.69	26	65	19	58.33	14	24	14	33.50	3.6
Bladensburg .....	41.52	54.43	45.07	47.02	26	67	?	?	1	s 27	—	?	3.7
Chestertown .....	41.63	52.79	55.12	46.51	26	65	19	58.83	25	26	14	32.17	3.5
Frederick .....	40.64	51.11	43.03	44.93	5	65	10	57.83	14	o 27	14	33.17	3.8
Leitersburg .....	35.77	51.13	40.03	42.31	5	69	10	58.00	15	t 18	14	28.33	3.8
Sykesville .....	40.20	53.27	43.97	45.81	5	70	10	59.67	15	c 21	14	32.33	3.8
DISTRICT OF COLUMBIA—													
Washington .....	43.30	53.77	47.27	48.11	26	67	10	60.00	13	u 28	14	34.67	3.4

a Same temperature on the 18th.

b Same temperature on the 21st.

c Same temperature on the 25th.

d Observations taken at 8 a. m., 2 p. m., and 9 p. m.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9

a. m., 40.30.

f Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9

a. m., 38.86.

g Same temperature on the 19th.

h Observations taken at sunrise, 2 p. m., and sunset.

i Same temperature on the 30th.

j Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9

a. m., 38.65.

k Same temperature on the 16th.

l Daily maximum and minimum.

m Observations taken at 8 a. m., 2 p. m., and 10 p. m.

n Same temperature on the 10th.

o Same temperature on the 15th.

p Incomplete.

q Observations taken at sunrise, noon, and sunset.

r Same temperature on the 5th.

s Same temperature on the 2d, 14th, and 15th.

t Same temperature on the 17th.

u Same temperature on the 14th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—	°	°	°	□		°		°		°		°	
Crichton's Store (a) .....	49.35	57.15	56.94	54.48	5	72	5	65.00	14	26	14	37.00	5.1
Cross Creek .....	29.37	50.08	36.36	38.60	4	75	4	48.00	14	b 16	13	22.67	-----
Falmouth .....	46.97	58.57	48.50	51.35	5	75	5	62.33	13	20	14	37.00	-----
Lewisburg .....	35.87	55.93	40.90	44.23	12	70	10	56.00	14	14	13	26.67	3.2
Mont View .....	40.43	57.27	47.00	48.23	5	76	10	64.00	1	c 24	1	32.00	2.9
Poplar Grove .....	37.83	60.90	42.00	46.91	4	79	12	68.33	14	20	13	25.33	3.6
Portsmouth .....	46.73	59.83	49.53	52.03	12	74.5	12	63.00	15	30.5	14	33.17	4.0
Rose Hill .....						74				32			-----
Rougemont .....	44.37	61.00	49.57	51.65	5	76	10	65.67	14	20	14	33.67	3.5
Smithfield .....	43.72	60.36	47.28	50.45	5	74	26	61.70	14	22	14	31.60	4.2
Westwood .....	43.32	57.91	49.47	50.24	5	72	10	61.33	14	22	14	33.67	-----
Wheeling .....	34.72	50.71	41.02	42.15	4	69	4	54.67	13	c 19	13	22.33	5.9
Winchester .....	39.23	32.04	43.20	45.21	10	70	10	60.67	14	22	14	30.67	3.2
NORTH CAROLINA—													
Chapel Hill .....	45.13	61.67	50.67	52.49	5	74	26	61.67	12	22	14	34.67	4.5
Davidson College .....	42.40	58.46	49.10	49.99	12	72	12	61.27	14	21	14	35.17	3.0
Green Plains .....	42.70	60.60	43.53	48.94	5	d 72	12	60.67	14	20	14	30.67	-----
Murfreesborough .....	46.30	59.74	51.33	52.46	12	72	18	64.33	14	26	14	33.67	3.5
SOUTH CAROLINA—													
Aiken .....	47.75	67.25	51.79	55.60	10	80	12	65.67	14	24	14	38.00	2.4
All Saints .....	59.23	64.53	56.30	60.02	12	75	18	68.33	14	31	14	38.00	4.4
Charleston .....	55.37	64.90	59.73	60.00	10	e 73	28	67.00	14	32	14	41.33	-----
Columbia, [White] .....	60.53	74.67	64.90	66.70	15	88	26	78.67	29	44	21	50.33	1.5
St. John's .....	48.86	64.92	53.20	55.66	12	75	27	68.00	15	27	14	36.33	4.2
GEORGIA—													
Atlanta .....	46.23	62.27	55.27	54.59	10	f 72	24	g 61.67	14	24	13	32.67	2.1
Augusta .....	49.04	72.52	54.83	58.80	12	83	27	69.17	14	h 30	14	41.33	2.2
Clarksville .....	37.57	62.70	47.60	49.29	12	i 74	7	d 61.67	14	20	13	30.33	2.6
Sparta .....	44.77	65.20	52.00	53.99	12	78	27	66.33	14	19	14	31.67	2.8
Thomaston .....	51.87	66.10	60.80	59.59	11	79	11	71.33	14	25	14	38.00	1.9
Whitemarsh Island .....	55.23	66.30	59.43	60.32	27	e 76	28	69.33	14	33	14	40.67	3.2
FLORIDA—													
Alligator .....	55.37	70.77	59.00	61.71	11	82	12	69.33	14	32	14	38.67	3.2
Atsena .....	58.97	66.90	63.60	63.16	24	74	29	70.33	14	32	14	42.33	2.7
Belair (j) .....	51.20	67.46	56.66	58.44	25	b 81	25	72.33	15	28	15	39.33	-----
Gainesville (k) .....	56.00	70.54	62.20	62.91	11	78	30	70.67	14	34	14	?	3.4
Jacksonville .....	60.30	70.40	61.38	64.03	11	l 79	10	71.33	15	35	14	44.00	3.7
Micanopy .....	55.37	71.67	60.43	62.49	30	79	21	69.73	14	h 33	14	40.33	3.9
St. Augustine .....	63.27	69.57	64.27	65.70	18	80	28	72.67	14	40	14	44.33	3.7
Salt Ponds (m) .....	71.80	76.23	-----	74.01	12	82	12	80.00	14	58	14	59.50	4.0
Seville .....	55.19	-----	-----	-----	28	75	-----	-----	14	32	-----	-----	3.7
Warrington .....	59.03	70.03	63.50	64.19	6	81	12	73.33	14	32	14	43.67	3.0
ALABAMA—													
Cahawba .....	47.00	71.30	54.14	57.48	11	f 82	26	n 71.67	14	20	-----	?	2.3
Carlowville .....	53.93	72.50	61.45	62.63	25	82	11	71.33	14	24	14	36.33	1.2
Greene Springs .....	48.81	67.82	54.65	57.09	12	80	11	71.33	14	20	13	31.33	3.0
Greensborough (j) .....	48.58	68.54	54.23	57.12	11	i 81	-----	?	14	23	-----	?	2.6
Orville .....	46.50	67.57	55.27	56.45	11	81	11	71.67	14	22	13	31.67	3.0
MISSISSIPPI—													
Columbus .....	45.72	65.67	53.97	55.12	12	79	11	70.13	14	17	13	28.90	3.3
Hernando .....	50.40	64.76	55.46	56.87	5	o 80	11	72.33	13	21	13	28.00	4.6
Natchez .....	52.87	68.60	60.80	60.76	27	80	27	75.00	14	22	13	32.67	4.3
Westville .....	52.55	70.23	63.97	62.25	11	85	11	78.00	13	c 23	13	31.67	4.4
LOUISIANA—													
New Orleans .....	59.73	72.00	64.90	65.54	27	p 81	27	q 75.33	13	38	13	41.00	-----

a Observations taken at 8½ a. m., noon, and 4½ p. m.

b Same temperature on the 29th.

c Same temperature on the 14th.

d Same temperature on the 12th.

e Same temperature on the 28th.

f Same temperature on the 11th.

g Same temperature on the 30th.

h Same temperature on the 15th.

i Same temperature on the 23d.

j Incomplete.

k Observations taken at 6 a. m., 2 p. m., and 9 p. m.

l Same temperature on the 22d.

m Thermometer 2½ to 2¾ degrees too high.

n Same temperature on the 27th.

o Same temperature on the 8th, 11th, and 24th.

p Same temperature on the 11th and 24th.

q Same temperature on the 26th.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—	°	°	°	°		°		°		°		°	
Austin, [Palm] .....	53.20	70.63	58.73	60.85	23	81	23	73.34	14	23	12	34.34	4.2
Austin, [Van Nostrand] .....	53.16	73.12	60.83	62.37	11	83	23	75.00	14	24	13	35.83	4.4
Bonham .....	51.87	70.20	58.17	60.08	11	85	30	73.33	13	22	12	26.00	3.5
Burkeville .....	48.33	69.85	52.70	56.96	11	87	11	74.67	14	13	13	27.17	3.4
Cross Roads .....	52.90	64.10	58.27	58.42	23	82	23	75.00	13	23	13	33.00	4.1
Dallas .....	58.50	70.77	65.83	65.03	11	a 84	11	79.33	13	24	12	34.00	2.7
Gilmer (b) .....	49.40	72.43	.....	60.91	11	88	11	77.00	13	18	13	23.33	3.4
Larissa .....	55.77	71.57	62.98	63.44	11	82	23	74.33?	13	18	.....	?	3.1
New Braunfels .....	57.13	73.43	64.20	64.92	11	85	23	78.33	14	22	13	37.33	1.0
Roundtop .....	57.00	77.50	63.00	65.83	17	88	.....	.....	.....	18.5	.....	.....	.....
Sisterdale .....	50.76	71.42	54.66	58.95	11	83	23	71.46	14	10	13	30.50	4.1
Union Hill .....	56.17	73.03	63.43	64.21	23	c 86	27	77.33	13	23	13	33.67	3.9
Washington .....	55.27	73.62	59.31	62.74	11	86	27	77.33	14	18	13	30.75	4.4
Webberville .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.3
ARKANSAS—													
Spring Hill (d) .....	52.48	69.18	.....	60.83	11	84	11	76.00	13	18	13	32.00	3.2
Washington (b) .....	49.90	67.43	.....	58.66	11	82	11	74.50	13	20	13	33.00	.....
Yellville (e) .....	39.88	.....	.....	.....	.....	56	.....	.....	13	17	.....	.....	4.1
TENNESSEE—													
Glenwood .....	43.96	59.27	50.07	51.10	4	f 73	4	g 61.33	13	15	13	21.07	4.3
Memphis .....	48.43	61.77	54.30	54.83	11	76	11	69.33	13	20	13	29.00	3.6
Pomona .....	41.37	63.07	43.07	49.17	3	74	30	60.00	14	15	13	21.33	.....
KENTUCKY—													
Bardstown .....	41.77	57.18	47.67	48.84	9	71	4	h 59.50	14	12	13	19.33	4.3
Danville .....	43.73	60.03	48.43	50.73	12	75	4	i 61.33	13	14	13	20.33	3.3
Lexington .....	41.66	55.21	46.50	47.79	4	71	4	j 59.67	13	k 14	13	18.00	4.6
Paris .....	40.52	54.62	45.03	46.72	4	69	4	63.00	13	19	13	20.67	4.7
Springdale (l) .....	40.90	56.65	51.42	49.66	4	74	5	63.83	13	k 16	13	19.67	4.8
OHIO—													
Avon .....	39.97	48.14	43.76	43.96	4	72	4	65.17	12	24	13	25.17	5.5
Bellefontaine .....	37.73	50.23	41.60	43.19	7	j 66	9	58.67	14	15	13	18.00	6.2
Bowling Green .....	39.46	50.71	43.32	44.50	4	70	4	63.53	15	19	13	24.60	5.7
Brecksville .....	37.27	48.77	41.80	42.61	4	70	4	58.33	13	k 20	13	22.67	5.0
Cincinnati, [Harper] .....	40.43	54.83	46.83	47.36	8	j 73	5	62.00	14	12	13	20.00	5.5
Cincinnati, [Phillips] .....	43.07	55.90	48.93	49.30	4	h 74	5	65.33	13	20	13	23.00	3.7
Cleveland .....	39.65	49.05	44.88	44.53	4	72	4	63.50	13	k 23	13	25.50	7.3
College Hill .....	39.57	53.33	41.07	44.66	30	m 68	4	h 57.03	13	k 16	13	21.03	5.1
Collingwood .....	37.23	52.27	40.60	43.37	10	78	4	63.00	12	n 20	12	24.67	.....
Elk Run .....	36.03	48.53	41.50	42.02	4	71	4	59.67	14	17	13	23.67	4.8
Freedom .....	34.96	44.93	39.93	39.94	5	64	5	59.33	14	18	13	25.00	4.7
Hillsborough .....	39.33	50.28	45.03	44.88	4	67	4	59.83	14	14	13	17.67	4.7
Hudson (o) .....	38.50	48.35	42.34	43.06	4	65	4	58.13	14	21	13	25.40	5.5
Iberia .....	39.07	53.13	46.70	44.88	4	70	4	?	13	k 17	13	?	5.8
Jackson, (Monroe county)(p) .....	34.50	50.11	42.48	42.36	12	71	.....	?	14	19	.....	?	.....
Kelley's Island .....	40.76	46.96	44.00	43.91	8	61	4	55.33	13	24	13	27.33	5.7
Madison, [King] .....	38.85	48.73	41.67	43.08	4	74	4	61.33	14	q 22	14	27.67	6.1
Montville .....	37.53	47.85	42.03	42.47	4	70	4	59.00	14	17	13	22.00	6.0
Mount Union (p) .....	37.30	45.83	41.64	41.59	0	66	.....	?	14	15	13	22.33	5.5
New Lisbon .....	33.42	50.16	38.93	40.84	4	72	5	57.33	14	12	13	24.67	5.4
North Bend .....	39.36	54.04	45.61	46.34	4	72	4	62.93	13	k 16	13	18.50	4.2
Northwood .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.4
Portsmouth .....	38.50	57.57	43.63	46.57	12	77	12	61.00	13	k 20	13	23.67	3.5
Ripley .....	42.87	.....	48.33	45.60	12	65	30	56.50	15	21	14	23.00	.....
Rockport .....	41.17	51.97	46.20	46.45	4	71	4	62.33	12	25	12	27.67	.....

a Same temperature on the 23d.

b Observations taken at sunrise and 2 p. m.

c Same temperature on the 27th.

d Observations taken at 7 a. m. and 3 p. m.

e Observations taken at sunrise.

f Same temperature on the 8th.

g Same temperature on the 25th.

h Same temperature on the 5th.

i Same temperature on the 9th and 30th.

j Same temperature on the 9th.

k Same temperature on the 14th.

l Observations taken at 7 a. m., 2 p. m., and 5 p. m.

m Same temperature on the 4th, 5th, and 6th.

n Same temperature on the 13th.

o The records of thermometer at this place are 0°.85 too high.

p Incomplete.

q Same temperature on the 15th.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.	
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.		
OHIO—Continued.	○	○	○	○		■		○		○		○		
Savannah .....	35.83	50.37	42.13	42.78	4	72	4	64.00	14	17	13	22.00	6.2	
Troy .....	36.17	52.73	42.47	43.79	9	71	4	60.67	13	a 18	13	20.33	4.2	
Urbana .....	36.43	52.27	42.00	43.57	4	b 72	9	60.00	14	17	13	19.67	5.4	
Welchfield .....	35.30	47.90	39.76	40.99	4	70	4	58.67	14	18	13	22.33	5.0	
Westerville .....	38.53	52.18	44.32	45.01	4	72	4	58.50	14	19	13	23.33	5.4	
Windham .....	35.47	50.20	42.03	42.57	4	73	4	58.67	14	18	13	23.67	5.4	
Zanesville .....	36.97	52.13	49.31	46.14	4	c 72	?	?	14	17	13	?	---	
MICHIGAN—														
Battle Creek .....	35.83	46.07	39.37	40.42	4	70	4	63.67	15	16	13	26.00	5.5	
Detroit .....	37.57	48.59	36.03	40.73	4	72	4	53.33	14	20	14	24.33	5.7	
Grand Haven .....	39.03	41.93	39.87	40.28	7	d 62	8	58.00	24	27	14	32.00	7.6	
Grand Rapids .....	34.46	44.26	37.43	38.72	8	70	4	d 61.00	24	20	13	28.00	7.0	
Marquette .....	30.37	35.36	30.67	32.13	8	54	4	48.70	14	15	27	18.90	7.2	
Monroe, [Bowlsby] .....	37.37	46.40	42.70	42.16	4	73	4	62.33	13	19	13	23.33	5.3	
Monroe, [Whelpley] .....													5.3	
Monroe Piers (e) .....	37.18	43.01	41.76	40.15	4	c 62	5	55.37	13	21	13	24.25	6.2	
New Buffalo (f) .....	37.24	44.71	39.23	40.39	4	d 68	4	62.00	14	18	14	23.00	7.1	
Ontonagon (g) .....	31.17	32.53		31.85	8	50	8	49.50	27	a 21	27	21.50	7.8	
Ottawa Point (h) .....	35.06	39.96	38.33	37.22	4	54	4	50.25	24	i 24	20	a 27.50	8.0	
Thunder Bay Island (j) .....	34.43	37.05	36.01	35.81	4	51	4	48.75	13	k 25	20	26.75	8.0	
Ypsilanti .....	35.03	45.57	39.35	39.98	4	70	4	61.33	15	20	15	25.33	6.8	
INDIANA—														
Aurora (l) .....	37.83	53.83	46.13	43.93	4	74	4	60.00	14	14	13	19.33	---	
Cannelton .....	44.69	56.22	48.19	49.70	5	72	4	63.13	13	19	13	21.00	4.2	
Logansport .....	39.80	49.20	42.00	43.67	4	73	4	66.67	12	m 19	14	28.67	5.8	
Michigan City (n) .....	39.63	42.96	43.70	41.84	4	69	4	64.50	21	o 30	21	33.50	3.6	
New Harmony .....	43.27	55.23	48.03	48.84	10	73	9	63.67	14	18	14	21.00	4.7	
Richmond, [Haines] .....	41.17	51.85	45.43	46.15	4	70	4	62.67	13	a 21	13	24.67	4.3	
ILLINOIS—														
Augusta .....	36.67	48.10	41.83	42.20	3	73	4	64.00	12		7	12	14.67	5.3
Aurora .....	35.03	46.73	39.03	40.26	3	71	4	59.33	12	m 15	14	19.33	5.4	
Batavia, [Mead] .....	34.80	41.69	38.33	38.27	3	72	4	60.00	12	p 15	13	19.00	6.6	
Bruce .....	39.21	49.46	42.00	43.56	4	75	4	68.67	13		14	13	18.00	5.0
Chicago (q) .....	30.06		31.68	30.87										7.3
Edgington .....	36.07	47.90	40.40	41.46	3	76	4	63.67	13		14	12	19.33	6.4
Elgin .....	33.33	43.47	37.10	37.96	36	68	4	60.00	12	r 14	13	19.00	7.0	
Galena .....														6.4
Lebanon (s) .....	39.85	49.53	41.90	43.77	30	65	?	?	13		13	13	21.00	6.5
Manchester (f) .....	38.60	52.33	44.50	45.14	3	76	4	65.00	13		12	12	18.67	6.1
Marengo .....	33.30	41.75	37.86	37.64	4	74	4	63.00	15		12	12	20.33	6.4
Ottawa .....	33.40	46.14	39.50	39.68	3	70	4	63.00	13		12	13	17.67	6.1
Pekin .....	36.90	48.20	43.16	42.75	3	72	4	65.00	13		12	12	18.67	6.3
Peoria .....	37.97	48.00	43.83	43.27	4	70	4	64.83	13		14	12	19.67	6.4
Riley .....	34.63	42.48	36.90	33.00	7	64	4?	?	12		12	13	19.00	6.2
Sandwich .....	34.86	46.16	39.70	40.24	3	72	4	61.00	13		12	12	m 18.67	6.1
West Salem .....	42.83	56.83	48.53	49.40	4	77	8	66.67	13		18	13	20.33	4.8
West Urbana .....	37.83	49.53	43.07	43.48	4	75	4	64.67	13		13	13	17.67	6.9
Wheaton .....	34.77	44.77	38.22	39.25	3	69	4	60.50	12		13	13	18.50	7.4
Winnebago .....	32.63	43.40	36.23	37.42	7	70	4	63.00	15		10	12	19.50	5.9
MISSOURI—														
Cassville .....	46.63	57.80	50.62	51.68	4	d 77	4	71.00	13		16	12	18.33	4.8
Paris .....	37.50	50.37	43.97	43.95	3	75	3	64.67	13		10	12	14.67	5.4

*a* Same temperature on the 14th.*b* Same temperature on the 9th.*c* Same temperature on the 5th.*d* Same temperature on the 8th.*e* Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at

9 a. m., 38.68.

*f* Observations taken at 7 a. m., 1 p. m., and 9 p. m.*g* Observations taken at 9 a. m. and 3 p. m.*h* Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at

9 a. m., 35.56.

*i* Same temperature on the 28th.*j* Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at

9 a. m., 35.78.

*k* Same temperature on the 14th, 20th, and 28th.*l* Observations taken at 6 a. m., 2 p. m., and 9 p. m.*m* Same temperature on the 13th.*n* Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at

9 a. m., 41.06.

*o* Same temperature on the 24th.*p* Same temperature on the 18th.*q* Observations for the last 19 days only.*r* Same temperature on the 15th.*s* Incomplete.

## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MISSOURI—Continued.	°	°	°	°	°	°	°	°	°	°	°	°	
Rhineland	35.36	51.31	43.39	43.35	30	78	—	?	13	7	12	18.67	5.6
St. Louis, [Engelmann]	41.35	53.78	47.18	47.44	3	a 75	4	65.50	13	15	12	22.00	5.2
St. Louis, [Fendler]	39.73	53.70	45.72	46.38	3	76	4	64.33	13	14½	12	21.67	—
Stockton	44.00	57.67	46.73	49.47	3	78	3	a 67.67	13	14	12	17.33	4.3
Warrenton	38.97	52.43	45.13	45.51	3	a 75	4	65.00	13	14	13	19.00	4.7
WISCONSIN—													
Appleton	30.77	40.47	33.73	34.99	4	65	4	55.67	15	11	14	22.00	5.5
Bay City	31.33	29.40	24.93	25.22	7	56	7	43.67	14	b 8	27	11.33	5.6
Beloit	32.47	43.10	35.97	37.18	4	c 69	4	63.33	15	10	12	c 20.00	4.5
Delafield	36.30	45.57	39.97	40.61	4	74	4	67.67	15	15	13	24.00	6.4
Green Bay	32.77	42.90	46.57	40.75	4	70	4	59.33	14	d 14	14	22.00	5.9
Janesville	29.56	46.06	39.27	38.30	4	c 70	4	63.33	15	11	13	18.33	—
Kenosha	37.03	45.06	40.67	40.92	8	69	4	62.50	15	17	13	23.67	5.1
Manitowoc	34.47	42.40	38.53	38.47	4	69	4	65.00	15	18	14	23.67	6.4
Milwaukee, [Lapham]	37.63	43.37	40.82	40.62	4	69	4	65.50	15	19	13	24.33	—
Milwaukee, [Larkin]	36.60	—	40.21	38.40	3	72	4	63.00	15	18	14	23.50	6.6
Milwaukee, [Winkler]	35.20	42.80	38.63	38.88	4	70	4	65.33	15	15	13	22.67	5.5
Pardeeville	30.54	40.65	36.58	35.92	4	70	4	64.00	15	8	12	22.67	7.1
Platteville	31.70	43.67	35.60	36.99	4	69	4	62.33	13	14	12	18.67	6.4
Rocky Run	31.70	41.43	35.90	36.34	4	69	4	62.67	15	10	13	e 22.67	6.4
Superior, [Mann]	26.47	33.37	28.95	29.60	1	48	7	43.67	30	6	13	15.50	7.0
Superior City, [Stuntz] (f)	26.43	33.63	31.23	29.62	1	45	7	42.75	13	g 10	13	15.00	7.0
Wausau	31.43	40.20	33.90	35.18	4	65	4	60.00	26	h 12	26	15.33	3.4
IOWA—													
Bellevue	32.33	46.20	36.80	38.41	4	74	4	65.33	15	13	12	21.00	6.4
Burlington	37.90	48.76	46.30	42.65	3	76	7	63.67	13	16	12	18.00	6.5
Dubuque	34.57	44.10	39.07	39.25	4	72	4	64.67	13	16	12	21.33	5.7
Fairfield	35.40	47.62	40.20	41.07	4	78	4	64.67	13	11	12	13.67	5.9
Fayette Village	29.10	40.27	32.60	33.99	4	71	7	59.33	14	8	13	12.67	5.9
Forestville	31.57	40.64	34.89	35.70	4	i 70	8	60.00	14	12	11	17.00	5.0
Fort Madison (j)	35.90	46.90	41.86	41.55	3	74	4	64.33	13	11	12	16.00	5.3
Franklin	32.77	45.37	35.10	37.75	4	73	7	61.67	13	6	12	16.33	5.0
Muscatine	33.73	46.70	38.23	39.55	3	75	4	62.00	13	12	12	16.00	4.6
Pleasant Plain	34.40	47.83	39.10	40.44	3	78	4	67.67	13	10	12	15.67	5.6
Rossville	30.40	39.98	34.57	34.98	4	71	7	70.90	15	12	14	b 22.37	5.6
MINNESOTA—													
Beaver Bay, [Clark]	28.97	33.07	29.13	30.39	1	45	7	44.00	27	10	13	15.50	5.1
Beaver Bay, [Wieland]	24.80	32.67	25.20	27.56	7	45	7	43.00	30	11	30	12.33	6.6
Burlington	26.97	34.17	28.27	29.80	7	46	7	44.33	27	5	27	12.67	6.4
Chatfield	29.10	41.47	31.50	34.02	4	75	7	62.67	12	10	12	15.67	6.6
Forest City	24.04	34.00	27.23	28.42	7	64	—	?	13	0	13	9.67	4.0
Hazlewood	25.10	34.59	27.55	29.08	7	68	7	54.33	30	— 2	30	6.67	5.8
Princeton	25.87	36.77	28.83	30.49	7	69	7	62.33	13	2	13	9.67	5.5
DACOTAH—													
Greenwood (k)	25.87	45.33	29.47	33.56	7	72	6	48.67	30	— 2	30	6.33	5.4
NEBRASKA—													
Bellevue	33.43	46.73	38.60	39.59	3	76	7	65.67	12	5	12	10.67	4.3
Deer Creek	28.47	39.00	28.96	32.14	2	70	6	?	11	— 12	11	— 5.67	—
Elkhorn	30.77	45.70	36.13	37.53	3	76	7	63.33	12	1	12	7.33	5.6
Nebraska City	34.06	45.99	38.12	39.39	3	76	3	62.80	30	0.6	30	2.40	5.4
Omaha, [Rain]	32.66	44.13	36.80	37.86	3	78	3	60.33	12	2	12	8.33	5.5
KANSAS—													
Burlingame	38.30	53.26	43.00	44.85	3	e 76	4	66.00	12	10	12	15.33	4.0
Denver City	26.90	52.47	30.33	36.57	2	70	3	54.33	12	— 18	12	— 0.67	3.1
Lecompton	47.17	56.83	43.23	49.08	4	82	4	69.33	12	0	12	27.33	3.2
Manhattan	39.10	58.10	42.27	46.49	4	84	3	71.33	12	10	12	12.00	6.8

a Same temperature on the 4th.

b Same temperature on the 27th.

c Same temperature on the 7th.

d Same temperature on the 15th.

e Same temperature on the 14th.

f Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at

9 a. m., 27.20.

g Same temperature on the 14th and 27th.

h Same temperature on the 28th.

i Same temperature on the 8th.

j Observations taken at 6 a. m., noon, and 7 p. m.

k Observations taken at 7 a. m., 2 p. m., and 10 p. m.



## No. 24.—THERMOMETER AND FACE OF SKY, NOVEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date	M'n temp.	Date.	Temp.	Date.	Mean temp.	
KANSAS—Continued.	°	°	°	°		°		°		°			
Neosho Falls .....	40.07	55.40	44.63	46.70	11	76	7	67.00	12	12	12	14.00	2.7
Wyandott City.....	38.83	52.73	49.80	46.12	7	75	7	69.67	11	10	12	27.67	4.4
UTAH—													
Great Salt Lake City .....	34.00	43.00	39.00	38.67	---	68	---	---	---	10	---	---	---
WASHINGTON—													
Vancouver .....	42.53	51.80	44.86	46.40	2	a 60	3	b 52.67	5	c 32	26	38.00	7.2
CALIFORNIA—													
Auburn .....				60.97									
Downieville (d) .....	38.20	48.56	39.13	41.93	13	e 68	11	f 52.33	24	28	23	g 34.00	---
Monterey .....	52.40	61.47	54.36	56.08	12	69	4	63.50	27	41	27	49.61	---
Sacramento .....	51.13	56.90	54.13	54.05	1	68	11	61.67	27	42	27	h 47.33	5.7
San Francisco .....	51.83	58.10	53.40	54.44	13	66	13	60.67	23	i 43	23	47.00	5.3
Santa Clara .....	48.70	59.22	52.08	53.33	13	e 70	5	60.67	2	36.5	7	44.17	7.0
Union Rancho .....	48.53	59.60	52.06	53.40	1	80	10	65.67	27	37	22	45.33	5.1
MEXICO—													
Cordova (j) .....	64.71	68.52	65.86	66.66	28	73.8	---	---	15	k 58.3	---	---	---
Mirador (l) .....	59.23	69.12	62.24	63.53	---	---	---	---	15	46.4	---	---	---
WEST INDIES—													
St. George's, Bermuda (m) .....				69.5	---	78.2	---	---	---	56.4	---	---	---
Turk's Island .....	79.00	82.00	79.50	80.17	1	n 85	1	82.33	29	74	29	76.67	---
CENTRAL AMERICA—													
Guatemala (o) .....				61.84	17	77	---	---	15	45.3	---	---	---
SOUTH AMERICA—													
Catharina Sophia, Surinam (p) .....	74.36	86.04	79.21	79.87	4	90	4	81.67	8	q 72	21	76.00	3.4

- a Same temperature on the 10th.  
b Same temperature on the 11th.  
c Same temperature on the 6th.  
d Observations taken at 8 a. m., 2 p. m., and 9 p. m.  
e Same temperature on the 14th.  
f Same temperature on the 15th.  
g Same temperature on the 25th.  
h Same temperature on the 28th.  
i Same temperature on the 24th.

- j Observations taken at 9 a. m., 12 m., 3, 6, and 9 p. m. Mean 12 m., 67.08; mean at 6 p. m., 67.15.  
k Same temperature on the 13th and 14th.  
l Observations taken at 7 a. m., 2 p. m., and 8 p. m.  
m Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.  
n Same temperature on the 2d.  
o Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.  
p Observations taken at 6 a. m., 2 p. m., and 6 p. m.  
q Same temperature on the 10th, 21st, 22d, and 29th.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
BRITISH AMERICA—	°	°	°	°		°		°		°			
Fort Rae (a) .....	—14.41	—11.24	—14.03	—13.23	21	4	15	2.00	29	(b)	29	(b)	4.2
Fort Simpson (a) .....	—7.38	—7.96	—1.35	—3.90	5	23	15	12.00	1	—36	1	—32.7	5.0
Hamilton (c) .....	21.36		22.26	21.81	1	57	1	49.50	31	—5	31	2.50	—
Montreal .....	11.07	14.33	12.98	12.79	1	47	1	42.06	29	—17	29	—12.95	6.6
Red River Settlement .....	—9.35	—1.77	—7.84	—6.32	10	38	10	28.67	7	—37	1	—26.00d	3.6
St. John's .....	33.00	35.33	31.84	33.39	9	59	■	51.00	25	11	4	19.33	8.4
St. Martin (e) .....	4.26	14.25	8.66	9.06	1	42	20	34.13	29	—33	29	—18.17	—
Stanbridge .....	10.58	18.16	10.35	13.03	1	55	1	47.00	28	—36	28	—19.33	7.1
Toronto (e) .....	16.52	21.03	17.23	18.26	1	54	1	44.37	31	—2.6	31	—1.08	7.3
Windsor .....	23.58	27.09	24.20	24.96	1	f 53.5	7	47.33	28	—2	28	—0.83	8.3
Wolfeville .....	23.89	26.90	23.48	24.76	1	55	1	50.00	28	—4	28	—18.33	8.7
MAINE—													
Bangor .....	11.63	21.42	13.71	15.59	1	g 42	1	g 39.33	28	—15	28	—10.00	5.3
Belfast (h) .....	12.13	19.15	14.48	15.25	7	50	7	46.67	28	—16	28	—12.00	6.2
Cornish, [West] .....	12.39	19.00	13.42	15.27	■	44	2	40.67	29	—18	28	—9.33	4.6
Cornishville .....	14.96	21.77	16.44	17.72	7	49	■	42.67	29	—14	28	—7.00	5.3
Dexter .....													5.9
Gardiner .....	9.19	19.82	12.69	13.90	2	i 41	2	i 37.67	29	—25	29	—13.00	6.3
Lisbon .....	10.58	23.32	15.09	16.33	1	g 45	2	42.33	25	—23	29	—9.34	5.5
Perry .....	16.68	22.97	17.55	19.07	7	52	7	46.00	28	—14	28	—6.67	4.9
Portland .....	16.79	22.71	18.34	19.28	■	47	2	44.00	29	—8	28	—2.50	5.9
Steuben .....	17.45	24.03	18.32	19.93	1	50	1	46.33	25	j —11	28	—7.00	5.9
Topsham .....	9.94		13.71	11.82	■	42	2	38.50	31	—19	29	—13.00	7.0
Vassalborough .....	13.84	21.16	18.00	17.67	2	48	1	40.67	28	j —14	28	—6.00	5.7
NEW HAMPSHIRE—													
Claremont .....	14.19	23.00	16.55	17.91	1	48	1	43.33	29	—16	28	—8.67j	6.2
Manchester .....	14.64	25.84	20.88	20.45	1	55	1	47.67	29	—15	29	—6.00	5.9
Shelburne (k) .....													6.7
Stratford .....	11.48	19.32	13.45	14.75	7	50	7	40.67	29	—27	28	—15.00	7.0
VERMONT—													
Brandon .....	17.20	22.72	17.14	19.02	1	51	1	46.50	29	—26	29	—11.67	2.2
Burlington .....	14.43	19.30	14.93	16.22	1	54	1	49.00	29	—26	29	—15.33	6.9
Craftsbury .....	11.68	19.55	13.58	14.94	1	50	1	44.00	29	—24	28	—12.00	6.6
Lunenburg .....	9.78	18.21	14.45	14.15	7	46	1	36.33	29	—32	29	—18.00	5.8
Rupert .....	16.26	24.52	19.81	20.20	6	58	1	46.67	29	—18	29	—6.00	6.5
St. Johnsbury .....	8.87	18.60	11.39	12.95	7	46	7	37.33	29	—34	28	—19.00	6.2
MASSACHUSETTS—													
Amherst .....	20.71	27.39	21.93	23.34	2	63	2	54.50	29	—8.5	28	—3.33	5.9
Bridgewater .....	25.55	31.26	26.14	27.65	1	l 57	7	56.33	29	—4	28	—2.67	6.6
Cambridge .....	25.55	28.35	22.97	25.62	2	65	2	58.00	29	—8	28	—2.33	6.4
Lawrence .....	18.52	25.87	19.97	21.45	2	61	2	53.67	29	—12	28	—4.33	7.0
Mendon .....	19.55	28.06	21.90	23.17	2	66	2	57.33	29	—10	28	—1.00	5.6
Nantucket .....	34.55	36.10	33.34	34.66	2	58	2	54.17	28	12	28	14.33	6.3
New Bedford .....	27.23	32.89	27.73	29.28	7	58	7	55.00	28	j —2	28	1.33	6.9
Westfield .....	17.81	26.26	20.52	21.53	2	62	■	54.33	29	—17	28	—6.33	6.5
Williamstown .....	18.92	21.08	18.56	19.42	7	57	1	49.93	29	—24	29	—9.83	6.8
Worcester .....	22.35	27.84	23.05	24.41	2	63	2	57.33	29	—8	28	—1.33	6.3
RHODE ISLAND—													
Providence (m) .....	26.70	31.70	26.80	28.40	1	i 61	2	56.00	29	—2	28	3.67	5.9
CONNECTICUT—													
Columbia .....	22.90	31.39	21.65	25.31	1	g 57	2	53.67	29	—8	28	0.00	6.0
Middletown .....	23.13	29.33	23.31	25.26	1	59	2	54.93	29	—7	28	1.10	6.0
Pomfret .....	21.23	26.16	21.74	23.04	1	56.5	2	51.17	29	—11	28	—2.83	6.4
Saybrook .....	20.65	31.73	25.87	29.08	2	57	2	52.67	29	—17?	29	—0.33	6.1
Wallingford .....	22.72	29.56	23.61	25.30	1	56½	2	52.83	29	—7	28	1.83	5.5

a Observations taken at 7 a. m., 2 p. m., and 7 p. m.

b Mercury frozen at 7 p. m. on the 3d, and at 7 a. m., 2 p. m., and 7 p. m. on the 29th.

c Observations taken at 9 a. m. and 9 p. m.

d Same temperature on the 31st.

e Observations taken at 6 a. m., 2 p. m., and 9 p. m.

f Same temperature on the 7th and 8th.

g Same temperature on the 2d.

h Observations taken at 7 a. m., noon, and 6 p. m.

i Same temperature on the 7th.

j Same temperature on the 29th.

k Incomplete.

l Same temperature on the 2d and 7th.

m Observations taken at sunrise, 2 p. m., and 10 p. m.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
NEW YORK—	°	°	°	°		°		°		°		°	
Bellport .....	29.55	34.23	29.03	30.94	2	55	2	52.67	28	7	28	9.00	5.5
Beverly .....	22.93	28.85	24.00	25.26	1	a 57	1	51.33	29	— 9	29	— 2.67	6.6
Buffalo (b) .....	23.26	26.21	23.82	24.43	1	55	1	51.00	28	c 4	31	5.67	7.8
Cazenovia .....	17.46	22.30	19.15	19.64	2	57	1	53.27	28	14.5	28	— 9.73	8.2
Charlotte (d) .....	20.22	25.41	24.38	22.95	1	63	1	59.25	29	— 8	29	4.00	8.4
Flatbush .....	27.40	32.57	27.90	29.29	2	62	2	58.37	29	3	28	5.83	6.5
Fort Niagara (e) .....	20.64	25.16	23.80	22.56	1	60	1	58.25	31	— 8	31	1.50	7.8
Nichols .....	21.58	30.90	22.13	24.87	1	60	1	54.33	28	0	28	3.00	8.0
Oswego .....	20.74	26.06	23.65	23.48	1	60	1	53.67	29	— 10	28	— 0.33	6.0
Penn Yan (f) .....	20.13	26.52	22.10	22.92	1	55	1	53.00	29	1	28	3.33	1.7
Rochester, [Dewey] .....	20.94	25.55	22.68	23.06	1	60	1	52.00	29	0	28	5.67	8.3
Sackett's Harbor (g) .....	16.64	20.95	20.50	19.05	1	58	1	55.62	29	— 21	28	— 11.50	7.0
Wampsville .....	16.84	23.00	19.19	19.68	1	60	1	55.33	29	— 18	28	— 10.00	7.8
Waterford .....	18.93	25.58	19.42	21.31	1	57	1	53.00	29	— 16	28	— 6.33	6.4
NEW JERSEY—													
Freehold .....	29.55	35.73	30.81	32.03	2	70	2	63.67	28	h 8	28	9.00	----
Lambertville .....	25.74	35.02	28.63	29.80	2	67	2	60.50	29	6	28	8.80	3.1
Newark (i) .....				29.45	1	j 62	2	55.88	28	6	28	7.00	----
Woodstown .....	30.35	35.35	30.19	31.96	2	68	2	64.00	28	9	28	12.00	5.7
PENNSYLVANIA—													
Altoona .....	27.97	33.68	27.16	29.60	1	68	2	61.67	31	4	31	10.00	7.3
Bedford .....	25.94	35.55	28.55	30.01	2	70	2	56.33	31	0	31	10.33	7.3
Berwick .....	25.89	32.10	27.00	28.33	1	a 60	1	a 52.33	31	4	28	9.00	6.2
Cannonsburg .....	26.16	32.45	29.00	29.20	1	64	1	60.00	31	6	31	10.00	7.8
Chambersburg .....	27.00	33.65	29.58	30.08	1	a 68	2	56.67	29	10	29	11.67	7.4
Easton (k) .....	23.31	31.81	23.67	26.26	2	64	2	59.00	29	— 1	29	2.33	7.3
Fleming .....	24.74	31.10	25.61	27.15	1	59	1	52.33	25	c 0	31	7.00	7.7
Gettysburg .....	25.94	32.55	26.52	28.34	2	66	2	60.33	31	8	29	10.50	6.3
Harrisburg, [Heisely] .....	29.13	33.74	30.71	31.19	2	67	2	60.33	29	11	29	11.67	7.0
Harrisburg, [Hickok] .....	28.68	33.40	30.08	30.72	2	69.5	2	60.00	29	c 12	29	12.00	7.3
Lewisburg .....	24.05	30.35	24.63	26.34	1	62	1	51.97	31	4	31	10.23	8.0
Morrisville .....	26.42	34.61	26.77	29.27	2	67	2	60.00	28	h 4	28	6.67	4.8
Mount Joy .....	27.82	34.98	29.05	30.62	2	72	2	62.50	31	0	29	11.50	6.1
Norristown .....	29.15	33.59	28.94	30.56	2	68	2	62.00	29	9	28	11.33	6.4
North Whitehall (l) .....	23.58	31.87	28.94	28.13	2	62	2	56.00	29	6	29	7.67	7.0
Philadelphia .....	30.66	36.48	31.87	33.00	2	70	2	62.80	28	h 11	28	13.33	6.4
Pittsburg, [Marine Hospital] .....	26.13	33.23	27.81	29.06	1	67	1	62.33	31	5	31	9.00	8.0
Pocopson .....	28.61	34.71	29.02	30.78	2	67	2	61.50	28	h 10	28	11.67	6.1
Sewickleyville .....	23.79	29.36	23.97	25.71	1	60	1	55.67	31	0	31	2.00	7.6
Shamokin .....	25.61	32.29	28.45	28.78	1	a 72	2	63.00	16	5	28	11.00	6.7
Somerset .....	25.07	32.65	24.97	27.56	1	69	1	61.33	31	2	31	8.00	8.6
Tarentum .....	26.19	32.19	26.65	28.34	1	65	1	61.00	31	0	31	5.00	7.7
West Haverford .....	28.13	34.48		31.30	2	68	2	61.50	29	8	31	9.50	6.7
Worthington .....	23.94	31.10	25.90	26.98	1	64	1	60.67	31	1	31	5.33	8.1
MARYLAND—													
Annapolis .....	30.82	38.79	35.48	35.03	2	74	2	66.83	9	13	28	19.00	6.0
Bladensburg .....	30.04	37.78	33.29	33.70	1	67		?	25	12	29	17.33	6.8
Chestertown .....	31.12	36.87	32.12	33.37	2	70		?	29	10	28	13.33	6.3
Frederick .....	30.16	34.77	31.53	32.15	2	63.5	2	59.57	29	14	29	15.00	6.7
Leitersburg .....	26.61	34.13	27.13	29.29	2	72	2	59.67	31	4	29	12.00	6.8
St. Mary's .....	38.89	44.19	39.48	40.85		?		?		?		?	4.9
Sykesville .....	26.10	33.87	27.13	29.03	2	71	2	65.33	29	8	29	11.33	5.9
DISTRICT OF COLUMBIA—													
Georgetown .....	32.15	39.71	34.08	35.31	2	76	2	69.33	29	15	29	17.67	5.8
Washington .....	31.13	36.83	33.48	33.81	2	71	2	64.67	29	13	29	16.00	6.2

a Same temperature on the 2d.

b Observations taken at 8 a. m., 2 p. m., and 9 p. m.

c Same temperature on the 31st.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 21.80.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 20.64.

f Observations taken at sunrise, 2 p. m., and sunset.

g Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 18.11.

h Same temperature on the 29th.

i Daily maximum and minimum.

j Same temperature on the 7th.

k Observations taken at 8 a. m., 2 p. m., and 10 p. m.

l Observations taken at sunrise, noon, and sunset.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp	Date.	Temp.	Date.	Mean temp.	
VIRGINIA—	°	°	°	°		°		°		°			
Crack Whip.....	25.90	34.90	27.29	29.36	1	74	1	62.33	24	a 6	24	11.00	6.3
Crichton's Store (b).....	37.04	44.27	42.69	41.33	2	74	2	?	9	18	29	24.00	5.3
Cross Creek.....	22.84	32.57	23.65	26.35	2	62	1	52.00	22	— 3	31	2.00	---
Falmouth.....	31.84	41.23	35.23	36.10	2	77	2	68.67	8	11	29	17.33	---
Fredericksburg (c).....	.....	43.71	.....	.....	2	76	.....	.....	29	28	.....	.....	6.0
Lewisburg.....	27.13	41.97	30.90	33.33	1	71	6	57.67	8	5	8	9.67	5.3
Mont View.....	30.87	41.35	35.00	35.74	2	76	2	68.00	9	12	8	20.00	5.0
Poplar Grove.....	30.45	43.00	31.45	34.97	1	76	1	60.00	8	17	8	12.00	6.6
Portsmouth.....	38.14	49.66	38.16	41.99	1	74.5	1	62.83	25	16.5	8	29.17	5.5
Rose Hill.....	.....	.....	.....	.....	.....	70	.....	.....	.....	21	.....	.....	---
Rougemont.....	29.20	39.53	32.77	33.85	.....	?	.....	?	9	9	8	17.33	5.4
Smithfield (d).....	35.44	47.35	37.91	40.23	2	75	2	66.67	25	12	.....	?	6.0
Westwood.....	33.15	44.02	36.71	37.96	2	76	2	66.33	9	14	.....	?	---
Wheeling.....	26.42	31.77	27.89	28.69	1	68	1	62.83	31	6	31	8.00	7.8
Winchester.....	28.19	36.81	28.94	31.31	2	74	1	61.33	9	a 12	8	16.00	5.9
NORTH CAROLINA—													
Chapel Hill (d).....	37.37	47.26	40.33	41.65	2	77	2	65.33	.....	?	.....	?	6.3
Davidson College.....	33.92	45.47	37.82	39.07	2	69	.....	?	9	14	.....	?	5.0
Green Plains.....	35.19	49.26	38.61	41.02	2	80	2	63.33	8	19	8	23.67	---
Murfreesborough.....	37.84	46.90	41.20	41.98	2	73	2	66.33	9	18	8	27.67	5.0
SOUTH CAROLINA—													
Aiken.....	41.35	54.57	42.65	46.19	3	81	3	68.67	8	f 22	.....	?	4.9
All Saints.....	45.90	56.87	48.65	50.47	8	75	7	69.00	25	23	9	31.00	4.7
Charleston.....	48.52	58.06	52.16	52.91	2	75	7	68.67	9	28	9	35.67	---
St. John's.....	42.07	59.35	45.90	49.11	7	g 76	5	69.00	25	18	?	?	5.1
GEORGIA—													
Atlanta.....	37.45	46.90	41.74	42.03	2	70	1	61.67	8	16	8	22.67	4.7
Augusta.....	45.35	58.97	46.86	50.39	1	82	?	?	25	28.5	?	?	5.1
Clarksville.....	34.55	49.45	39.29	41.10	3	73	3	66.00	23	13	23	24.33	5.1
Sparta.....	38.61	51.52	41.53	43.89	1	75	3	67.33	8	h 17	8	26.67	5.2
Thomaston.....	47.90	52.68	50.58	50.39	1	70	3	68.67	8	19	8	30.33	5.4
Whitemarsh Island.....	48.68	59.86	53.06	53.87	2	i 76	4	71.67	25	30	24	38.67	4.2
FLORIDA—													
Alligator.....	47.29	65.45	53.39	55.38	3	82	4	72.67	24	h 28	24	39.67	2.9
Atsena.....	53.35	60.42	57.75	57.17	1	76	1	73.00	24	34	24	43.00	3.3
Belair (d).....	44.90	62.00	53.52	53.47	5	81	5	73.67	8	22	22	39.33	3.9
Gainesville.....	48.23	64.97	56.35	56.52	2	80	2	72.33	24	30	24	40.67	3.1
Jacksonville.....	53.29	64.96	56.87	58.38	30	79	4	72.33	25	36	24	44.66	4.0
Micanopy.....	47.41	65.84	54.69	55.98	2	j 80	4	72.00	24	h 30	24	40.33	3.9
St. Augustine.....	56.87	97.10	59.00	60.49	7	80	4	75.33	24	36	24	44.00	3.6
Salt Ponds (k).....	68.45	73.64	.....	71.05	8	82	4	78.50	25	58	24	60.50	4.1
Seville.....	49.25	.....	.....	.....	2	l 67	.....	.....	8	30	.....	.....	3.7
Warrington.....	48.35	58.81	54.29	53.82	2	77	2	72.67	8	20	8	30.33	4.1
ALABAMA—													
Greene Springs.....	38.81	49.52	40.45	42.92	1	75	1	69.67	8	10	7	19.00	5.6
Greensborough (d).....	37.09	49.89	40.62	42.53	?	?	?	?	?	?	?	?	?
Orville.....	39.52	52.03	43.45	45.00	1	79	1	71.33	8	15	8	23.00	5.9
MISSISSIPPI—													
Columbus.....	36.05	45.18	38.18	39.80	1	70	1	67.20	8	12	7	18.40	5.3
Hernando.....	39.70	41.35	34.32	35.46	1	72	1	68.67	8	5	8	12.00	5.8
Natchez.....	38.48	49.48	44.23	44.06	1	76	1	72.00	7	m 16	7	21.00	5.8
Pauding.....	40.32	53.47	44.33	46.04	29	77	?	?	?	?	?	?	4.1
Westville.....	38.90	51.77	43.83	44.83	1	80	1	73.33	8	13	7	18.67	?
LOUISIANA—													
New Orleans.....	48.23	57.84	51.90	52.66	1	79	1	74.00	8	26	7	31.67	---

a Same temperature on the 31st.

b Observations taken at 8½ a. m., noon, and 4 p. m.

c Observation taken at 2 p. m.

d Incomplete.

e Same temperature on the 7th.

f Same temperature on the 22d.

g Same temperature on the 2d and 3d.

h Same temperature on the 25th.

i Same temperature on the 4th.

j Same temperature on the 3d.

k Thermometer ¼ to 2½ degrees too high.

l Same temperature on the 5th.

m Same temperature on the 8th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG. WARMEST DAY.				LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
TEXAS—	°	°	°	°		°		°		°		°	
Austin, [Palm] .....	33.06	48.81	37.35	39.74	1	74	26	64.33	6	10	6	12.34	5.
Austin, [Van Nostrand] .....	34.02	52.10	40.10	42.07	1	77	26	65.67	21	10	6	15.67	5.
Bonham .....	28.48	45.77	32.19	35.48	27	80	27	62.67	7	0	6	6.33	4.4
Burkeville .....	32.90	50.22	38.48	40.53	1	76	1	70.33	8	11	7	19.33	5.0
Cross Roads .....	35.48	47.23	42.71	41.81	27	74	27	70.00	7	9	6	11.67	4.6
Dallas .....	36.90	45.19	41.03	41.04			26	71.00	11	10	2	20.33	3.6
Gilmer .....	28.94		48.21	25.72	1	73	1	70.50	21	a 0	6	9.50	4.7
Larissa .....	34.73	47.79	41.76	41.43	1	75	26	66.67	7	3	?	?	4.6
New Braunfels .....	37.16	54.35	45.23	45.58	1	78	1	75.00	7	15	6	19.66	1.0
Roundtop .....	37.00	55.00	41.50	44.50	?	81.5	?	?	?	9	?	?	
Sisterdale .....	32.10	50.20	34.69	39.00	1	72	26	61.43	15	11	11	15.10	4.6
Union Hill .....	36.00	50.16	42.68	42.95	1	79	27	70.67	7	8	6	12.00	5.6
Washington .....	33.52	50.79	38.03	40.78	1	78	26	71.00	21	b 6	6	12.33	5.2
Webberville .....													4.5
ARKANSAS—													
Washington .....	31.71	45.16		38.43	1	74	1	71.00	7	6	7	15.00	
Yellville (c) .....	22.71				1	70			6	— 2½			4.9
TENNESSEE—													
Glenwood .....	28.41	36.88	30.69	31.99	1	72	1	63.27	23	0	7	7.67	6.0
Memphis .....	30.52	38.13	34.10	34.25	1	74	1	66.33	7	7	7	12.00	5.1
Pomona .....	29.19	43.97	31.61	34.92	26	76	1	62.33	8	0	8	8.67	6.1
University Place .....	33.84	40.70	35.83	36.79	1	63	1	62.00	11	4	7	7.33	5.5
Winchester .....	34.06	44.13	35.81	38.00	1	68	1	66.67	8	8	8	17.00	5.9
KENTUCKY—													
Bardstown .....	28.08	36.10	28.92	31.03	1	70	1	65.00	23	— 7	8	9.50	6.3
Danville .....	29.71	39.77	29.90	33.13	1	74	1	67.33	23	— 6	7	7.67	5.9
Paris .....	26.68	33.23	26.45	28.79	1	69	1	63.33	23	— 8	7	6.67	6.7
Springdale (d) .....	24.40	33.35	29.65	29.13	1	67	1	62.00	23	— 12½	8	8.33	6.1
OHIO—													
Avon .....	23.61	28.20	24.93	25.58	1	66	1	55.67	31	— 8	31	— 1.17	6.7
Bellefontaine .....	19.39	26.34	19.68	21.80	1	63	1	55.67	31	— 14	31	— 20.00	6.6
Bowling Green .....	22.11	31.08	24.12	25.77	1	65	1	56.33	31	— 14	31	— 4.67	6.8
Brecksville .....	19.81	26.19	20.55	22.18	1	63	1	54.67	31	— 10	31	— 4.00	6.7
Cincinnati, [Harper] .....	24.52	31.58	26.26	27.45	1	67	1	61.33	8	— 3	31	2.67	5.9
Cincinnati, [Phillips] .....	27.68	33.32	29.55	30.18	1	68	1	63.33	23	2	31	8.00	5.4
Cleveland .....	23.23	29.18	25.63	26.01	1	64½	1	55.83	31	— 8	31	— 2.00	8.0
College Hill .....	22.61	31.77	24.45	26.28	1	64	1	55.03	31	0	31	4.67	5.5
Collingwood .....	20.26	28.97	21.65	23.63	1	64	1	55.33	31	— 15	31	— 6.33	
Elk Run .....	22.45	28.51	24.03	25.00	1	61	1	59.00	31	— 2	31	0.67	7.9
Freedom .....	22.42	28.06	24.03	24.84	1	61	1	55.33	31	— 5	31	— 4.33	7.4
Hillsborough .....	22.94	28.77	24.89	25.53	1	61	1	69.83	31	— 1 e	31	1.50	6.1
Hudson (f) .....	21.04	27.68	22.73	23.82	1	62	1	58.92	31	— 5	31	— 3.65	7.1
Jackson, (Monroe Co.) .....	25.46	34.46	28.90	29.61	1	70	1	63.33	8	6	31	9.67	6.8
Kelcy's Island .....	23.61	27.55	25.29	25.49	1	56	1	50.33	31	— 8	31	— 1.67	6.8
Madison, [Atkins] .....	21.60	26.52	25.20	24.47	6	52	?	?	31	— 5	31	0.33	8.8
Madison, [King] .....	23.58	30.71	25.10	26.46	1	64	1	54.33	31	— 8	31	4.00	8.3
Montville .....	20.34	25.10	21.61	22.35	1	61	1	54.67	31	— 10	31	— 5.00	7.2
Mount Union (g) .....	22.23	29.57	23.91	25.24	1	62	1	55.23	31	— 4	31	0.00	
New Lisbon .....	22.03	30.29	25.54	25.95	1	61	1	58.67	22	— 4	31	0.67	7.1
North Bend .....	22.76	30.45	23.76	25.66	1	66	1	57.20	31	— 4 e	31	0.67	5.5
Northwood .....	21.42	27.94	20.90	23.42	1	64	1	56.00	31	— 11	31	— 5.33	6.4
Portsmouth .....	27.64	37.04	28.61	31.10	1	72	1	65.50	8	4	31	10.33	6.5
Ripley .....	29.84		31.06	30.45	1	65	1	64.00	23	6	31	10.50	6.8
Rockport .....	24.58	34.33	28.68	29.20	1	64	1	57.00	31	— 7	31	0.33	
Savannah .....	18.87	28.84	20.77	22.83	1	65	1	57.67	8	— 20	31	— 8.33	7.3
Troy .....	20.26	29.71	21.23	23.73	1	62	1	55.67	8	— 15	31	— 4.67	5.5
Urbana .....	18.77	29.42	20.81	23.00	1	62	1	56.00	8	— 10	31	— 5.33	6.6
Welchfield .....	20.94	27.19	22.35	23.49	1	64	1	54.33	31	— 9	31	— 4.00	7.9
Westerville .....	23.05	30.94	25.53	26.51	1	64	1	58.33	8	— 12	31	0.67	6.5
Windham .....	22.16	31.90	25.48	26.51	1	61	1	56.00	31	— 5	31	1.20	

a Same temperature on the 7th.

b Same temperature on the 7th and 8th.

c Observations taken at sunrise.

d Observations taken at 7 a. m., 2 p. m., and 5 p. m.

e Same temperature on the 8th.

f The records of thermometer at this place are 0°.85 too high.

g Incomplete.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
MICHIGAN—	°	°	°	°		°		°		°		°	
Battle Creek (a).....	16.65	25.39	18.83	20.29	1	60	1	44.67	31	—16	31	—9.00	6.8
Detroit.....	19.36	24.78	17.13	20.42	1	69	1	49.67	31	—14	31	—9.33	6.3
Grand Haven.....	22.06	25.00	23.77	23.61	1	41	1	34.00	14	7	31	12.00	8.8
Grand Rapids.....	18.22	26.35	19.71	21.43	1	53	1	37.33	31	—7	31	1.00	8.3
Marquette.....	10.66	17.24	13.32	13.74	11	39	17	31.76	7	—19	30	—7.40	6.7
Monroe, [Bowlsby].....	17.97	26.03	20.03	21.34	1	59	1	50.00	31	—12	31	—4.00	6.3
Monroe, [Whelpley].....													5.9
Monroe Piers (b).....	19.95	25.17	23.09	22.29	1	53.5	1	49.25	31	—13	31	—6.37	5.1
New Buffalo (c).....	18.13	24.20	19.58	20.64	1	48	1	38.00	31	—16	31	—11.00	6.8
Ontonagon (d).....	8.58	14.84	12.10	11.84	10	35	17	29.00	31	—16	30	—9.48	6.8
Ottawa Point (e).....	18.54	23.41	20.97	20.48	1	45	1	36.75	31	—6	31	0.00	7.1
Thunder Bay Island (f).....	18.09	20.62	19.16	19.39	1	g 36	18	33.50	31	—5	31	—0.50	8.0
Ypsilanti.....	19.95	28.34	23.43	23.91	1	57	1	47.00	31	0	7	9.33	7.2
INDIANA—													
Aurora (h).....	22.87	33.94	27.42	28.08	1	66	1	60.67	8	—14	31	2.00	---
Cannelton.....	27.28	33.77	28.47	29.84	1	66	1	56.10	23	—2	7	8.27	6.0
Logansport.....	20.52	29.10	22.77	24.16	1	61	1	46.00	31	—7	31	—4.33	5.9
Michigan City (i).....	18.97	24.00	24.39	22.00	1	44	1	42.25	13	j 2	22	4.50	5.7
New Harmony.....	24.55	31.65	26.52	27.57	1	66	1	49.00	23	2	31	6.33	5.5
Richmond, [Austin] (k).....	22.87	33.89		28.38	1	65	1	65.00	8	—10	31	0.00	6.2
Richmond, [Haines].....	23.89	33.97	25.77	27.88	1	65	1	57.67	8	—8	31	0.17	5.4
ILLINOIS—													
Augusta.....	12.93	24.07	17.87	18.29	10	46	11	35.00	31	—13	31	—7.00	3.8
Aurora.....	12.93	22.22	15.68	16.94	11	41	11	33.33	31	—22	31	—16.67	4.7
Batavia, [Mead].....	13.26	22.16	15.84	17.10	10	44	17	34.33	31	—22	31	—17.67	5.1
Bruce.....	11.16	21.09	14.64	15.63	10	44	11	35.00	31	—24	31	—17.33	4.2
Chicago.....	13.52		14.26	13.89	1	36	5	31.50	31	—19	31	—17.50	6.2
Edgington.....	12.06	23.90	15.74	17.23	10	47	11	35.33	31	—18	30	—11.33m	4.3
Elgin.....	12.58	20.61	15.33	16.17	11	42	11	34.00	31	—22	31	—17.00	5.6
Galena.....													4.4
Lebanon.....	19.52	29.74	23.58	24.28	1	59	11	39.00	7	—7	7	2.00	5.7
Manchester (c).....	16.87	27.54	21.45	21.95	25	50	25	39.67	24	—5	6	m 0.00	4.8
Marengo.....	13.42	20.90	15.81	16.71	10	45	11	34.00	31	—18	31	—12.33	4.9
Naperville.....	13.97	21.55	15.48	17.00	9	41	16	35.00	31	—20	31	—15.67	5.6
Ottawa.....	11.19	21.45	16.77	16.47	9	n 41	11	33.00	31	—20	31	15.00	4.3
Pekin.....	13.71	23.87	19.81	19.13	9	n 42	11	36.00	31	—16	31	9.33	5.2
Peoria.....	14.27	24.80	20.06	19.71	11	43	11	35.67	31	—13	31	—8.67	4.9
Riley.....	10.16	21.74	13.13	15.01	17	45	17	34.33	31	—26	31	—19.67	4.7
Sandwich.....	13.22	22.12	16.87	17.40	1	43	11	37.67	31	—20	31	15.00	5.3
West Salem.....	22.48	31.48	24.90	26.29	1	65	1	47.00	31	o 0	31	4.67	5.8
West Urbana.....	17.58	24.26	20.32	20.72	1	48	5	37.67	30	—9 m	31	—5.67	5.4
Wheaton.....	13.56	20.97	16.00	16.84	1	42	11	33.50	31	—21	31	—16.17	5.6
Winnebago.....	9.90	19.35	13.23	14.16	11	41	11	32.83	31	—26	31	20.00	5.0
MISSOURI—													
Cassville.....	22.35	39.52	26.74	29.54	25	p 57	25	48.33	5	—8	9	—10.33	5.2
Paris.....	15.61	26.48	20.23	20.77	25	57	25	41.00	24	—13	6	—3.00	5.1
Rhineland.....	15.74	30.29	21.83	22.65	25	56	25	44.53	31	—12	6	—5.33	4.8
St. Louis, [Engelmann].....	21.05	29.02	24.97	25.01	25	48	25	38.67	8	—3.5	6	4.00	5.5
St. Louis, [Fendler].....	19.61	28.81	23.65	24.02	25	47	25	39.00	7	—11	7	2.67	---
Stockton.....	21.81	31.58	22.32	25.24	26	q 50	26	44.00	6	—4	6	1.33	3.5
Warrenton.....	18.26	31.13	22.71	24.03	25	55	25	44.00	7	—6	6	1.33	4.4

a Incomplete.

b Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 20.98.

c Observations taken at 7 a. m., 1 p. m., and 9 p. m. Incomplete.

d No observations on the 1st, 2d, and 3d of the month.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 19.01.

f Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 19.73.

g Same temperature on the 6th and 11th.

h Observations taken at 6 a. m., 2 p. m., and 9 p. m.

i Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 20.67.

j Same temperature on the 23d.

k Observations taken at 6 a. m. and 1 p. m.

l Same temperature on the 17th.

m Same temperature on the 31st.

n Same temperature on the 10th.

o Same temperature on the 7th.

p Same temperature on the 26th.

q Same temperature on the 27th.



## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
WISCONSIN—	°	°	°	°		°		°		°		°	
Appleton .....	10.06	19.35	13.74	14.38	10	a 38	11	32.67	31	—20	31	—14.00	4.2
Bay City .....	1.52	9.06	1.55	3.03	10	32	17	23.33	31	—30	31	—24.67	6.3
Beloit .....	10.23	20.03	13.23	14.50	11	42	11	33.00	31	—22	31	—17.00	4.0
Delafield .....	14.57	23.91	18.45	18.98	11	b 43	11	37.00	31	—24	31	—17.33	6.1
Green Bay .....	11.00	22.61	15.65	16.42	11	b 43	?	?	31	—19	31	—10.33	4.3
Kenosha .....	16.03	23.67	19.13	19.61	11	43	11	35.33	31	—16	31	—10.33	4.8
Manitowoc .....	14.42	23.52	19.23	19.06	10	40	17	33.33	31	—16	31	—9.33	5.8
Milwaukee, [Lapham] .....	15.85	22.90	19.68	19.48	11	41	17	35.67	31	—16	31	—11.00	---
Milwaukee, [Larkin] .....	14.23	---	17.70	15.96	11	39	17	33.00	31	—20	31	—17.50	3.5
Milwaukee, [Winkler] .....	13.00	22.35	16.55	17.30	11	42	11	34.00	31	—21	31	—15.00	4.6
Pardeeville .....	10.00	21.11	14.19	15.10	10	a 40	11	35.00	31	—23	31	—15.33	6.0
Platteville .....	8.06	19.87	12.80	13.58	11	39	11	32.67	31	—24	31	—18.00	4.7
Rocky Run .....	10.45	19.81	13.71	14.66	11	42	11	36.00	31	—23	31	16.67	5.6
Superior City, [Stuntz] (c) .....	1.83	11.84	6.64	4.18	10	37	17	26.25	7	—31	6	—21.50	5.5
Superior, [Mann] .....	0.44	11.90	3.10	5.15	10	a 35	17	26.67	2	—27 d	7	—19.33	5.7
Wausau .....	5.23	19.97	10.58	11.93	10	c 46	17	32.33	31	—22	6	—11.33	3.5
IOWA—													
Bellevue .....	9.07	22.06	13.87	15.03	10	44	10	35.33	31	—21	31	—14.00	4.9
Burlington .....	15.74	25.74	18.52	20.00	10	47	9	34.00	31	—10	31	0.00	5.5
Dubuque .....	12.94	22.94	16.35	17.41	10	a 44	11	34.67	31	—16	30	—12.67	3.8
Fairfield .....	13.52	24.73	17.64	18.63	10	51	10	37.00	6	—12	?	?	4.5
Fayette Village .....	5.99	17.50	10.90	11.46	10	43	---	?	31	—25	31	—8.33	4.6
Fort Madison (f) .....	12.19	21.77	18.35	17.47	11	b 41	12	34.00	31	—15	31	—9.00	4.1
Franklin .....	8.65	20.00	12.77	10.47	10	46	10	33.33	30	—20 g	30	—16.00	3.8
Muscatine .....	9.61	21.42	13.81	14.95	10	46	10	34.33	31	—22	31	—16.00	3.6
Pleasant Plain .....	9.90	22.51	13.22	15.21	10	47	10	34.00	31	—22	31	—13.33	4.0
Rossville .....	7.24	17.06	10.76	11.69	10	41	10	32.07	31	—23	31	—18.50	3.6
MINNESOTA—													
Beaver Bay, [Clark] .....	2.48	11.68	5.48	6.55	10	34	17	27.00	7	—22 g	6	—17.83g	2.8
Beaver Bay, [Wieland] .....	3.29	10.58	0.48	2.59	10	36	18	24.33	7	—35	30	—23.67	5.0
Burlington .....	1.55	13.55	5.29	6.80	10	38	10	28.67	2	—28	6	—20.33	5.1
Chatfield .....	2.77	15.29	7.23	8.43	10	45	10	31.33	31	—24	30	—19.33	4.6
Forest City .....	0.06	12.23	4.45	5.58	10	40	10	30.00	2	—27	30	—20.00	2.6
Hazlewood .....	1.52	8.96	4.93	5.14	10	34	10	32.00	6	—24	31	—20.00	3.8
Princeton .....	1.65	12.13	4.45	6.08	10	43	10	31.00	7	—31	6	—23.33	3.9
DAKOTA TERRITORY—													
Greenwood .....	4.90	28.71	8.71	14.11	9	64	9	40.00	2	—22 g	5	—14.33	2.8
NEBRASKA—													
Bellevue .....	9.92	22.70	14.64	15.75	11	56	11	39.00	31	—15	31	—12.33	3.4
Deer Creek .....	12.37	25.10	17.48	18.32	11	41	25	36.83	2	—26	5	—20.50	?
Elkhorn .....	3.97	20.19	10.55	11.57	10	55	10	37.76	31	—28	31	20.33	4.0
Nebraska City .....	10.58	21.82	15.70	16.03½	10	52	10	39.03½	31	—15	31	—11.90	4.2
Omaha, [Rain] .....	7.13	20.19	12.17	13.16	25	h 42	11	33.00	31	—22	31	—17.33	4.0
KANSAS—													
Burlingame .....	14.32	28.74	19.80	20.95	9	54	9	38.67	22	—4 j	5	0.67	2.8
Leavenworth City .....	---	---	---	---	---	---	---	---	---	---	---	---	2.7
Lecompton .....	16.52	32.00	20.06	22.86	9	62	25	45.33	5	—6	6	0.00	3.4
Manhattan .....	14.23	31.32	19.19	21.58	9	62	9	41.67	6	—8	5	—4.67	1.2
Neosho Falls .....	15.00	33.00	18.97	22.32	25	62	26	43.00	22	—7 k	31	5.00	2.7
Wyandott City .....	15.16	28.61	21.96	21.91	9	49	11	37.33	6	—6 l	6	3.67	4.0
UTAH—													
Great Salt Lake City .....	19.00	26.00	21.00	22.00	---	38	---	---	---	—22	---	---	---
CALIFORNIA—													
Auburn .....	---	---	---	55.16	---	---	---	---	---	---	---	---	2.8
Downieville .....	28.38	43.16	31.29	34.25	18	52	18	45.66	6	19	5	23.00	---
Monterey .....	43.90	58.53	45.61	49.35	11	72½	24	57.87	29	32	29	41.38	---

a Same temperature on the 11th.

b Same temperature on the 16th.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean

at 9 a. m., 0.06.

d Same temperature on the 7th.

e Same temperature on the 17th.

f Observations taken at 6 a. m., noon, and 7 p. m.

g Same temperature on the 31st.

h Same temperature on the 9th and 10th.

i Same temperature on the 10th.

j Same temperature on the 5th, 6th, and 7th.

k Same temperature on the 6th and 7th.

l Same temperature on the 20th.

## No. 25.—THERMOMETER AND FACE OF SKY, DECEMBER, 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEG.		COLDEST DAY.		
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	Mean temp.	
CALIFORNIA—Continued.	○	■	○	■		○		○		○		■	
Sacramento.....	39.48	47.26	43.81	43.52	1	a 53	1	50.33	6	c 34	22	37.33	4.1
San Francisco.....	45.26	53.03	48.26	48.85	18	d 60	18	55.00	21	38	22	42.33	3.0
Santa Clara.....	39.52	54.52	44.74	46.26	18	63	18	56.50	7	31	29	40.33	3.7
Union Rancho.....	36.22	51.45	41.13	42.93	18	64	18	54.00	6	29	29	37.33	3.5
MEXICO—													
Cordova (e).....	62.35	65.30	62.92	63.80	1	f 72.3			10	58.3			
Mirador (g).....	57.48	66.15	58.61	60.75	29	78	2	67.60	10	49	20	54.80	6.5
WEST INDIES—													
St. George's, Bermuda (h).....				65.6		74.4				61			
Turk's Island.....	74.94	77.80	76.00	76.28	1	i 80	1	78.00	11	73	11	k 74.33	
CENTRAL AMERICA—													
Guatemala (l).....				61.52	29	76.3			12	a 46.8			
SOUTH AMERICA—													
Catharina Sophia, Sur., (m).....	73.70	85.20	79.20	79.50		a 88	7	81.67	14	71	19	78.00	4.5

a Same temperature on the 11th.

b Same temperature on the 24th.

c Same temperature on the 29th.

d Same temperature on the 10th and 11th.

e Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 9 p. m.

Mean at 12 m., 64.49; mean at 6 p. m., 64.

Same temperature on the 2d.

g Observations taken at 7 a. m., 2 p. m., and 8 p. m.

h Observations taken at 2½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

i Same temperature on the 14th, 17th, 23d, and 30th.

j Same temperature on the 2d, 14th, and 17th.

k Same temperature on the 12th and 25th.

l Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.

m Observations taken at 6 a. m., 2 p. m., and 6 p. m.



## No. 26.—PSYCHROMETER, JANUARY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
BRITISH AMERICA—													
Montreal .....	.065	.087	.076	20	.183	10	<i>a</i> .006	78	78	81	51	45	65
St. Martin ( <i>b</i> ) .....	.069	.101	.075	1	.216	10	.000	80	80	80	47	63	52
Toronto ( <i>b</i> ) .....	.135	.123	.124	20	.228	10	.008	90	73	81	59	52	63
Windsor .....	.109	.126	.114	22	.375	11	.020	84	80	84	57	43	67
Wolfville .....	.109	.128	.121	21	.419	13	.024	86	85	90	57	54	73
MAINE—													
Portland .....	.099	.102	.101	21	.257	11	.016	88	72	85	51	10?	63
Steuben .....	.100	.110	.103	21	.267	12	<i>c</i> .000?	88	77	86	49	0?	0?
VERMONT—													
Burlington .....	.102	.119	.104	20	.289	10	.012	85	79	84	58	52	44
Woodstock .....	.090	.093	.101	21	.246	11	.008	94	76	89	?	53	64
MASSACHUSETTS—													
Amherst .....	.113	.136	.123	21	.283	11	.018	95	83	90	67	57	69
Bridgewater ( <i>b</i> ) .....	.135	.166	.157	21	.419	11	.019	92	86	92	68	32	72
Cambridge .....								92	84	87	78	72	76
Lawrence .....	.103	.130	.115	21	.334	10	.006	76	70	78	20	34	49
Nantucket .....	.149	.156	.153	21	.335	10	.031	74	64	76	44	30	46
New Bedford .....	.140	.156	.151	21	.367	11	.026	88	78	90	54	40	74
Westfield .....	.103	.121	.118	21	.276	11	.007	82	66	85	38	32	62
Worcester .....	.135	.151	.137	21	.332	10	.031	82	76	83	48	40	50
RHODE ISLAND—													
Providence ( <i>d</i> ) .....													
CONNECTICUT—													
Middletown .....	.122	.135	.130	21	.333	11	.021	93	73	90	70	41	64
Pomfret .....	.127	.149	.140	21	.348	10	.033	95	88	92	77	62	75
Wallingford .....	.115	.131	.126	21	.311	10	.023	91	72	90	58	30	62
NEW YORK—													
Buffalo ( <i>b</i> ) .....	.135	.132	.136	14	.289	23	.033	75	69	64	43	45	47
Clinton .....	.097	.112	.099	7	.236	10	.006	68	61	64	49	32	33
Fordham .....	.128	.144	.136	7	.293	13	<i>e</i> .000	68	60	71	0	0	37
Fort Edward .....	.096	.129	.117	21	.299	10	.004	80	78	84	35	33	26
New York city .....	.138	.157	.143	28	.375	11	.000	78	67	71	27	0	20
PENNSYLVANIA—													
Berwick .....	.140	.153	.146	21	.363	24	.048	84	69	80	70	41	56
Carlisle .....	.114	.138	.122	28	.310	10	.015	73	62	71	37	44	39
Chambersburg .....	.324	.343	.356	21	.489	24	.194	64	61	69	48	43	49
Chromedale .....	.209	.210	.183	21	.454	9	.000	81	74	76	0	?	?
Easton ( <i>b</i> ) .....	.128	.128	.138	21	.375	10	.000	79	59	79	53	0	45
Harrisburg, [Hickok] .....	.120	.128	.123	21	.363	9	.000	71	57	67	24	0	36
Lewisburg .....	.121	.129	.118	21	.336	10	.026	84	64	74	50	43	15
Linden ( <i>b</i> ) .....	.137	.156	.146	28	.266	10	.029	94	79	94	70	49	64
Murrysville .....	.099	.114	.106	7	.322	22	.005	68	51	61	26	5	23
Norristown .....	.147	.157	.148	21	.376	9	.034	83	50	75	57	35	33
Philadelphia .....	.153	.165	.158	28	.390	11	.028	82	64	79	58	35	61
Somerset .....	.138	.184	.143	28	.418	10	.023	93	80	89	80	36	46
Westtown .....	.151	.189	.157	28	.403	10	.026	89	80	86	68	55	67
MARYLAND—													
Annapolis .....	.160	.183	.179	28	.429	10	.039	86	67	79	59	46	51
Baltimore .....	.139	.150	.139	28	.426	11	.013	66	50	63	19	25	33
Chestertown .....	.142	.142	.138	21	.431	22	<i>e</i> .000	66	46	57	24½	0	7½
Frederick .....	.134	.160	.143	21	.375	10	.031	78	66	75	55	43	52
DISTRICT OF COLUMBIA—													
Washington .....	.153	.164	.162	28	.410	10	.022	74	56	69	35	36	40
NORTH CAROLINA—													
Murfreesborough .....	.257	.340	.307	21	.678	11	.094	98	92	96	89	81	88
SOUTH CAROLINA—													
All Saints .....	.263	.300	.288	21	.604	24	.084	86	66	84	51	36	48

\*The maxima, being generally 100, or complete saturation, are omitted in this table.

*a* Same amount on the 11th.*b* For changes in hours of observation, &c., see table of the thermometer for this month.*c* Same amount on the 30th.*d* Mean relative humidity for the month, 60*e* Same amount on the 23d.

## No. 26.—PSYCHROMETER, JANUARY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
<b>SOUTH CAROLINA—Continued.</b>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Columbia, [Barton] .....	.233	.231	.239	28	.549	23	.051	85	54	75	57	4	21
Columbia, [White] .....	.206	.298	.223	21	.644	8	.089	83	79	81	62	39	62
St. John's (a) .....	.273	.356	.286	21	.618	24	.096	88	74	82	64	45	54
<b>GEORGIA—</b>													
Athens .....	.211	.236	.227	28	.540	8	.055	85	61	79	56	31	51
Augusta .....	.250	.308	.318	21	.623	8	.076	71	64	70	40	44	55
Savannah .....	.280	.313	.306	21	.629	23	.069	81	63	76	49	29	46
<b>FLORIDA—</b>													
Jacksonville .....	.334	.448	.371	21	.731	8	b. 129	84	78	84	51	55	61
Micanopy .....	.358	.461	.416	21	.731	?	?	97	69	93	?	?	?
<b>ALABAMA—</b>													
Greensborough (a) .....	.218	.268	.241		?		?	86	65	80	?	?	?
Selma .....	.086	.272	.272	21	.536	23	.082	89	67	78	62	38	49
<b>MISSISSIPPI—</b>													
Columbus .....	.201	.225	.234	21	.530	23	.062	86	59	80	57	35	52
Paulding .....	.279	.338	.321	20	.618	24	.023	87	70	74	65	41	■
<b>TEXAS—</b>													
Austin, [Van Nostrand] .....	.235	.224	.212	20	.430	21	.057	89	44	68	52	10½	34
Larissa .....	.250	.312	.277	21	.577	23	.091	85	69	79	71	47	■
Sisterdale .....	.194	.209	.197					80	46	73			
<b>TENNESSEE—</b>													
Glenwood .....	.152	.163	.169	20	.452	22	.047	82	54	71	50	23	37
La Grange .....	.189	.228	.211	20	.483	23	.075	87	58	79	45	41	50
Memphis .....	.199	.220	.223	27	.537	22	.005	60	64	79	71	34	5
<b>KENTUCKY—</b>													
Bardstown .....	.143	.161	.157	27	.378	22	.024	81	61	76	58	31	47
Louisville (a) .....		.160		27	.388	22	.036		61			34	
Springdale (a) .....	.143	.188	.181	27	c. 368	8	.042	95	71	86	78	52	55
<b>OHIO—</b>													
Avon .....	.130	.135	.143	14	.316	8	.033	80	65	76	53	23	51
Cincinnati .....	.141	.259	.159	14	.452	8	.036	76	79	72	53	53	59
Hillsborough .....	.127	.140	.143	20	.374	23	.032	81	66	77	52	33	44
Montville .....	.128	.141	.140	20	.403	23	.039	85	72	80	51	40	52
Savannah .....	.117	.151	.131	20	.361	10	.028	83	76	79	56	54	55
Westerville .....	.137	.170	.162	20	.382	8	.030	82	75	85	59	45	51
<b>MICHIGAN—</b>													
Detroit .....	.119	.137	.118	20	.273	10	d. 000	71	65	64	29	■	■
Marquette .....	.080	.101	.082	18	.177	22	.008	79	74	77	43	16	51
Ottawa Point (e) .....	.123	.123	.130	19	.212	10	.026	96	89	89	69	62	67
Thunder Bay Island (f) .....	.102	.114	.107	20	.197	22	.018	77	79	76	45	57	51
Ypsilanti .....	.128	.130	.131	20	.243	10	.026	96	70	81	48	31	52
<b>INDIANA—</b>													
New Harmony .....	.158	.185	.182	20	.388	22	.052	92	73	93	79	38	58
Richmond .....	.116	.129	.141	27	.309	22	.036	73	59	72	52	28	37
<b>ILLINOIS—</b>													
Augusta .....	.114	.136	.127	27	.282	22	.029	86	67	81	58½	25½	50
Batavia, [Mead] .....	.138	.169	.143	27	.304	31	.072	81	76	80	64	57	49
Manchester (a) .....	.136	.202	.150	27	.376	7	g. 031	99	90	99	87	71	80
Peoria .....	.111	.124	.123	26	.244	22	.014	78	59	75	57	22	49
Wheaton .....	.109	.118	.112	13	.225	8	.026	89	70	84	57	31	48
<b>MISSOURI—</b>													
St. Louis, [Engelmann] .....	.142	.157	.145	27	.344	22	.028	83	62	76	54	37	45
<b>WISCONSIN—</b>													
Appleton .....	.082	.126	.099	20	.244	8	h. 000	63	75	71	0	43	37
Madison .....	.089	.107	.098	27	.204		?	80	76	80	56	38	?
Waukesha .....	.083	.107	.106	12	.209	8	h. 000	63	63	69	■	34	■

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 23d.

c Same amount on the 20th.

d Same amount on the 22d and 23d.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .121; mean relative humidity, 96.

f Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .096; mean relative humidity, 74.

g Same amount on the 22d.

h Same amount on the 19th.



## No. 26.—PSYCHROMETER, JANUARY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
IOWA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches.</i>		<i>Inches</i>		<i>Inches</i>						
Fairfield .....	.096	.104	.095	27	.218	22	.003	72	54	64	10	11	26
Sioux City .....	.070	.147	.092	23	.310	21	.000	70	69	73	10	30	0
MINNESOTA—													
Beaver Bay, [Clark] .....	.071	.100	.087	19	.155	21	.017	84	82	94	57	61	76
KANSAS—													
Leavenworth City, [McCarty] .....	.129	.148	.141	19	.282	7	.021	85	69	82	62	39	56
MEXICO—													
Mirador (a) .....	.963	1.110	1.146	28	1.545	5	.490						
Vera Cruz (b) .....	.572		.582					81	7	79			
CALIFORNIA—													
Sacramento .....	.212	.243	.239	18	.362	26	.120	81	72	81	54	32	51
WEST INDIES—													
St. George's, Bermuda (c) .....				?	.630	?	.234						
CENTRAL AMERICA—													
Guatemala (d) .....	.363	.348	.392					57.5	47	83			
SOUTH AMERICA—													
Catharina Sophia, Surinam (b) .....	.778	.875	.876	11	.977	1	.658	92	73	87	90	65	75
EASTERN CONTINENT—													
Jerusalem, Palestine .....	.233	.266	.234	13	.374	11	.102	82	70	78	58.5	20	40

a Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to  $\frac{1}{1000000}$  water in the cubic space of air."

b For changes in hours of observation, &c., see table of the thermometer for this month.

c Mean force of vapor, .445; mean relative humidity, 78; minimum humidity, 39.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean force of vapor at 6 a. m., .405; mean relative humidity at 6 a. m., 92.

## No. 27.—PSYCHROMETER, FEBRUARY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
BRITISH AMERICA—													
Montreal	.078	.116	.093	27	.229	11	.001	71	81	78	2	51	39
St. Martin (a)	.062	.114	.086	20	.261	13	.010	75	78	82	57	62	65
Toronto (a)	.115	.115	.121	20	.245	10	.045	86	69	81	63	46	47
Windsor	.106	.125	.114	4	.305	8	.024	85	76	83	65	42	67
Wolfville	.101	.137	.115	11	.311	11	.024	81	81	90	29	45	61
MAINE—													
Portland	.097	.118	.110	16	.209	25	.042	87	68	78	54	40	52
Steuben	.096	.113	.119	20	.238	10	.000?	85	68	88	52	0?	33
VERMONT—													
Burlington	.102	.114	.102	20	.235	10	.027	86	68	74	56	43	48
MASSACHUSETTS—													
Auburn	.117	.141	.126	20	.259	11	.050	92	76	84	73	52	54
Cambridge								93	85	89	80	70	76
Lawrence	.107	.132	.119	20	.265	11	.030	77	71	79	34	36	48
Nantucket	.155	.137	.163	3	.286	7	.000?	74	55	79	49	0?	58
New Bedford	.154	.168	.161	9	.289	25	.064	91	78	94	56	40	63
Westfield	.103	.118	.123	20	.257	25	.077	81	63	82	59	35	50
Worcester	.128	.148	.133	20	.292	13	.059	83	71	84	56	38	62
RHODE ISLAND—													
Providence (d)													
CONNECTICUT—													
Middletown	.129	.135	.136	20	.266	10	.048	90	64	87	59	37	61
Pomfret	.131	.144	.133	20	.278	16	.000	94	81	87	65	0	66
Wallingford	.120	.130	.129	20	.257	25	.051	87	66	82	47	36	57
NEW YORK—													
Buffalo (a)	.126	.143	.140	19	.285	10	.063	75	72	79	56	51	64
Fordham	.106	.129	.119	20	.361	10	.000	60	59	64	33	22	0
Fort Edward	.098	.129	.117	20	.248	11	.026	89	73	90	60	51	53
New York city	.147	.156	.135	20	.387	14	.000	79	64	65	36	32	0
Schenectady	.119	.137	.127	28	.216	25	.040	90	77	84	56	53	66
PENNSYLVANIA—													
Berwick	.128	.158	.144	20	.321	5	.054	81	68	83	58	41	61
Carlisle	.132	.150	.136	24	.247	5	.049	74	64	73	46	41	46
Chambersburg	.341	.371	.378	19	.476	21	.210	66	62	62	49	52	41
Chromedale	.210	.218	.217	20	.427	4	.047	90	79	90	50	16	43
Easton (a)	.129	.131	.133	20	.261	11	.043	69	59	75	48	31	45
Harrisburg, [Hickok]	.130	.140	.133	20	.244	10	.044	72	58	68	37	31	26
Lewisburg	.121	.140	.127	20	.233	1	.000	80	61	74	0	33	24
Murrysville	.109	.132	.126	19	.436	5	.030	64	53	66	34	20	29
Norristown	.129	.149	.114	18	.222	11	.055	75	66	79	33	34	48
Philadelphia	.152	.166	.158	20	.404	11	.070	79	65	74	44	31	46
Somerset	.164	.183	.156	20	.449	10	.074	97	77	90	74	44	69
Westtown	.150	.185	.168	20	.418	11	.068	89	80	89	59	48	61
MARYLAND—													
Annapolis	.174	.198	.197	20	.449	5	.090	86	68	79	48	42	54
Baltimore	.153	.158	.155	20	.405	5	.054	69	55	70	31	26	32
Chester town	.137	.152	.141	20	.395	26	.000	62	54	52	0	15	27
Frederick	.159	.179	.163	20	.348	5	.071	81	67	75	52	40	47
DISTRICT OF COLUMBIA—													
Washington	.174	.180	.172	20	.390	10	.071	80	62	71	36	34	33
NORTH CAROLINA—													
Murfreesborough	.275	.371	.316	20	.668	1	f.153	98	89	94	91	77	81
SOUTH CAROLINA—													
All Saints	.301	.373	.335	18	.628	1	.129	90	70	86	66	29	49
Columbia, [Barton]	.273	.288	.392	20	.579	20	.019	84	59	78	45	15	7
Columbia, [White]	.311	.434	.370	19	.812	2	.106	92	88	93	58	70	70
St. John's (a)	.260	.307	.298	20	.621	1	.123	88	69	81	73	51	44

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation. &amp;c., see table of the thermometer for this month.

b Same amount on the 15th.

c Same amount on the 30th.

d Mean relative humidity, 59.

e Same amount on the 24th.

f Same amount on the 11th.



## No. 27.—PSYCHROMETER, FEBRUARY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
GEORGIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Athens .....	.271	.271	.286	18	.564	4	.100	87	58	78	59	21	32
Savannah .....	.328	.363	.356	28	.602	21	.091	85	59	78	44	19	39
FLORIDA—													
Jacksonville .....	.384	.533	.431	28	.785	4	.152	87	75	84	73	55	44
ALABAMA—													
Greensborough (a) .....	.343	.323	.298	26	.671	10	.111	86	58	77	62	28	41
Selma .....	.336	.323	.352	25	.559	10	.130	85	59	75	56	32	43
MISSISSIPPI—													
Columbus .....	.298	.333	.332	17	.641	10	.079	84	64	83	60	37	49
Paulding .....	.331	.429	.438	18	.690	4	.160	89	69	79	64	45	30½
TEXAS—													
Austin, [Palm] (b) .....	.472	.426	.496	24	.639	20	.071	84	54	78	41	15	34
Austin, [Van Nostrand] .....	.387	.382	.379	19	.672	2	.097	87	55	69	48	12	34
Larissa .....	.366	.421	.406	19	.705	3	.000	82	67	79	22	0	64
Sisterdale .....	.343	.330	.339	18	.611	2	.067	82	49	72	35	■	28
TENNESSEE—													
Glenwood .....	.227	.249	.253	19	.542	10	.071	82	66	80	58	25	52
La Grange .....	.276	.314	.301	18	.615	■	.101	85	72	82	62	41	53½
Memphis .....	.280	.308	.301	25	.662	10	.096	90	70	82	62	42	35
KENTUCKY—													
Bardstown .....	.191	.230	.220	19	.595	10	.067	84	70	78	65	38	45
Louisville (a) .....		.219		19	.595	4	.073		66			33	
Springdale (a) .....	.192	.238	.243	19	.733	7	.065	93	77	85	54	36	54
OHIO—													
Avon .....	.138	.154	.154	19	.479	14	.000	77	64	78	56	0	47
Cincinnati .....	.176	.279	.213	19	.583	4	.067	80	77	77	67	39	49
Hillsborough .....	.157	.175	.183	19	.556	5	.063	83	69	79	54	34	43
Montville .....	.137	.160	.161	19	.483	11	.065	86	75	87	45	44	51
Savannah .....	.126	.180	.157	19	.418	7	.032	85	82	88	59	56	75
Westerville .....	.157	.182	.183	19	.493	7	.055	90	74	85	57	30	42
MICHIGAN—													
Detroit .....	.121	.144	.110	16	.228	7	.020	71	65	63	32	39	29
Marquette .....	.078	.106	.081	21	.218	5	.000	77	68	70	35	16	0
Ottawa Point (c) .....	.109	.142	.126	23	.222	11	d.022	83	81	80	67	71	64
Thunder Bay Island (e) .....	.097	.110	.103	22	.178	4	.019	72	75	73	49	45	45
Ypsilanti .....	.120	.130	.133	19	.383	10	.048	86	63	76	53	37	51
INDIANA—													
New Harmony .....	.193	.235	.228	19	.706	10	.065	93	74	90	61	47	70
Richmond .....	.141	.155	.171	19	.481	10	.058	79	63	77	58	23	44
ILLINOIS—													
Augusta .....	.131	.168	.148	19	.500	9	.029	84	69	82	56	40	52
Batavia .....	.118	.153	.139	19	.509	14	.006	85	71	84	52	2	45
Manchester (a) .....	.161	.239	.182	19	.604	4	f.044	100	90	99	100	65	83
Peoria .....	.131	.152	.140	19	.492	10	d.027	75	58	72	49	33	42
Wheaton .....	.121	.140	.132	19	.490	13	.028	88	69	87	68	42	63
MISSOURI—													
St. Louis .....	.171	.195	.192	19	.502	9	.047	81	62	78	55	29	53
WISCONSIN—													
Appleton .....	.100	.166	.108	22	.437	9	f.020	72	78	72	39	53	49
Madison .....	.103	.115	.104	19	.323	28	.003	77	66	71	38	33	2
IOWA—													
Fairfield .....	.096	.100	.102	19	.391	16	.000	65	53	66	26	■	42
MINNESOTA—													
Beaver Bay .....	.070	.103	.087	17	.199	10	.014	96	83	92	72	59	68
KANSAS—													
Lawrence (a) .....	.240	.286	.278	19	.449	20	.131	53	43	52	37	29	38

a For changes in hours of observation, &c., see table of the thermometer for this month.

b For the last 14 days of the month only.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .103; mean relative humidity, 81.

d Same amount on the 13th.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .091; mean relative humidity, 72.

f Same amount on the 10th.

## No. 27.—PSYCHROMETER, FEBRUARY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
CALIFORNIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Sacramento .....	.259	.316	.290	6	.436	22	.173	81	75	80	65	66	60
San Francisco .....	.287	.286	.294	6	.442	21	.181	84	66	82	75	43	64
MEXICO—													
Mirador (a) .....	1.091	1.217	1.329	14	1.660	8	.640						
Vera Cruz (b) .....	.667		.734					80		83			
WEST INDIES—													
St. George's, Bermuda (c) ..				?	.676	?	.262						
CENTRAL AMERICA—													
Guatemala (d) .....	.398	.369	.422					57.5	44	82.5			
SOUTH AMERICA—													
Catharina Sophia, Surinam (b)	.782	.836	.836	4	.945	20	.658	90	70	84	81	62	74
EASTERN CONTINENT—													
Jerusalem, Palestine .....	.261	.305	.263	10	.423	4	.134	79	67	78	43	32½	33

a Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to  $\frac{1}{1000000}$  water in the cubic space of air."

b For changes in hours of observation, &c., see table of the thermometer for this month.

c Mean force of vapor, .479; mean relative humidity, 82; minimum, 48.  
d Mean force of vapor at 4 a. m., .409; mean relative humidity at 4 a. m., 91. Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m.



## No. 28.—PSYCHROMETER, MARCH, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Montreal .....	.154	.206	.173	18	.348	2	.020	84	84	86	43	54	45
St. Martin (a) .....	.122	.199	.152	29	.309	2	.013	82	80	85	69	54	71
Toronto (a) .....	.161	.171	.173	18	.357	2	.049	85	68	77	68	39	54
Windsor .....	.151	.172	.160	26	.354	2	.024	88	74	87	65	49	68
Wolfville .....	.158	.194	.162	19	.322	2	.035	85	79	85	51	45	52
MAINE—													
Portland .....	.140	.158	.159	19	.265	3	.038	80	68	79	56	36	46
Steuben .....	.138	.166	.161	31	.286	2	.015	78	72	85	29	28	14
VERMONT—													
Burlington .....	.153	.168	.186	28	.338	1	.020	82	67	71	32	20	45
MASSACHUSETTS—													
Amherst .....	.161	.191	.175	18	.406	2	.050	86	66	78	54	29	50
Bridgewater (a) .....	.197	.190		17	.520	2	.052	78	61		39	18	
Cambridge .....								91	83	84	74	62	64
Lawrence .....	.149	.179	.178	18	.390	2	.025	70	64	77	39	34	29
Nantucket .....	.187	.199	.192	18	.335	2	.049	74	63	76	39	33	47
New Bedford .....	.192	.202	.198	18	.483	2	.071	84	68	86	51	22	42
Westfield .....	.143	.169	.181	18	.398	1	.038	75	58	79	45	17	51
Worcester .....	.173	.219	.197	17	.446	2	.051	82	67	77	59	38	57
RHODE ISLAND—													
Providence (c) .....													
CONNECTICUT—													
Middletown .....	.176	.176	.186	29	.403	10	.000	83	52	76	52	0	45
New Haven .....	.158	.198	.177	18	.388	19	.014	66	60	69	38	19	26
Pomfret .....	.176	.220	.189	18	.403	2	.057	88	78	84	62	29	50
Wallingford .....	.175	.182	.187	19	.418	2	.048	83	56	77	53	16	50
NEW YORK—													
Buffalo (a) .....	.184	.199	.194	18	.362	2	.065	77	69	72	59	30	49
Clinton .....	.150	.184	.165	29	.362	1	.036	74	65	74	42	34	50
Fordham .....	.220	.238	.218		?		?	86	67	8	?	?	?
Fort Edward .....	.153	.196	.169	29	.388	1	.034	81	69	76	55	42	43
New York .....	.182	.216	.186	18	.419	3	.036	69	57	61	36	28	21
Saratoga .....	.313	.372	.350	15	.618	3	.152	68	63	62	26	26	21
Schenectady .....	.161	.202	.188	18	.427	3	.047	84	70	83	65	49	67
PENNSYLVANIA—													
Berwick .....	.198	.219	.200	18	.491	2	.082	78	59	71	53	34	19
Carlisle .....	.182	.209	.232	18	.522	2	.064	70	54	67	45	25	37
Chambersburg .....	.394	.398	.422	24	.550	21	.112	68	64	66	55	19	39
Easton (a) .....	.174	.182	.185	18	.410	2	.047	68	51	69	37	23	31
Harrisburg, [Hickok] .....	.175	.192	.199	18	.497	31	.032	66	50	63	28	15	11
Lewisburg .....	.177	.171	.185	18	.444	2	.060	79	48	69	43	15	25
Linden (a) .....	.201	.211	.209	12	.491	1	.069	84	59	71	53	20	38
Murrysville .....	.149	.173	.172	18	.376	31	.047	59	43	64	27	10	31
Norristown .....	.189	.209	.199	18	.549	31	.058	69	54	66	21	20	40
Philadelphia .....	.207	.227	.222	18	.549	2	.085	74	50	66	45	23	38
Somerset .....	.200	.246	.209	24	.429	2	.082	91	69	81	65	49	54
Westtown .....	.211	.252	.230	18	.565	1	.077	83	63	79	50	39	45
MARYLAND—													
Annapolis .....	.234	.257	.272	29	.490	2	.070	83	59	72	51	29	44
Baltimore .....	.200	.197	.222	18	.502	23	.005	62	42	59	30	1	32
Chestertown .....	.201	.197	.210	18	.509	23	.000	65	42	57	28	0	32
Frederick .....	.215	.242	.238	18	.483	2	.078	79	58	73	53	29	46
DISTRICT OF COLUMBIA—													
Washington .....	.226	.234	.237	18	.522	31	.057	73	51	65	37	12	40
NORTH CAROLINA—													
Murfreesborough .....	.364	.485	.420	29	.705	2	.199	93	83	91	83	71	83

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &c., see table of the thermometer for this month.  
b Same amount on the 29th.  
c Mean relative humidity for the month, 59.  
d Same amount on the 30th.  
e Same amount on the 3d.  
f Same amount on the 21st.  
g Same amount on the 24th.

## No. 28.—PSYCHROMETER, MARCH, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.	MEAN.			MINIMA.			
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 a. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
SOUTH CAROLINA—													
All Saints.....	.400	.436	.419	29	.785	19	.142	87	68	81	51	30	39
Columbia, [Barton].....	.308	.326	.329	7	.631	6	.084	76	49	68	21	16	24
Columbia, [White].....	.401	.587	.488	29	.963	19	.216	90	89	92	71	45	82
St. John's (a).....	.402	.408	.389	29	.745	18	b .156	88	63	79	70	32	43
GEORGIA—													
Athens.....	.293	.311	.315	7	.603	25	.104	79	55	69	46	22	26
Augusta.....	.355	.411	.446	29	.717	19	.160	67	59	69	43	38	54
Savannah.....	.429	.424	.418	30	.772	19	.107	84	60	73	43	22	39
FLORIDA—													
Jacksonville.....	.545	.622	.523	30	.877	20	.251	88	77	87	66	61	54
Micanopy.....	.526	.610	.535	29	.950	19	.225	89	66	91	56	38	74
ALABAMA—													
Greensborough.....	.311	.298	.325	24	.618	18	.047	82	51	71	53	13	33½
Moulton.....	.297	.277	.296	23	.616	19	.124	69	56	65	46	27	44
Selma.....	.364	.316	.368	14	.639	31	.137	87	56	71	63	24	47
MISSISSIPPI—													
Columbus.....	.331	.342	.351	23	.646	18	.119	84	58	76	54	32	47
TEXAS—													
Austin, [Palm].....	.327	.258	.296	23	.685	13	.099	73	32	56	30	5	1
Austin, [Van Nostrand].....	.352	.281	.308	24	.671	13	.044	80	34	57	44	8	7
Larissa.....	.371	.453	.403	28	1.023	14	.169	78	65	77	65	42	53
Sisterdale.....	.297	.211	.268	23	.590	10	.000	74	26	57	9	6	0
TENNESSEE—													
Glenwood.....	.248	.243	.254	14	.487	4	.065	75	49	66	26	12	27
La Grange.....	.272	.313	.294	22	.651	18	.139	72	57	66	44	31	41
Memphis.....	.283	.305	.317	22	.583	8	.061	76	56	70	19	18	30
KENTUCKY—													
Bardstown.....	.235	.268	.220	23	.559	26	c .000	74	55	62	47	■	0
Louisville (a).....		.253		23	.554	31	.102		48			20	
Springdale (a).....	.231	.290	.274	21	.476	2	.120	84	64	71	58	31	38
OHIO—													
Avon.....	.216	.237	.192	16	.543	13	.092	75	66	70	39	28	30
Cincinnati, [Harper].....	.251	.422	.265	22	.785	31	.139	76	65	66	45	43	41
Hillsborough.....	.200	.215	.196	7	.398	31	.069	72	52	57	39	19	18
Montville.....	.202	.227	.201	24	.420	30	.098	78	64	71	53	33	39
Savannah.....	.214	.279	.239	28	.497	2	.084	84	74	86	52	31	71
Westerville.....	.212	.235	.229	21	.405	2	.071	81	57	72	46	33	41
MICHIGAN—													
Detroit.....	.138	.153	.133	27	.376	14	.053	66	47	66	31	15	34
Marquette.....	.127	.146	.136	23	.242	1	.034	79	72	79	45	35	42
Ottawa Point (d).....	.161	.196	.177	23	.336	2	.057	81	79	80	63	64	70
Thunder Bay Island (e).....	.148	.156	.154	24	.233	1	.048	78	78	78	62	68	67
Ypsilanti.....	.173	.176	.167	11	.365	22	.067	81	55	68	54	15	48
INDIANA—													
New Harmony.....	.252	.277	.275	23	.532	29	.138	80	59	75	53	36	45
ILLINOIS—													
Augusta.....	.179	.227	.216	23	.455	19	.091	79	63	75	39	29	39½
Batavia, [Mead].....	.189	.214	.200	23	.478	5	.000	85	64	80	64	0	58
Manchester (a).....	.246	.304	.277	23	.591	19	.141	100	77	95	92	55	79
Peoria.....	.175	.191	.202	23	.416	30	.086	69	49	70	47	22	43
Upper Alton (f).....	.292	.351	.267	23	.717	19	.135	82	80	74	47	58	69
Wheaton.....	.177	.185	.187	23	.359	25	g .090	83	61	78	57	29	58
MISSOURI—													
St. Louis.....	.201	.217	.228	28	.473	31	.038	68	49	65	45	8	35½
WISCONSIN—													
Appleton.....	.157	.191	.167	23	.376	.1	.067	76	71	77	37	28	49

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 19th.

c Same amount on the 23d.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .145. Mean relative humidity, 81.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .135. Mean relative humidity 77.

f For the last 22 days of the month only.

g Same amount on the 30th.



## No. 28.--PSYCHROMETER, MARCH, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
WISCONSIN—Continued.	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Madison .....	.161	.163	.....	23	.340	24	.012	81	61	76	60	29	4
Waukesha .....	.151	.170	.149	17	.260	21	.025	71	56	67	9	8	10
IOWA—													
Fairfield .....	.150	.167	.169	23	.396	4	.082	66	50	65	46	21	26
Muscatine .....	.230	.237	.242	23	.439	1	.142	86	80	81	70	54	52
MINNESOTA—													
Beaver Bay, [Clark] .....	.132	.146	.141	21	.204	25	.022	87	80	89	57	52	65
Beaver Bay, [Wieland] .....	.134	.189	.145	21	.289	27	.040	95	86	94	58	81	78
KANSAS—													
Lawrence .....	.224	.243	.263	5	.487	22	.097	57	50	51	29	29	34
CALIFORNIA—													
Sacramento .....	.234	.267	.272	25	.410	28	.078	73	61	71	42	19	44
San Francisco .....	.229	.249	.267	21	.405	31	.094	69	54	74	29	20	26
MEXICO—													
Minatitlan .....	.664	.723	.712	13	.904	20	.507	80	61	74	61	35	51
Mirador (b) .....	1.167	1.317	1.388	24	1.800	6	.780	.....	.....	.....	.....	.....	.....
Vera Cruz (c) .....	.731	.....	.746	.....	.....	.....	.....	78	.....	78	.....	.....	.....
WEST INDIES—													
St. George's, Bermuda (d) .....	.....	.....	.....	?	.667	?	.309	.....	.....	.....	.....	.....	.....
CENTRAL AMERICA—													
Guatemala (e) .....	.446	.474	.486	.....	.....	.....	.....	55	54	85.5	.....	.....	.....
SOUTH AMERICA—													
Catharina Sophia, Surinam ..	.739	.868	.862	18	.936	10	.577	89	70	86	85	65	83
EASTERN CONTINENT—													
Jerusalem, Palestine .....	.286	.312	.294	17	.500	17	.145	76	61	76	32	34	25

a Same amount on the 31st.

b Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to 30° 30' water in the cubic space of air."

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Mean force of vapor, .432; mean relative humidity, 76; minimum, 53.

e Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m. Mean force of vapor at 4 a. m., .456. Mean relative humidity at 4 a. m., 93.

## No. 29.—PSYCHROMETER, APRIL, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
BRITISH AMERICA—													
Halifax (a).....	.192		.209	18	.283	1	.116	78		75	56		52
St. Martin (a).....	.151	.241	.180	30	.529	10	.072	83	73	82	70	40	39
Toronto (a).....	.187	.159	.156	14	.331	28	.053	75	53	66	31	14	27
Windsor.....	.172	.200	.177	23	.382	1	.093	86	69	79	63	51	54
Wolfville.....	.162	.202	.181	21	.361	5	.070	73	64	79	47	32	50
MAINE—													
Portland.....	.151	.152	.149	23	.254	1	.047	69	52	63	33	26	21
Steuben (a).....	.128	.150	.140	23	.275	1	.000	63	54	62	29	18	0
VERMONT—													
Burlington.....	.140	.143	.154	26	.283	5	.052	64	47	60	37	21	29
MASSACHUSETTS—													
Amherst.....	.182	.174	.174	23	.349	9	.069	75	51	66	42	14	26
Bridgewater (a).....	.187	.198	.168	30	.501	1	.000	72	58	61	37	18	0
Cambridge.....								84	75	79	70	62	65
Lawrence.....	.151	.153	.161	26	.278	6	.044	66	49	67	36	14	32
Nantucket.....	.183	.176	.207	23	.345	5	.068	63	50	75	34	24	41
New Bedford.....	.176	.181	.184	23	.388	1	.033	68	52	68	39	11	29
Westfield.....	.159	.151	.176	25	.337	9	.032	62	43	65	31	8	29
Worcester.....	.192	.197	.183	17	.334	30	.067	78	57	69	46	24	20
RHODE ISLAND—													
Providence (b).....													
CONNECTICUT—													
Middletown.....	.185	.165	.178	26	.353	6	.066	75	40	66	51	14	27
Pomfret.....	.185	.204	.190	26	.349	1	.058	80	60	75	56	21	44
Wallingford.....	.174	.170	.184	26	.374	5	.051	72	44	65	42	17	35
NEW YORK—													
Bellport.....	.198	.225	.229	26	.378	5	.064	69	62	81	42	19	49½
Buffalo (a).....	.183	.181	.196	11	.322	5	.079	71	60	73	45	29	49
Clinton.....	.167	.175	.173	3	.336	9	.054	67	49	66	39	25	31
Fort Edward.....	.178	.200	.187	28	.322	19	.002	77	60	68	50	21	45
Henrietta.....	.215	.205	.189	20	.658	4	.025	61	59	78	10	34	9
New York city.....	.190	.241	.212	26	.631	16	.076	63	56	62	33	21	23
Waterford.....	.206	.231	.211	30	.314	1	.103	79	64	77	45	38	42
PENNSYLVANIA—													
Berwick.....	.227	.263	.265	30	.502	9	.074	75	60	76	49	25	51
Carlisle.....	.208	.234	.233	13	.496	5	.082	67	56	67	32	19	28
Chambersburg.....	.413	.425	.468	13	.572	6	.309	70	66	69	57	41	61
Easton (a).....	.188	.193	.205	26	.408	5	.074	63	48	66	35	25	32
Harrisburg, [Hickok].....	.197	.200	.214	13	.471	9	.052	64	46	56	25	11	25
Lewisburg.....	.209	.194	.219	13	.478	1	.060	69	46	65	34	12	22
Linden (a).....	.217	.254	.242	15	.460	4	.089	81	67	77	66	27	40
Norristown.....	.192	.198	.215	26	.425	4	.056	63	50	67	36	16	38
Philadelphia.....	.207	.212	.226	3	.478	6	.085	65	47	63	33	22	27
Somerset.....	.240	.291	.229	13	.581	9	.098	91	68	77	68	48	51
MARYLAND—													
Annapolis.....	.255	.274	.294	27	.505	5	.120	75	59	76	43	29	39
Baltimore.....	.201	.211	.226	26	.403	4	.038	55	45	54	15	8	16
Frederick.....	.248	.281	.275	13	.493	6	.116	79	65	78	48	33	39
DISTRICT OF COLUMBIA—													
Washington.....	.247	.257	.271	27	.549	4	.051	70	52	70	33	12	37
VIRGINIA—													
Montross.....	.304	.414	.324	11	.641	9	.120	85	81	85	61	59	52
NORTH CAROLINA—													
Murfreesborough.....	.385	.515	.460	14	.877	6	.177	90	77	88	78	67	79
SOUTH CAROLINA—													
All Saints.....	.409	.409	.442	12	.717	18	.041	78	53	75	54	7	48
Columbia, [Barton].....	.342	.332	.359	3	.666	5	.086	77	45	62	49½	16	24½
Columbia, [White].....	.488	.713	.535	13	1.255	6	.209	89	89	89	75	70	85
St. John's (a).....	.413	.421	.439	12	.759	18	.162	80	59	79	45	34	47

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Mean relative humidity for the month, 59.  
c Same amount on the 9th.



## No. 29.—PSYCHROMETER, APRIL, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
GEORGIA—	<i>Inches.</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches.</i>		<i>Inches</i>						
Athens .....	.335	.358	.341	12	.701	18	.127	73	52	66	23	19	35
Augusta .....	.401	.452	.473	12	.738	6	.182	70	59	69	47	43	49
Savannah .....	.430	.423	.464	2	.759	23	.149	78	53	74	48	26	37
FLORIDA—													
Jacksonville .....	.608	.686	.603	14	.944	6	.282	83	73	87	37	58	75
Micanopy .....	.547	.623	.564	2	.887	17	.216	87	58	94	46	39	84
ALABAMA—													
Greensborough (b) .....	.393	.357	.377	27	.614	16	.140	83	55	73	64	28	44
Moulton .....	.345	.341	.354	12	.625	5	.120	66	55	62	42	34	45
Selma .....	.377	.322	.388	2	.680	8	.071	76	45	65	61	8	43
MISSISSIPPI—													
Columbus .....	.390	.412	.431	2	.731	5	.143	82	53	78	52	35	53
Paulding .....	.491	.500	.506	11	.812	7	.125	90	66	72	65	43	21½
TEXAS—													
Austin, [Palm] .....	.356	.237	.341	11	.839	26	.000	61	25	53	24	0	13
Austin, [Van Nostrand] .....	.394	.310	.375	11	.724	27	.071	69	33	58	28	7	25
Larissa .....	.455	.537	.488	25	.942	21	.142	86	73	76	58	36½	59
Sisterdale .....	.355	.298	.352	11	.685	22	.014	64	31	56	11	3	5
TENNESSEE—													
Glenwood .....	.288	.288	.315	10	.660	5	.097	73	50	71	39	18	38
La Grange .....	.324	.398	.382	13	.733	5	.125	79	57	77	52	33	53
Memphis .....	.372	.385	.389	11	.798	5	.133	80	57	73	48	36	38
KENTUCKY—													
Bardstown .....	.281	.313	.292	27	.662	5	.106	73	59	69	52	59	40
Louisville (b) .....		.295		13	.651	5	.103		51			26	
Springdale (b) .....	.253	.339	.327	13	.638	7	.056	82	64	76	22	34	55
OHIO—													
Avon .....	.197	.215	.207	11	.489	1	d. 000	59	59	73	0	10	0
Cincinnati, [Harper] .....	.279	.405	.307	11	e. 745	4	.123	73	65	69	54	36	52
Hillsborough .....	.238	.267	.257	13	.568	4	.076	75	61	69	39	21	31
Montville .....	.211	.223	.218	13	.581	9	.052	71	58	70	39	19	40
Savannah .....	.236	.311	.254	13	.639	9	.123	83	75	86	63	54	59
Westerville .....	.247	.258	.267	13	.604	5	.099	77	60	75	55	27	44
MICHIGAN—													
Detroit .....	.149	.145	.151	11	.390	29	f. 000	60	36	68	28	0	42
Marquette .....	.140	.159	.129	17	.224	1	.000	76	68	76	39	0	30
Ottawa Point (g) .....	.198	.226	.207	30	.439	0	.105	81	81	81	71	71	71
Thunder Bay Island (h) .....	.163	.171	.160	29	.262	3	i. 089	78	77	78	72	68	63
Ypsilanti .....	.180	.170	.178	14	.415	23	.077	70	47	65	40	18	37
INDIANA—													
New Harmony .....	.289	.336	.340	13	.708	5	.084	81	64	82	65	33	40
Richmond, [Moore] .....	.212	.229	.235	13	.546	3	.088	68	54	63	38	18	34
ILLINOIS—													
Augusta .....	.219	.261	.253	10	.622	4	.085	80	63	72	58	33	51
Batavia, [Mead] .....	.189	.232	.211	10	.576	7	.045	78	61	76	49	16	48
Elgin .....	.186	.206	.193	10	.537	23	.086	82	59	75	60	22	50
Manchester (b) .....	.264	.342	.295	10	.639	4	j. 141	91	77	91	73	46	68
Peoria .....	.197	.239	.233	10	.570	6	.060	67	50	64	45	17	35
Upper Alton .....	.293	.392	.330	26	.731	4	.116	83	78	81	66	44	45
Wheaton .....	.185	.188	.185	10	.543	8	.082	79	53	71	61	24	50
MISSOURI—													
St. Louis .....	.255	.245	.236	10	.566	5	.085	72	49	63	36	14	32
WISCONSIN—													
Appleton .....	.149	.227	.170	26	.556	24	.056	64	67	70	32	21	22
IOWA—													
Dubuque .....	.159	.164	.182	26	.306	5	.066	52	46	67	23	16	43

a Same amount on the 28th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 13th.

d Same amount on the 10th.

e Same amount on the 12th.

f Same amount on the 30th.

g Observations taken at 6 and 9 a. m., 3 and 6 p. m. Mean force of vapor at 6 a. m., .156; mean relative humidity, 81.

h Observations taken at 6 and 9 a. m., 3 and 6 p. m. Mean force of vapor at 6 a. m., .149; mean relative humidity, 80.

i Same amount on the 5th and 8th.

j Same amount on the 5th and 6th.

## No. 29.—PSYCHROMETER, APRIL, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
Iowa—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Fairfield .....	.168	.181	.188	10	.543	22	.040	63	47	68	39	13	39
Muscatine .....	.244	.260	.276	30	.438	5	.131	82	76	81	70	51	69
MINNESOTA—													
Beaver Bay, [Clark] .....	.157	.172	.156	29	.310	1	.070	85	82	89	53	41	73
Beaver Bay, [Wieland] .....	.160	.227	.153	30	.470	1	.068	96	87	97	79	72	79
KANSAS—													
Lawrence .....	.242	.293	.297	10	.608	3	.072	53	52	55	25	34	32
CALIFORNIA—													
Sacramento .....	.286	.343	.333	16	.524	1	.133	73	61	73	60	30	44
San Francisco .....	.269	.282	.276	8	.423	1	.103	73	54	76	33	26	48
MEXICO—													
Minatitlan .....	.718	.724	.746	30	.910	19	.379	74	56	69	63	37	53
Mirador (a) .....	1.243	1.363	1.455	29	1.890	26	.780						
Vera Cruz (b) .....	.747		.819					75		82			
WEST INDIES—													
St. George's, Bermuda (c) .....				?	.696	?	.248						
CENTRAL AMERICA—													
Guatemala (d) .....	.488	.534	.515					59.5	60.5	89			
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (b) .....	.778	.840	.853	11	.945	11	.621	89	68	85	82	65	78

a Observations taken at 7 a. m., 2 p. m., and 8 p. m.; and "humidity reduced to  $\frac{1}{1000000}$  water in the cubic space of air."

b For changes in hours of observation, &c., see table of the thermometer for this month.

c Mean force of vapor, .492; mean relative humidity, 79; minimum, 47.

d Observations taken at 4 and 10 a. m., 4 and 10 p. m. Mean force of vapor at 4 a. m., .496; mean relative humidity at 4 a. m., 96.



## No. 30.—PSYCHROMETER, MAY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
St. Martin (a).....	.309	.448	.350	24	.738	10	.162	81	59	75	55	36	49
Toronto (a).....	.284	.315	.298	7	.513	30	.125	75	58	72	44	30	41
Windsor.....	.309	.389	.314	26	.645	31	.172	85	67	81	57	36	55
Wolfville.....	.317	.340	.297	23	.653	5	.077	72	58	72	23	29	41
MAINE—													
Gardiner.....	.327	.366	.317	8	.574	2	.137	80	63	82	55	24	35
Portland.....	.286	.305	.296	2	.577	1	.146	74	64	78	41	30	40
Steuben.....	.273	.306	.265	5	.655	2	.114	75	61	81	36	21	43
VERMONT—													
Burlington.....	.311	.359	.323	26	.623	15	.104	67	54	67	46	22	45
MASSACHUSETTS—													
Amherst.....	.314	.391	.354	27	.633	1	.185	84	57	75	62	32	26
Bridgewater (a).....	.369	.433	.319	13	.952	13	.054	87	78	78	46	27	11
Cambridge.....								91	79	83	74	61	69
Lawrence.....	.292	.323	.298	13	.564	3	.151	73	56	70	43	29	46
Nantucket.....	.314	.319	.318	21	.476	5	.031	74	63	84	46	6	52
New Bedford.....	.338	.342	.339	28	.505	3	.046	82	64	88	55	9½	61
Westfield.....	.305	.332	.351	21	.644	2	.153	77	49	78	50	16	54
Worcester.....	.332	.376	.319	19	.655	3	.172	76	58	73	49	19	24
RHODE ISLAND—													
Providence (c).....													
CONNECTICUT—													
Middletown.....	.313	.350	.329	28	.627	2	.183	73	48	78	47	20	53
Pomfret.....	.362	.448	.358	7	.664	1	.225	91	75	89	69	42	51
Wallingford.....	.327	.348	.337	18	.566	1	.146	83	53	79	47	28	43
NEW YORK—													
Bellport.....	.342	.396	.355	8	.577	10	.077	78	73	88	23	22	66
Buffalo (a).....	.334	.348	.339	26	.529	23	.178	70	59	67	45	26	44
Fort Edward.....	.322	.331	.341	27	.695	10	.117	73	49	69	41	24	47
Henrietta.....	.360	.385	.346	26	.623	3	.012	63	50	73	3	29	42
New York city.....	.335	.374	.359	20	.548	1	.132	69	52	69	38	24	43
Oswego.....	.367	.475	.383	8	.846	18	.164	77	72	81	30	47	61
Rochester, [Mathews].....	.353	.329	.328	27	.621	14	.071	73	48	63	45	15	32
Saratoga.....	.451	.471	.559	26	.744	23	.321	70	69	72	61	47	62
Waterford.....	.365	.431	.393	8	.677	16	.181	77	61	76	43	37	49
PENNSYLVANIA—													
Berwick.....	.411	.515	.481	27	.759	11	.297	82	67	85	69	47	70
Carlisle.....	.351	.376	.409	26	.608	1	.150	67	50	72	32	23	35
Chambersburg.....	.462	.515	.568	21	.757	18	.303	78	68	79	66	44	67
Easton (a).....	.323	.330	.345	27	.563	15	.153	66	45	71	36	16	42
Harrisburg, [Hickok].....	.337	.353	.368	20	.581	1	.168	70	44	61	39	22	27
Lewisburg.....	.347	.373	.365	28	.600	15	.134	69	49	69	45	18	38
Norristown.....	.340	.352	.367	27	.556	30	.138	77	54	73	39	17	55
Philadelphia.....	.361	.383	.393	21	.691	1	.121	69	50	69	38	18	39
Somerset.....	.362	.477	.379	30	.650	28	.245	80	55	76	65	42	57
MARYLAND—													
Annapolis.....	.432	.420	.472	21	.700	16	.210	87	58	77	73	33	53
Baltimore (a).....	.331	.357	.382	20	.577	16	.168	61	49	63	34	21	36
Chestertown.....	.390	.377	.392	21	.658	16	.162	71	50	67	50	23	42
Frederick.....	.399	.443	.430	21	.654	1	.222	76	59	78	45	32	50
DISTRICT OF COLUMBIA—													
Washington.....	.407	.419	.448	21	.682	4	.190	81	55	74	59	29	47
VIRGINIA—													
Kanawha.....	.423	.581	.494	31	.731	3	.320	91	66	82	73	51	67
Montross.....	.442	.596	.483	31	.859	1	.234	87	76	87	76	59	65
NORTH CAROLINA—													
Murfreesborough (a).....	.561	.693	.595	15	.846	13	.405	91	76	88	88	62	73

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Same amount on the 19th.

c Mean relative humidity for the month, 81.

d Same amount on the 27th.

e Same amount on the 4th.

## No. 30.—PSYCHROMETER, MAY, 1859.

NAME OF STATION.	FORCE OF VAPOR.						RELATIVE HUMIDITY.						
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
SOUTH CAROLINA—													
All Saints.....	.527	.553	.544	21	.826	2	.234	84	62	79	49	33	42
Columbia, [Barton].....	.457	.417	.513	21	.735	4	.110	53	49	76	48	14	47
Columbia, [White].....	.530	.810	.632	14	1.215	1	.322	84	80	81	58	42	49
St. John's.....	.513	.538	.537	18	.843	2	.244	82	56	82	46	36	60
GEORGIA—													
Athens.....	.482	.434	.475	17	.696	2	.170	77	48	73	52	23	42
Augusta.....	.521	.581	.632	17	.884	2	.259	68	57	67	40	36	32
Savannah.....	.570	.572	.594	21	.834	■	.242	83	59	80	48	32	66
Thomaston.....	.534	.718	.651	17	1.111	8	.337	79	67	73	63	53	63
FLORIDA—													
Jacksonville.....	.700	.755	.677	14	.999	1	.462	85	70	87	69	57	65
Micanopy.....	.705	.732	.668	26	1.070	3	.536	93	59	90	77	41	85
ALABAMA													
Greensborough.....	.528	.495	.575	12	.822	28	.243	76	50	78	54	27	46
Moulton.....	.507	.509	.562	31	.684	24	.293	68	59	70	58	40	60
Selma.....	.458	.335	.415	9	.577	28	.216	67	32	50	53	19	34
MISSISSIPPI—													
Columbus.....	.563	.582	.608	18	.774	27	.360	82	52	79	63	36	60
Paulding.....	.635	.638	.667	19	.827	28	.410	87	63	74	73	44	57
TEXAS—													
Austin, [Palm].....	.575	.484	.590	■	1.037	28	.093	72	37	66	41	8	34
Austin, [Van Nostrand]....	.623	.556	.602	31	.765	27	.258	81	45	73	42	26	40
Larissa.....	.618	.823	.690	22	1.201	27	.399	82	77	82	65	56	70
Sisterdale.....	.556	.449	.576	18	.778	■	.150	72	37	69	47	8	42
TENNESSEE—													
Glenwood.....	.475	.499	.508	16	.704	27	.252	78	58	83	78	30	57
La Grange.....	.543	.624	.582	31	.846	5	.349	79	69	76	55	38	51
KENTUCKY—													
Bardstown.....	.462	.477	.467	12	.877	28	.270	75	51	72	53	32	32
Louisville (b).....	.433	.464	.487	26	.707	22	.269	72	48	66	54	25	50
Springdale (b).....	.389	.594	.577	20	.969	28	.231	93	62	85	76	28	49
OHIO—													
Avon.....	.362	.407	.367	24	.838	14	.147	72	56	75	31	28	48
Cincinnati, [Harper].....	.454	.524	.496	26	.704	15	.255	73	57	64	49	40	46
Hillsborough.....	.386	.409	.406	26	.658	3	.086	77	50	66	51	9	38
Montville.....	.361	.416	.388	26	.678	2	.111	72	57	74	33	12	35
Savannah.....	.418	.509	.407	7	.823	27	.183	80	61	81	53	14	47
Westerville.....	.400	.464	.455	7	.877	14	.214	75	52	77	51	28	48
MICHIGAN—													
Detroit.....	.212	.338	.239	12	.718	3	.000	43	40	49	■	7	11
Lake George (b).....	.253	.292	.262	26	.407	19	.160	78	64	76	64	39	56
Marquette.....	.238	.225	.239	24	.499	14	.000	76	51	75	34	0	11
Ottawa Point (d).....	.239	.379	.356	24	.536	14	.162	84	86	85	80	75	77
Thunder Bay Island (e).....	.247	.257	.248	25	.349	2	.169	76	76	80	65	61	65
Ypsilanti.....	.308	.319	.322	26	.639	14	.089	66	44	67	35	17	38
INDIANA—													
New Harmony.....	.543	.622	.594	26	.923	23	.389	84	66	89	63	40	68
Notre Dame.....	.397	.418	.412	26	.646	12	.174	70	55	73	53	34	50
Richmond.....	.366	.323	.363	26	.582	23	.144	68	40	62	37	18	38
ILLINOIS—													
Augusta.....	.422	.481	.451	5	.850	14	.216	82	66	78	61	40	56
Batavia, [Mead].....	.372	.452	.379	24	.914	15	.183	78	56	77	47	23	31
Elgin.....	.342	.398	.360	8	.595	13	.169	78	58	77	53	25	54
Manchester (b).....	.500	.612	.517	17	.813	27	.335	91	96	94	65	53	78
Peoria.....	.400	.434	.443	26	.658	14	.162	71	50	69	45	27	46
Upper Alton.....	.474	.687	.501	12	.931	14	.272	85	82	85	51	56	67
Wheaton.....	.326	.312	.321	4	.618	22	.138	69	52	74	48	21	48

a Same amount on the 16th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 9th.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .289. Mean relative humidity, 84.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .238. Mean relative humidity, 84.

f Same amount on the 14th.



## No. 30.—PSYCHROMETER, MAY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches	Inches	Inches		Inches		Inches						
MISSOURI—													
St. Louis.....	.456	.495	.494	26	.670	14	<i>a</i> .193	73	57	76	34	25	53
WISCONSIN—													
Appleton.....	.309	.386	.345	17	.693	12	.149	74	52	75	29	22	23
Madison.....	.300	.310	.322	24	.559	1	.044	60	46	64	33	5	40
Milwaukee, [Larkin].....	.332	.335	.331	24	.500	12	.204						
IOWA—													
Dubuque.....	.303	.297	.324	24	.812	23	.000	60	41	59	0	0	29
Fairfield.....	.343	.385	.343	7	.666	21	<i>b</i> .163	63	51	65	31	23	38
Muscataine.....	.483	.514	.527	17	<i>c</i> .680	15	.321	83	79	80	72	63	69
MINNESOTA—													
Beaver Bay, [Clark].....	.237	.225	.225	24	.482	13	.090	80	65	84	38	31	41
Beaver Bay, [Wieland] ( <i>d</i> )..	.255	.364	.249	6	.771	13	<i>e</i> .170	91	76	91	67	57	70
KANSAS—													
Lawrence.....	.469	.506	.511	31	.758	27	.257	71	61	69	50	41	52
CALIFORNIA—													
Sacramento.....	.340	.374	.373	20	.522	12	.136	69	57	69	34	19	37
San Francisco.....	.303	.304	.305	19	.403	25	.150	74	52	80	25	14	33
MEXICO—													
Minatitlan.....	.774	.760	.813	20	.959	7	.582	72	56	69	54	37	45
Mirador ( <i>f</i> ).....	1.337	1.304	1.584	2	1.890	8	<i>g</i> 8.50						
Vera Cruz ( <i>h</i> ).....	.876		.908	9	1.013	30	.759	79		80	67		71
WEST INDIES—													
St. George's, Bermuda ( <i>i</i> )..				?	.791	?	.566						
CENTRAL AMERICA—													
Guatemala ( <i>j</i> ).....	.486	.512	.528					57	59	90			
SOUTH AMERICA—													
Cathar'a Sophia, Surinam ( <i>k</i> )	.796	.839	.869	2	<i>k</i> .886	17	.693	91	68	84	85	59	74

*a* Same amount on the 21st.*b* Same amount on the 27th.*c* Same amount on the 24th.*d* For the first 20 days of the month only.*e* Same amount on the 19th.*f* Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to  $\frac{1}{1000000}$  water in the cubic space of air."*g* Same amount on the 25th.*h* For changes in hours of observation, &c., see table of the thermometer for this month.*i* Mean force of vapor, .694; mean relative humidity, 89; minimum, 61.*j* Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m. Mean force of vapor at 4 a. m., .503. Mean relative humidity at 4 a. m. 95.*k* Same amount on the 11th and 18th.

## No. 31.—PSYCHROMETER, JUNE, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
BRITISH AMERICA—													
St Martin (a).....	.363	.515	.413	27	.855	10	.121	81	65	77	65	38	48
Toronto (a).....	.347	.379	.336	28	.770	4	.139	77	60	72	57	25	48
Windsor.....	.421	.505	.416	30	.751	12	.204	85	39	84	56	34	70
Wolfville (a).....	.408	.426	.406	24	.677	12	.160	72	51	79	35	29	68
MAINE—													
Gardiner.....	.430	.490	.437	29	.936	11	.175	85	72	87	59	39	50
Perry.....	.385	.459	.389	14	.827	11	.193	90	75	92	62	44	68
Portland.....	.424	.416	.407	29	.836	11	.203	80	69	84	59	33	54
Steuben.....	.395	.419	.353	24	.685	11	.173	85	73	85	50	37	53
NEW HAMPSHIRE—													
Mount Washington.....	.222	.243	.243	29	.466	11	.094	93	88	92	60	34	52
VERMONT—													
Burlington.....	.387	.455	.436	29	.935	11	.165	78	65	77	40	39	54
MASSACHUSETTS—													
Amherst.....	.466	.522	.480	29	.870	11	.224	89	69	88	71	37	63
Bridgewater (a).....	.519	.567	.519	29	1.426	11	.167	85	74	85	54	32	33
Cambridge.....								92	82	88	80	67	70
Lawrence.....	.413	.458	.426	29	.827	5	.202	78	66	81	63	37	50
Nantucket.....	.424	.427	.451	24	.623	14	.176	76	62	86	28½	44	44
New Bedford.....	.459	.487	.456	29	.759	11	.202	84	71	86	57	36	56
Westfield.....	.411	.466	.457	29	.776	5	.161	82	62	84	63	31	54
Worcester.....	.463	.496	.464	29	.872	7	.212	84	67	83	62	35	41
RHODE ISLAND—													
Providence (c).....													
CONNECTICUT—													
Middletown.....	.441	.473	.454	29	.915	11	.176	80	55	83	61	30	65
Pomfret.....	.475	.532	.470	29	.989	5	.238	92	81	93	75	56	69
Wallingford.....	.445	.478	.455	29	.929	11	.196	87	61	84	63	32	63
NEW YORK—													
Bellport.....	.452	.498	.476	2	.733	4	.122	79	72	88	40	25	77
Buffalo (a).....	.319	.417	.391	29	.680	11	.162	79	68	73	49	38	55
Cazenovia.....	.339	.389	.370	29	.785	6	.150	77	63	81	53	27	50
Fordham.....	.343	.358	.359	29	1.023	10	.006	58	40	55	28	4	2
Henrietta.....	.450	.465	.418	29	.895	4	.090	73	60	79	38	40	60
New York city.....	.456	.508	.480	29	.839	5	.176	71	59	70	34	26	38
Oswego.....	.452	.519	.428	28	1.030	6	.102	89	76	83	68	20	27
Rochester, [Mathews].....	.427	.382	.386	29	.829	5	.118	84	51	72	54	21	49
Schenectady.....	.442	.496	.445		?		?	76	64	74			
Waterford.....	.456	.524	.501	29	.908	5	.254	82	70	82	54	40	58
PENNSYLVANIA—													
Berwick.....	.495	.592	.540	29	1.108	11	.215	85	70	86	■	29	73
Carlisle.....	.435	.473	.497	28	.868	5	.127	67	56	74	48	24	52
Chambersburg.....	.555	.604	.609	29	.887	5	.336	81	78	81	70	62	68
Easton (a).....	.445	.441	.440	29	.846	11	.144	71	54	75	44	32	46
Harrisburg, [Hickok].....	.431	.455	.474	28	.773	4	.122	69	48	69	44	27	38
Lewisburg.....	.437	.431	.447	29	.834	4	.132	71	51	74	42	12	49
Mount Joy.....	.539	.666	.586	29	1.029	4	.190	82	75	80	64	53	58
Norristown.....	.484	.502	.497	29	.945	11	.146	78	59	78	47	36	48
Philadelphia.....	.501	.541	.512	29	.964	5	.162	72	57	72	42	29	50
Somerset.....	.450	.521	.455	29	.809	4	.165	88	63	86	73	43	72
MARYLAND—													
Annapolis.....	.568	.565	.603	29	.955	5	.180	84	61	77	60	42	63
Baltimore (a).....	.409	.413	.362		?		?	61	47	64			
Chestertown.....	.502	.505	.474	29	.847	5	d.144	68	53	66	44½	30	19
DISTRICT OF COLUMBIA—													
Washington.....	.529	.532	.567	12	.985	5	.160	75	56	76	42	31	51

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Same amount on the 28th.

c Mean relative humidity, 70.3  
d Same amount on the 28th.



## No. 31.—PSYCHROMETER, JUNE, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
VIRGINIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Kanawha .....	.541	.708	.601	---	?	---	?	91	75	93	---	---	---
Montross .....	.571	.687	.591	3	1.023	4	.199	87	74	87	74	57	77
NORTH CAROLINA—													
Murfreesborough .....	.695	.856	.732	29	1.083	5	.285	89	77	87	82	69	78
SOUTH CAROLINA—													
All Saints .....	.716	.723	.713	21	.909	5	.322	88	71	89	69	45	75
Columbia, [Barton] .....	.626	.625	.641	21	.829	6	.190	87	53	74	51	15	29
Columbia, [White] (a) .....	.684	.876	.736	30	1.459	6	.473	74	69	76	43	44	34
St. John's .....	.719	.738	.711	25	.904	5	.356	88	69	86	62	50	70
GEORGIA—													
Athens .....	.587	.589	.630	---	?	---	?	80	55	78	---	---	---
Augusta .....	.689	.726	.765	28	.909	6	.413	77	63	74	74	47	61
Savannah .....	.749	.742	.736	25	.913	6	.472	86	63	83	70	33	72
Thomaston .....	.691	.851	.797	9	1.070	5	.451	82	70	78	60	56	61
FLORIDA—													
Jacksonville .....	.851	.894	.838	18	1.056	9	.658	88	71	89	74	56	82
Micanopy .....	.752	.689	.708	28	1.147	10	.286	82	52	75	65	19	42
ALABAMA—													
Greensborough .....	.649	.643	.653	29	.931	3	.272	79	54	77	62½	38	44
Selma .....	.462	.300	.413	24	.570	3	.194	58	25	45	43	13	24
MISSISSIPPI—													
Columbus .....	.674	.702	.717	17	.935	4	.336	82	53	81	67	37	51
Paulding .....	.744	.787	.807	17	1.065	5	.426	90	69	85	45	53	62
TEXAS—													
Austin, [Palm] .....	.611	.444	.513	27	.820	23	.208	63	29	51	39	14	24
Austin, [Van Nostrand] .....	.693	.531	.624	26	.907	22	.326	74	35	61	40	20	35
Larissa .....	.737	.855	.732	13	1.242	23	.371	83	66	77	65	30	47
Sisterdale .....	.644	.506	.574	30	.958	22	.250	68	34	58	44	15	32
TENNESSEE—													
Glenwood .....	.563	.600	.615	29	.911	4	.224	86	62	85	66	42	66
La Grange .....	.665	.706	.730	19	.904	5	.321	84	66	77	70	45	64
Memphis .....	.684	.672	.701	17	1.128	4	.301	77	59	80	63	39	59
KENTUCKY—													
Bardstown .....	.554	.516	.550	29	.850	5	.216	76	52	72	60	17	40
Springdale (a) .....	.451	.685	.611	27	.978	5	.186	89	63	79	76	38	52
OHIO—													
Avon .....	.449	.491	.453	14	1.117	5	.153	76	64	79	55	32	61
Cincinnati, [Harper] .....	.556	.661	.617	29	.965	5	.247	77	68	75	65	53	64
Hillsborough .....	.475	.522	.483	27	.783	5	.190	84	61	75	59	42	54
Montville .....	.447	.486	.441	23	.863	4	.144	82	64	78	62	42	54
Savannah .....	.479	.467	.438	28	1.382	30	.123	79	53	81	63	18	56
Westerville .....	.489	.540	.535	27	.843	4	.173	79	60	83	59	36	53
MICHIGAN—													
Detroit .....	.332	.434	.349	29	.868	11	.104	54	44	55	21	23	35
Fort Gratiot (b) .....	.358	.340	.355	29	.868	4	.105	71	49	53	48	20	29
Marquette .....	.303	.298	.294	27	.665	14	.000?	75	57	78	36	0?	33
Ottawa Point (c) .....	.443	.500	.468	29	.785	4	.170	86	87	87	75	79	81
St. Mary's .....	.309	.349	.304	27	.745	10	.118	80	58	74	48	30½	52
Thunder Bay Island (d) .....	.324	.338	.330	29	.608	10	.131	75	75	78	58	43	46
Ypsilanti (a) .....	.394	.391	.400	27	.778	9	.123	72	47	72	51	15	51
INDIANA—													
New Harmony .....	.650	.713	.680	29	1.010	4	.283	85	69	90	61	51	69
Richmond .....	.443	.440	.462	15	.812	5	.144	74	52	68	53	28	47
ILLINOIS—													
Augusta .....	.481	.580	.550	26	1.028	11	.212	86	67	81	63	37½	63
Batavia, [Mead] .....	.440	.524	.465	27	.969	4	.182	77	53	81	47	26	46
Elgin .....	.430	.489	.449	7	1.295	4	.165	80	60	83	54	42	63

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .379; mean relative humidity at 9 a. m., 60.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .369; mean relative humidity at 6 a. m., 86.

d Same amount on the 28th.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .328; mean relative humidity at 6 a. m., 84.

## No. 31.—PSYCHROMETER, JUNE, 1859.

NAME OF STATION.	FORCE OF VAPOR.						RELATIVE HUMIDITY.						
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
ILLINOIS—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Manchester (a).....	.564	.716	.609	28	1.028	4	.244	92	81	89	74	63	40
Peoria.....	.453	.470	.491	27	.832	3	.149	70	47	63	48	21	38
Upper Alton.....	.548	.750	.581	13	1.215	4	.203	86	79	84	66	64	55
Wheaton.....	.394	.401	.420	27	.792	4	.120	65	53	76	44	19	53
MISSOURI—													
St. Louis.....	.520	.548	.553	29	.855	4	.170	70	52	72	43	29	45
WISCONSIN—													
Appleton.....	.391	.455	.405	27	.787	10	.125	72	60	77	40	28	50
Madison.....	.400	.411	.404	28	.816	3	.173	61	54	64	37	22	44
Milwaukee, [Larkin].....	.396	.443	.421	28	.839	5	.196	?					
IOWA—													
Dubuque.....	.384	.361	.412	27	.792	7	.111	66	42	64	17	15	45
Fairfield.....	.412	.444	.428	28	.748	4	.115	63	43	71	28	23	56
Muscatine.....	.549	.593	.600	27	.996	4	.295	82	79	81	70	56	66
MINNESOTA—													
Beaver Bay, [Clark].....	.294	.312	.310	27	.618	3	.143	83	69	83	53	31	64
KANSAS—													
Lawrence.....	.585	.634	.630	14	.895	3	.299	73	63	71	52	42	50
CALIFORNIA—													
Sacramento.....	.485	.502	.522	20	.942	4	.296	66	47	65	54	18?	42
San Francisco.....	.344	.355	.342	22	.451	4	.163	73	51	77	42	30	49
MEXICO—													
Mirador (d).....	1.433	1.472	1.568	27	1.825	5	.910						
Vera Cruz (a).....	.808		.872					81		81			
WEST INDIES—													
St. George's, Bermuda (e).....				?	.870	?	.416						
CENTRAL AMERICA—													
Guatemala (f).....	.522	.560	.537					70	75.5	94			
SOUTH AMERICA—													
Catharina Sophia, Surinam (a).....	.779	.850	.847	10	.945	27	.706	90	72	85	82	62	74

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 28th.

c Same amount on the 6th.

d Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to  $\frac{7}{100000}$  water in the cubic space of air."

e Mean force of vapor, .709; mean relative humidity, 81; minimum, 63.

f Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m. Mean force of vapor at 4 a. m., .506; mean relative humidity at 4 a. m., 97.5.



## No. 32.—PSYCHROMETER, JULY, 1859.

NAME OF STATION.	FORCE OF VAPOR.						RELATIVE HUMIDITY.						
	MEAN.			MAXIMUM.		MINIMUM.	MEAN.			MINIMA.*			
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.436	.520	.449	19	.909	2	.157	64	59	69	16	31	47
St. Martin (a).....	.471	.578	.498	12	.915	4	.165	81	59	79	60	40	49
Toronto (a).....	.461	.498	.456	19	.770	4	.244	78	61	75	63	36	61
Windsor .....	.464	.487	.462	6	.785	21	.272	85	63	84	68	38	57
MAINE—													
Gardiner .....	.490	.536	.505	17	1.057	4	.059	81	65	85	37	9	49
Perry .....	.424	.513	.443	13	.705	15	.189	83	66	85	33	33	51
Portland .....	.449	.466	.460	13	.682	24	.237	72	60	76	48	30	47½
Steuben .....	.432	.469	.497	13	.731	15	.123	77	61	82	18	32	40
NEW HAMPSHIRE—													
Mount Washington .....	.247	.292	.269	12	.503	2	.110	89	86	89	54	54	46
VERMONT—													
Burlington .....	.457	.495	.474	11	.733	4	.203	70	59	74	52	41	54
MASSACHUSETTS—													
Amherst .....	.522	.534	.544	12	.812	4	.257	88	60	86	61	35	59
Cambridge .....								91	75	85	75	64	72
Lawrence .....	.464	.471	.458	13	.706	21	.255	76	54	74	49	35	54
Nantucket .....	.500	.502	.513	20	.800	4	.283	74	61	84	47	38	54
New Bedford.....	.531	.542	.549	20	.787	21	.283	85	62	89	54	38½	62
Westfield .....	.471	.485	.524	13	.825	21	.248	82	53	85	65	34	55
Worcester .....	.515	.517	.525	13	.843	4	.259	79	57	78	62	38	58
RHODE ISLAND—													
Providence (b).....													
CONNECTICUT—													
Middletown .....	.491	.543	.487	13	.891	23	.136	82	56	77	61	38	19
Pomfret .....	.544	.619	.551	12	.923	4	.335	91	77	92	75	52	77
Wallingford.....	.500	.545	.513	13	1.298	7	.244	87	59	82	66	40	38
NEW YORK—													
Bellport .....	.521	.650	.552	21	.868	24	.232	80	75	87	63	56	34
Buffalo (a) .....	.512	.503	.514	18	.629	4	.231	74	60	70	55	34	44
Cazenovia .....	.450	.454	.452	12	c. 677	4	.225	78	55	83	53	30	64
Charlotte (d).....	.469	.512	.558	12	.882	4	.242	80	74	66	56	49	39
Fordham .....	.401	.427	.426	20	.720	11	.114	54	40	57	18	23	21
Fort Niagara (e).....	.517	.572	.562	19	.909	4	f. 204	73	67	67	30	45	36
Henrietta .....	.562	.571	.513	15	.996	4	.256	78	60	80	45	32	36
New York city .....	.516	.554	.528	30	1.016	4	.217	63	55	63	45	31	42
Oswego .....	.561	.664	.579	18	1.092	1	.349	89	83	84	73	49	56
Rochester, [Mathews] .....	.511	.472	.487	19	.829	4	.216	75	51	72	53	23	41
Sackett's Harbor (g).....	.507	.506	.489	12	.775	4	.247	72	61	60	55	45	43
Waterford .....	.542	.601	.564	12	.969	4	.315	82	63	81	61	32	66
PENNSYLVANIA—													
Berwick .....	.580	.678	.616	2	1.070	4	.362	84	65	80	66	47	51
Carlisle .....	.535	.549	.564	18	.915	4	.204	67	52	71	45	28	55
Chambersburg .....	.629	.691	.730	13	1.339	5	.367	79	69	77	63	49	69
Easton (a) .....	.503	.498	.476	17	.775	4	.210	71	49	74	43	32	49
Harrisburg, [Hickok] .....	.509	.502	.562	19	.778	4	.255	72	45	65	48	22	34
Lewisburg .....	.521	.516	.506	16	.824	4	.208	72	48	71	50	30	35
Mount Joy .....	.601	.718	.698	14	1.060	5	.372	79	66	77	53	45	52
Norristown .....	.522	.534	.541	2	.829	4	.219	76	52	75	51	31	50
Philadelphia .....	.551	.574	.579	2	.890	5	.268	69	51	69	45	32	57
Somerset .....	.515	.595	.511	14	.951	4	.280	88	58	80	75	47	64
MARYLAND—													
Annapolis .....	.628	.611	.679	2	.923	4	.313	81	55	72	63	38	56
Chestertown .....	.563	.546	.532	21	.920	4	.000	68	50	65	40	28	0
Frederick .....	.573	.610	.597	13	.962	4	.290	71	56	70	48	38	46

\* The maxima being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Mean relative humidity, 66.

c Same amount on the 1st.

d Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 6 p. m., .554; mean relative humidity, 66.

e Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 6 a. m., .504; mean relative humidity at 6 a. m., 85.

f Same amount on the 29th.

g Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 6 a. m., .451; mean relative humidity, 77.

## No. 32.—PSYCHROMETER. JULY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
DISTRICT OF COLUMBIA—													
Washington.....	.573	.545	.627	19	.918	4	.270	74	49	69	50	35	46
VIRGINIA—													
Kanawha.....	.623	.706	.707	2	a. 915	4	b. 407	89	61	91	71	43	78
Montross.....	.634	.731	.656	2	1.228	11	.226	82	68	86	57	58	69
NORTH CAROLINA—													
Murfreesborough (c).....	.784	.988	.869	2	1.200d	6	.487	90	79	88	82	70	74
SOUTH CAROLINA—													
All Saints.....	.747	.818	.768	26	1.060	6	.425	85	72	85	64	56	73
Columbia, [Barton].....	.685	.646	.687	19	.945	8	.305	89	52	73	74	27½	44
Columbia, [White].....	.825	1.205	.882	18	1.592	5	.396	89	88	90	48	79	63
St John's.....	.736	.787	.774	21	.983	6	.403	85	66	83	67	47	67
GEORGIA—													
Athens.....	.640	.608	.699	18	.878	24	.162	81	52	79	51	27	58
Augusta.....	.724	.750	.829	19	1.056	5	.486	74	59	72	66	45	62
Savannah.....	.744	.758	.746	20	1.013	6	.421	82	59	79	67	45	65
Thomaston.....	.790	.947	.876	18	1.242	9	.549	87	72	81	79	59	72
FLORIDA—													
Jacksonville.....	.896	.932	.854	25	1.200	6	.608	89	78	88	83	64	45
Micanopy.....	.783	.754	.761	14	1.116	13	.556	81	64	79	73	40	61
ALABAMA—													
Greensborough.....	.723	.708	.739	19	.986	6	.385	84	59	83	53	35	48
Selma.....	.440	.288	.401	10	.556	20	.138	52	24	43	28	8	22
MISSISSIPPI—													
Columbus.....	.743	.770	.769	18	1.023	6	.423	84	56	82	52	30	57
Paulding.....	.801	.805	.912	18	1.138	6	.529	92	72	89	75	52	69
TEXAS—													
Austin, [Palm].....	.671	.483	.582	12	.780	6	.326	66	31	56	42	17	36
Austin, [Van Nostrand].....	.774	.559	.693	12	.907	11	.386	79	34	65	59	22	39
Larissa.....	.771	.784	.747	20	.947	5	.512	82	52	74	60	36	58
Sisterdale.....	.716	.544	.631	5	.832	29	.391	69	34	64	53	21	41
TENNESSEE—													
Glenwood.....	.654	.585	.631	26	.927	4	.300	87	49	73	69	26	53
Memphis.....	.774	.813	.823	14	1.382	5	.449	79	59	81	61	39	66
KENTUCKY—													
Bardstown.....	.648	.646	.627	15	.931	4	.296	70	48	68	54	31	45
Springdale (c).....	.521	.681	.662	16	1.341	4	.258	86	55	68	75	34	47
OHIO—													
Avon.....	.608	.585	.585	18	.929	3	.221	78	58	81	60	22	55
Cincinnati, [Harper].....	.647	.775	.707	17	1.065	4	.354	75	61	67	66	51	55
Hillsborough.....	.545	.576	.554	20	.870	4	.277	79	53	68	61	35	48
Montville.....	.541	.522	.539	15	.868	4	.229	77	53	74	61	28	47
Savannah.....	.504	.533	.531	2	1.087	23	.210	74	48	83	40	22	56
Westerville.....	.597	.581	.599	19	.870	27	.296	78	50	74	65	33	58
MICHIGAN—													
Detroit.....	.489	.620	.478	17	1.015	3	.156	64	53	62	40	41	48
Fort Gratiot (e).....	.455	.519	.518	18	.897	3	.194	73	57	63	52	36	34
Lake George.....	.449	.549	.451	11	1.303	3	.203	83	66	76	65	37	39
Marquette.....	.430	.506	.430	15	1.051	3	.165	76	62	80	49	33	51
Monroe Piers (f).....	.575	.600	.600	12	.945	26	.209	67	62	64	36	36	45
Ottawa Point (g).....	.637	.662	.670	16	.996	3	.273	88	89	89	82	80	80
Thunder Bay Island (h).....	.471	.502	.474	19	.779	3	.216	77	77	79	60	46	56
Ypsilanti.....	.507	.475	.521	18	.766	26	.185	71	45	68	39	31	42
INDIANA—													
New Harmony.....	.760	.806	.837	16	1.270	4	.446	85	64	88	72	47	66
ILLINOIS—													
Augusta.....	.639	.672	.655	14	.948	27	.300	88	59	80	82	36	61
Batavia, [Mead].....	.605	.711	.609	17	1.165	3	.259	78	50	78	54	27	38

a Same amount on the 11th.

b Same amount on the 5th.

c For changes in hours of observation, &amp;c., see table of the thermometer for this month.

d Same amount on the 18th.

e Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 9 a. m., .534; mean relative humidity at 9 a. m., 64.

f Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 6 a. m., .538; mean relative humidity, 78.

g Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 6 a. m., .523; mean relative humidity at 6 a. m., 89.

h Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 6 a. m., .452; mean relative humidity at 6 a. m., 84.



## No. 32.—PSYCHROMETER, JULY, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
ILLINOIS—Continued.													
Manchester (a) .....	.716	.819	.726	15	1.187	4	.334	89	72	93	72	52	73
Peoria .....	.586	.549	.626	16	.942	3	.262	70	42	64	57	26	36
Upper Alton .....	.688	.871	.697	15	1.242	4	.336	87	76	86	62	62	72
Wheaton .....	.530	.482	.507	15	.839	26	.151	64	41	71	44	19	52
MISSOURI—													
St. Louis .....	.650	.649	.676	14	.899	4	.345	68	51	72	46	40	60
WISCONSIN—													
Appleton .....	.512	.708	.571	11	1.214	3	.104	70	69	77	41	29	28
Madison .....	.602	.596	.643	16	1.092	3	.242	61	57	72	36	33	53
Milwaukee, [Larkin] .....	.534	.590	.572	18	.868	3	.229						
IOWA—													
Dubuque .....	.527	.489	.529	17	.897	25	.040	66	39	61	36	2	15
Fairfield .....	.565	.541	.542	15	.877	26	.268	65	48	69	49	36	55
Muscatine .....	.678	.797	.755	16	1.121	4	.420	82	75	81	68	64	70
MINNESOTA—													
Beaver Bay, [Clark] .....	.429	.406	.426	10	.671	3	.204	88	70	86	62	32	63
Beaver Bay, [Wieland] .....	.594	.739	.569	15	1.119	25	.275	88	77	92	72	53	53
KANSAS—													
Lawrence .....	.694	.732	.742	20	.942	27	.497	72	61	71	59	46	59
CALIFORNIA—													
Sacramento .....	.429	.516	.462	7	.677	25	.338	70	62	68	57	36	57
San Francisco .....	.351	.365	.330	30	.516	12	.274	83	61	87	67	41	80
MEXICO—													
Mirador (d) .....	13.97	16.20	15.82	29	18.30	15	11.70						
Vera Cruz (a) .....	.844		.887					81		85			
WEST INDIES—													
St. George's, Bermuda (f) .....				?	.947	?	.507						
CENTRAL AMERICA—													
Guatemala (g) .....	.505	.507	.487					69	63.5	93			
SOUTH AMERICA—													
Catharina Sophia, Sur. (a) ..	.769	.824	.829	29	.914	12	.693	88	67	82	85	54	74

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 12th.

c Same amount on the 29th.

d Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to 1000000 water in the cubic space of air."

e Same amount on the 21st.

f Mean force of vapor, .753; mean relative humidity, 81; minimum, 51.

g Observations taken at 4 and 10 a. m., and 4 and 10 p. m. Mean relative humidity at 4 a. m., 97; mean force of vapor at 4 a. m., .500.

## No. 33.—PSYCHROMETER, AUGUST, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Montreal .....	.460	.495	.484	4	.682	3	.191	72	80	71	27	39	43
St. Martin (a) .....	.501	.563	.527	16	.721	30	.169	86	60	86	65	43	65
Toronto (a) .....	.446	.483	.461	14	.679	29	.172	82	59	76	61	26	52
Windsor .....	.495	.582	.515	4	.895	30	.292	90	67	88	77	41	68
Wolfville .....	.510	.550	.455	18	.827	31	.262	82	66	74	55	36	51
MAINE—													
Gardiner .....	.498	.541	.501	5	.772	29	.218	87	68	88	47	39	50
Perry .....	.464	.516	.490	3	.799	21	.282	88	69	91	72	42	73
Portland .....	.452	.469	.428	5	.739	29	.216	80	59	81	41	36	46
Steuben .....	.442	.473	.415	10	.759	29	.203	83	63	83	62	50	58
NEW HAMPSHIRE—													
Mount Washington .....	.234	.288	.251	4	.466	9	.073	83	80	82	21	32	16
VERMONT—													
Burlington .....	.483	.503	.493	4	.785	29	.216	77	57	76	63	35	52
MASSACHUSETTS—													
Amherst .....	.518	.580	.528	4	.990	28	.262	93	80	83	71	39	59
Cambridge .....								93	77	87	81	68	77
Lawrence .....	.410	.451	.454	2	.901	18	.101	75	50	74	62	10	56
Nantucket .....	.530	.524	.524	13	.732	29	.255	76	65	79	44	37	51
New Bedford .....	.546	.566	.555	4	.827	30	.244	86	66	92	56	42	66
Westfield .....	.465	.491	.490	4	.793	30	.238	86	55	83	69	34	55
Worcester .....	.517	.515	.532	27	.936	30	.247	86	57	80	67	35	63
RHODE ISLAND—													
Providence (b) .....													
CONNECTICUT—													
Middletown .....	.492	.497	.516	4	.796	30	.255	87	51	86	80	29	59
Pomfret .....	.535	.641	.516	4	.918	28	.282	96	79	94	83	54	67
Wallingford .....	.504	.531	.514	4	.850	29	.270	92	58	85	72	36	43
NEW YORK—													
Bellport .....	.555	.623	.569	4	.843	28	.282	86	73	88	59	55	63
Buffalo (a) .....	.518	.502	.524	10	.744	29	.244	77	58	72	56	32	54
Cazenovia .....	.434	.428	.427	4	.706	29	.145	86	53	85	65	27	80
Charlotte (c) .....	.523	.584	.583	16	.829	29	.242	78	68	67	52	43	45
Fort Niagara (d) .....	.529	.575	.585	14	.816	4	.274	73	68	73	29	50	59
Henrietta .....	.572	.555	.535	13	.914	30	.179	82	62	86	56	23	68
New York city .....	.525	.515	.543	5	.826	28	.252	66	52	64	49	31	42
Oswego .....	.579	.678	.563	11	1.203	28	.282	89	83	88	50	41	63
Rochester .....	.511	.476	.504	3	.732	29	.216	86	52	80	71	29	53
Sackett's Harbor (e) .....	.502	.534	.510	10	.789	29	.250	71	64	62	54	53	48
Waterford .....	.529	.636	.557	13	.870	29	.322	84	64	80	70	51	64
PENNSYLVANIA—													
Berwick .....	.532	.614	.561	3	.915	31	.285	84	65	79	73	45	58
Carlisle .....	.491	.481	.522	1	.731	29	.232	73	49	73	59	31	49
Chambersburg .....	.613	.621	.688	4	.922	30	.393	82	65	81	72	43	67
Easton (a) .....	.517	.508	.491	4	.752	29	.282	76	56	80	53	28	55
Harrisburg .....	.501	.505	.531	3	.800	29	.243	76	48	70	56	30	48
Lewisburg .....	.512	.497	.504	4	.822	28	.256	79	53	78	46	34	51
Mount Joy .....	.590	.726	.665	3	1.010	30	.349	84	71	82	76	52	71
Norristown .....	.507	.515	.562	24	.945	29	.232	81	53	79	56	29	51
Philadelphia .....	.551	.551	.581	■	1.014	29	.268	75½	50	72	54	31	55
Somerset .....	.497	.590	.509	10	.818	29	.309	91	61	85	80	46	72
MARYLAND—													
Annapolis .....	.628	.600	.671	5	.909	30	.349	86	57	74	75	39	62
Baltimore .....	.513	.502	.570	3	.789	29	.255	68	49	68	42	29	44
Frederick .....	.545	.585	.588	■	.832	18	.293	78	60	77	56	35	47

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Mean relative humidity, 67.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .481; mean relative humidity at 6 a. m., 84.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .490; mean relative humidity at 6 a. m., 84.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 9 p. m. Mean force of vapor at 6 a. m., .402; mean relative humidity at 6 a. m., 79.



## No. 33.—PSYCHROMETER, AUGUST, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
DISTRICT OF COLUMBIA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Washington .....	.588	.535	.626	4	a. 800	29	.319	82	55	75	67	35	42
VIRGINIA—													
Montross .....	.655	.780	.651	3	1.241	29	.380	88	78	89	60	60	77
NORTH CAROLINA—													
Murfreesborough .....	.695	.840	.750	4	1.269	30	.452	91	79	86	85	62	76
SOUTH CAROLINA—													
All Saints .....	.747	.790	.735	29	.977	30	.516	90	77	88	60	58	77
Columbia, [White] .....	.742	.992	.836	4	1.382	31	.376?	91	89	91	48	47?	74
St. John's (b) .....	.689	.765	.733	10	.945	17	c. 564	91	78	92	79	57	79
GEORGIA—													
Athens (b) .....	.630	.655	.659	29	.826	22	.450	89	65	88	76	46	72
Augusta .....	.693	.753	.756	14	.891	21	.545	77	68	75	67	49	65½
Savannah .....	.758	.782	.774	20	1.002	17	.576	89	71	93	80	44	78
Thomaston .....	.728	.893	.812	6	1.151	22	.564	88	79	83	69	60	69
FLORIDA—													
Jacksonville .....	.890	.943	.857	31	1.242	18	.758	90	78	90	83	63	82
Micanopy .....	.777	.738	.779	29	1.075	27	.529	86	66	83	78	38	71
ALABAMA—													
Greensborough .....	.741	.742	.754	6	.897	31	.482	89	65	84	79	48	66
Selma .....	.507	.388	.466	25	d. 577	3	e. 317	62	35	51	46	23	37
MISSISSIPPI—													
Columbus .....	.741	.762	.785	3	.920	30	.405	89	61	87	72	41	72
Paulding .....	.805	.832	.840	11	1.030	30	.570	90	70	85	77	49	66
TEXAS—													
Austin, [Palm] .....	.675	.453	.582	31	.787	15	.274	65	27	51	47	16	26
Austin, [Van Nostrand] .....	.778	.550	.681	28	.886	10	.407	78	32	59	58	21	42
Larissa .....	.786	.717	.723	20	.990	10	.433	82	45	68	55	22	47
Sisterdale .....	.708	.507	.607	16	.816	12	.354	71	29	57	56	20	24
TENNESSEE—													
Glenwood .....	.607	.608	.652	17	.914	4	.227	89	60	87	65	20	77
Memphis .....	.755	.752	.797	3	1.366	30	.464	89	64	90	74	45	66
KENTUCKY—													
Bardstown .....	.615	.633	.639	26	f. 816	29	.365	84	61	86	66	43	73
Lexington (b) .....	.567	.597	.601	11	.785	29	.336	78	59	80	62	40	50
Springdale (b) .....	.497	.658	.624	8	1.046	29	.112	87	65	74	56	45	19
OHIO—													
Avon .....	.575	.553	.574	18	.775	10	.121	84	60	85	29	26	66
Cincinnati .....	.639	.716	.623	4	.918	29	.348	86	64	78	62	45	59
Elk Run .....	.570	.694	.544	10	.997	29	.321	82	72	84	80	51	73
Hillsborough .....	.549	.600	.537	5	.877	23	.314	85	66	77	46	40	52
Montville .....	.547	.557	.539	11	.883	29	.298	86	62	83	67	40	67
Savannah .....	.544	.507	.523	18	.802	29	.273	86	49	85	75	27	42
Westerville .....	.578	.598	.607	3	.799	29	.331	89	60	85	77	41	69
MICHIGAN—													
Detroit .....	.496	.743	.520	11	1.038	31	.309	70	64	71	46	40	55
Fort Gratiot (g) .....	.444	.513	.530	10	.789	31	.245	77	44	63	62	48	33
Lake George .....	.436	.519	.423	11	.717	27	.247	84	57	73	65	40	63
Marquette .....	.420	.477	.417	13	.668	29	.188	76	62	82	48	30	54
Monroe Piers (h) .....	.556	.571	.590	8	.793	29	.278	72	62	67	56	35½	52
Ontonagon (i) .....	.453	.517	.....	10	.772	29	.225	71	66	.....	49	31	.....
Ottawa Point (j) .....	.563	.674	.629	10	.931	28	.269	82	81	81	62	53	39
Thunder Bay Island (k) .....	.487	.518	.509	17	.685	5	.216	75	73	78	37	47	51
Ypsilanti .....	.500	.492	.537	12	.745	31	.191	82	54	73	74	26	52

a Same amount on the 5th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 18th.

d Same amount on the 26th and 31st.

e Same amount on the 19th and 20th.

f Same amount on the 22d.

g Imperfect. Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .532; mean relative humidity at 9 a. m., 66.

h Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .537; mean relative humidity at 6 a. m., 85.

i Observations taken at 9 a. m. and 3 p. m.

j Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .520; mean relative humidity at 6 a. m., 89.

k Observations taken at 6 a. m., 9 p. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .461; mean relative humidity at 6 a. m., 83.

## No. 33.—PSYCHROMETER, AUGUST, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
INDIANA—	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
New Harmony.....	.707	.763	.748	3	1.065	24	.476	91	70	92	81	51	69
ILLINOIS—													
Augusta.....	.579	.669	.612	■	.845	29	.341	91	80	86	80	50	73
Batavia, [Mead] .....	.550	.660	.641	11	.998	31	.251	82	54	80	67	24	46
Manchester ( <i>b</i> ).....	.653	.794	.661	6	.958	20	.336	92	76	92	81	61	81
Peoria.....	.557	.535	.585	10	.780	29	.301	78	49	70	65	33	49
Upper Alton.....	.585	.815	.630	17	1.188	29	.376	86	76	84	66	62	65
Wheaton.....	.506	.452	.469	10	.710	31	.155	73	45	73	63	17	54
MISSOURI—													
St. Louis.....	.592	.574	.610	3	.810	29	.396	73	50	73	53	31	43
WISCONSIN—													
Appleton.....	.573	.644	.546	17	1.283	29	.076	80	58	82	14	37	49
Milwaukee, [Larkin] .....	.531	.572	.557	14	.785	31	.289						
Superior ( <i>d</i> ).....	.474	.475	.494	16	.745	28	.231	83	68	72	65	40	51
IOWA—													
Dubuque.....	.516	.477	.551	16	.739	28	.272	75	44	72	55	27	54
Fairfield.....	.536	.522	.518	10	.718	29	.282	73	55	72	53	36	45
Muscatine.....	.655	.723	.718	12	.942	29	.460	82	78	83	79	60	73
MINNESOTA—													
Beaver Bay, [Clark].....	.441	.414	.418	11	.566	28	.236	87	72	85	70	46	65
Beaver Bay, [Wieland].....	.513	.742	.485	■	1.255	28	.247	91	85	96	79	60	85
CALIFORNIA—													
Sacramento.....	.409	.481	.462	6	.564	20	.350	73	63	71	65	29	56
San Francisco.....	.389	.388	.393	3	.497	30	.330	84	62	88	67	41	80
MEXICO—													
Mirador ( <i>e</i> ).....	1.491	1.640	1.693	23	1.885	27	1.250						
Vera Cruz ( <i>b</i> ).....	.883		.931					83		81			
WEST INDIES—													
St. George's, Bermuda ( <i>f</i> ).....				?	.914	?	.689						
CENTRAL AMERICA—													
Guatemala ( <i>g</i> ).....	.523	.547	.538					69	59	95			
SOUTH AMERICA—													
Catharina Sophia, Surinam ( <i>b</i> ).....	.767	.828	.846	16	.887	13	.693	83	63	83	81	54	78

a Same amount on the 17th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 19th.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 6 a. m., .406; mean relative humidity at 6 a. m., 93.

e Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to 1000000 water in the cubic space of air."

f Mean force of vapor, .804; mean relative humidity, 83; minimum, 63.

g Observation taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m. Mean force of vapor at 4 a. m., .510; mean relative humidity at 4 a. m., 97.5.



## No. 34.—PSYCHROMETER, SEPTEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a.m.	9 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
BRITISH AMERICA—													
Montreal .....	.331	.364	.354	11	.604	15	.139	81	70	78	54	46	53
St. Martin (a) .....	.312	.389	.357	11	.590	15	.139	85	68	86	56	39	72
Toronto (a) .....	.308	.350	.337	10	.593	15	.068	82	65	81	48	20	64
Windsor .....	.341	.400	.361	25	.600	16	.173	93	69	90	67	46	66
Wolfville .....	.349	.426	.341	19	.577	16	.155	83	76	84	56	45	58
MAINE—													
Gardiner .....	.364	.409	.363	20	.635	11	.101	90	70	89	59	18	58
Perry .....	.346	.381	.349	—	?	—	?	80	69	89	—	—	—
Portland .....	.342	.342	.355	20	.591	15	.182	87	61	83	66	36½	53
Steuben .....	.314	.392	.311	27	.549	17	.037	79	72	83	14	46	57
NEW HAMPSHIRE—													
Mount Washington .....	.188	.209	.201	11	.374	15	.068	99	98	99	93	84	93
VERMONT—													
Burlington .....	.346	.385	.353	27	.581	15	.115	79	69	78	51	45	53
MASSACHUSETTS—													
Amherst .....	.376	.470	.410	20	.717	15	.157	94	68	90	60	43	60
Cambridge .....	—	—	—	—	—	—	—	95	84	90	79	68	74
Lawrence .....	.326	.323	.346	11	.586	14	.097	77	57	76	51	22	52
Nantucket .....	.406	.396	.413	4	.613	15	.165	70	60	76	31	32	55
New Bedford .....	.413	.423	.421	4	.666	14	.098	89	69	88	67	20	55
Westfield .....	.437	.365	.382	20	.631	14	.110	85	57	86	59	25	69
Worcester .....	.398	.461	.416	20	.759	15	.214	95	73	93	81	38	74
RHODE ISLAND—													
Providence (b) .....	—	—	—	—	—	—	—	—	—	—	—	—	—
CONNECTICUT—													
Middletown .....	.361	.392	.392	11	.635	15	.115	87	57	85	63	21	64
Pomfret .....	.390	.463	.405	21	.720	15	.195	96	82	95	82	57	81
Wallingford .....	.376	.393	.400	11	.641	15	.118	90	60	87	63	26	59
NEW YORK—													
Bellport .....	.422	.469	.440	11	.706	15	.162	83	75	84	48	37	60
Buffalo (a) .....	.370	.388	.400	10	.648	15	.108	77	62	79	37	43	47
Cazenovia .....	.335	.351	.350	8	.604	15	.078	85	64	88	50	25½	63
Charlotte (d) .....	.343	.419	.406	10	.680	14	.117	81	69	72	39	45	49
Dansville .....	.394	.439	.404	10	.811	15	.090	95	70	88	70	39	28
Fort Niagara (e) .....	.366	.432	.421	10	.658	14	.170	86	74	78	39	42	37
Henrietta .....	.419	.427	.397	10	.695	15	.086	81	70	86	46	35	24
New York city .....	.410	.422	.417	21	.633	14	.136	77	59	72	40	27	35
Rochester .....	.361	.363	.384	10	.648	14	.074	83	56	84	25	31	45
Sackett's Harbor (f) .....	.338	.401	.387	10	.577	15	.147	28	64	68	62	48	49
Waterford .....	.373	.430	.406	19	.662	15	.199	87	69	82	71	40	58
PENNSYLVANIA—													
Berwick .....	.439	.496	.445	—	?	—	?	87	75	84	—	—	—
Carlisle .....	.401	.421	.441	21	.718	15	.175	75	60	77	50	30	57
Chambersburg .....	.469	.509	.555	21	.759	15	.242	79	71	70	66	45	66
Easton (a) .....	.409	.383	.389	20	.630	15	.129	79	58	82	54	27	53
Harrisburg .....	.379	.394	.428	21	.680	15	.164	77	53	72	53	29	34
Lewisburg .....	.394	.410	.400	11	.720	14	.132	85	60	80	55	23	45
Mount Joy .....	.463	.580	.528	21	.758	15	.308	83	76	80	72	39	63
Norristown .....	.411	.399	.419	20	.655	15	.140	79	59	76	43	28	45
Philadelphia .....	.438	.462	.472	20	.658	15	.181	79	59	76	53	29	51
Somerseset .....	.401	.474	.425	19	.677	15	.225	93	68	89	70	49	76
MARYLAND—													
Annapolis .....	.504	.514	.579	21	.812	15	.231	87	83	79	55	35	51
Frederick .....	.447	.490	.516	20	1.232	15	.245	85	69	82	58	42	52
DISTRICT OF COLUMBIA—													
Washington .....	.480	.475	.525	20	.782	15	.216	83	60	79	60	28	49

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Mean relative humidity, 69.

c Same amount on the 20th.

d Observations taken at 6 and 9 a. m., 3 and 9 p. m. Mean force of vapor at 9 a. m., .386; mean relative humidity at 9 a. m., 78.

e Observations taken at 6 and 9 a. m., 3 and 9 p. m. Mean force of vapor at 9 a. m., .381; mean relative humidity at 9 a. m., 78.

f Observations taken at 6 and 9 a. m., 3 and 9 p. m. Mean force of vapor at 9 a. m., .355; mean relative humidity at 9 a. m., 72.

g Same amount on the 21st.

## No. 34.—PSYCHROMETER, SEPTEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
VIRGINIA—													
Montross .....	.548	.622	.564	21	.812	15	.308	93	79	92	69	63	83
NORTH CAROLINA—													
Murfreesborough .....	.591	.736	.662		?		?	90	80	88			
SOUTH CAROLINA—													
All Saints .....	.671	.830	.679	12	1.151	26	.438	91	85	88	83	58	82
Columbia .....	.686	.956	.729	12	1.255	24	.469	92	88	91	84	49	79
St. John's .....	.622	.685	.670	5	.928	24	.473	89	66	80	57	40	74
GEORGIA—													
Athens .....	.552	.592	.597	4	.762	24	.414	89	64	86	79	49	68
Augusta .....	.615	.698	.710	4	.915	23	.466	75	64	74	64	50	88
Clarksville .....	.503	.617	.589	4	.854	23	.282	87	71	83	58	41	56
Savannah .....	.699	.692	.704	5	.939	25	.405	85	63	81	68	38	63
Thomaston .....	.614	.760	.723		?	24	.443	86	74	80	65	56	64
FLORIDA—													
Jacksonville .....	.845	.927	.841	4	1.065	22	.612	88	77	89	82	64	85
Micanopy .....	.730	.695	.724	5	.855	24	.487	89	59	82	69	41	71
Warrington .....	.953	1.017	.994	13	1.189	22	.658	93	87	91	83	75	74
ALABAMA—													
Selma .....	.521	.417	.498	28	.596	3	.291	77	41	61	46	19	44
MISSISSIPPI—													
Columbus .....	.597	.650	.662	19	.863	21	.394	90	61	87	79	45	67
Paulding .....	.693	.731	.755	5	.891	21	.487	90	89	83	79	47	86
TEXAS—													
Austin, [Palm] .....	.690	.579	.641		?		?	81	51	73			
Austin, [Van Nostrand] .....	.720	.647	.698	9	.870	19	.323	90	55	82	66	27	44
Larissa .....	.676	.691	.687	10	.884	21	.342	90	61	82	78	55	64
Sisterdale .....	.643	.589	.619	28	.798	19	.223	82	50	78	58	21	54
TENNESSEE—													
Glenwood .....	.521	.558	.542	12	.785	15	.342	90	63	86	78	42	67
Memphis .....	.598	.616	.651	11	.839	20	.416	90	65	89	77	47	73
KENTUCKY—													
Bardstown .....	.495	.518	.531	30	.733	14	.232	86	77	86	74	34	61
Springdale (d) .....	.414	.495	.514	16	.912	14	.222	87	61	75	80	38	59
OHIO—													
Avon .....	.405	.466	.418	10	.725	13	.203	78	68	83	40	39	58
Cincinnati .....	.472	.635	.528	27	.884	15	.308	87	74	85	74	37	69
Flk Run .....	.422	.544	.433	10	.883	6	.133	87	73	83	50	36	32
Hillsborough .....	.426	.470	.440	11	.720	15	.212	88	67	80	60	39	53
Montville .....	.413	.436	.428	30	.693	15	.194	86	67	82	64	40	60
Savannah .....	.403	.448	.412	10	.733	13	.209	87	64	82	61	34	62
Westerville .....	.438	.483	.477	10	.726	15	.200	88	62	86	59	37	58
MICHIGAN—													
Detroit .....	.358	.447	.366	10	.679	14	.095	76	64	70	60	20	37
Grand Haven .....	.364	.403	.380	10	.658	4	.190	82	66	74	63	44	31
Lake George .....	.291	.367	.328	10	.584	15	.136	86	64	79	69	27	65
Marquette .....	.301	.328	.287	10	.583	30	.122	77	61	78	56	17	32
Monroe Piers (f) .....	.389	.408	.416	10	.651	14	.173	84	66	72	64	39	42
Ontonagon .....	.332	.380		28	.854	14	.160	75	70		46	33	
Ottawa Point (g) .....	.354	.407	.391	10	.621	14	.160	85	71	74	58	42	45
Thunder Bay Island (h) .....	.329	.355	.341	11	.600	14	.138	83	72	77	71	43	52
Ypsilanti .....	.353	.389	.363	10	.667	14	.157	79	61	74	51	35	51
INDIANA—													
Michigan City (i) .....	.370	.414	.405	10	.718	6	.139	78	70	72	41	42	46
New Harmony .....	.548	.636	.602	10	.891	14	.403	94	77	93	88	58	58
ILLINOIS—													
Augusta .....	.421	.496	.456	10	.786	3	.244	90	68	85	60	31	63

a Same amount on the 27th.

b Same amount on the 23d.

c Same amount on the 5th and 13th.

d For changes in hours of observation, &amp;c., see table of the thermometer for this month.

e Same amount on the 4th.

f Observations taken at 6 and 9 a. m., 3 and 6 p. m. Mean force of vapor at 9 a. m., .389; mean relative humidity at 9 a. m., 78.

g Observations taken at 6 and 9 a. m., 3 and 6 p. m. Mean force of vapor at 9 a. m., .373; mean relative humidity at 9 a. m., 81.

h Observations taken at 6 and 9 a. m., 3 and 6 p. m. Mean force of vapor at 9 a. m., .337; mean relative humidity at 9 a. m., 74.

i Observations taken at 6 and 9 a. m., 3 and 6 p. m. Mean force of vapor at 9 a. m., .391; mean relative humidity at 9 a. m., 73.



## No. 34.—PSYCHROMETER, SEPTEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
ILLINOIS—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Batavia.....	.391	.518	.416	10	.936	2	.208	87	64	82	61	30	60
Manchester (a).....	.486	.614	.524	25	.904	20	.311	97	82	95	81	56	87
Peoria.....	.395	.430	.430	10	.762	3	.137	74	54	71	46	18	47
Upper Alton.....	.456	.653	.486	10	1.065	4	.236	88	81	88	70	47	73
Wheaton.....	.358	.346	.361	10	.779	1	.194	78	51	75	41	12	41
MISSOURI—													
St Louis.....	.471	.474	.508	10	.752	2	.263	80	56	81	48	37	57
WISCONSIN—													
Appleton.....	.358	.437	.374	10	.904	3	.177	78	62	82	51	29	49
Milwaukee, [Lapham].....	.368	.376	.387	10	.677	3	.146	80	64	76	36	22	43
Milwaukee, [Larkin].....	.391	.421	.402	10	.733	14	.238						
Superior (b).....	.298	.348	.336	10	.510	13	.133	93	73	75	41	40	21
IOWA—													
Dubuque.....	.353	.380	.378	10	.717	1	.154	77	54	72	56	24	53
Fairfield.....	.342	.422	.334	10	.664	3	.150	71	56	71	53	27	62
Muscataine.....	.501	.543	.546	10	.843	21	.362	85	84	83	69	72	73
MINNESOTA—													
Beaver Bay, [Clark].....	.325	.329	.317	9	.491	14	.149	92	74	91	70	40	66
Beaver Bay, [Wieland].....	.319	.449	.315	9	.705	14	.155	89	78	91	71	57	61
CALIFORNIA—													
Sacramento.....	.372	.425	.433	15	c. 543	22	.226	71	57	69	53	25	45
San Francisco.....	.382	.333	.373	15	.510	28	.243	82	59	80	46	27	39
Santa Clara.....	.347	.362	.368	2	.449	23	.163	77	43	75	26	19	40
MEXICO—													
Mirador (d).....	1.421	1.560	1.555	23	1.825	13	1.190						
WEST INDIES—													
St George's, Bermuda (e).....				?	.970	?	.532						
CENTRAL AMERICA—													
Guatemala (f).....	.505	.534	.526					72	74.5	95			
SOUTH AMERICA—													
Cathar'a Sophia, Surinam (a).....	.792	.874	.845	17	.997	9	.718	89	68	84	86	54	78

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Observations taken at 6 and 9 a. m., 3 and 6 p. m. Mean force of vapor at 9 a. m., .318; mean relative humidity at 9 a. m., 81.

c Same amount on the 16th.

d Observations taken at 7 a. m., 2 and 8 p. m., and "humidity reduced to 30.0000 water in the cubic space of air."

e Mean force of vapor, .804; mean relative humidity, 83; minimum, 59.

f Observations taken at 4 and 10 a. m., 4 and 10 p. m. Mean force of vapor at 4 a. m., .502; mean relative humidity at 4 a. m., 93.

## No. 35.—PSYCHROMETER, OCTOBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
BRITISH AMERICA—													
Montreal .....	.203	.228	.216	5	.524	23	.100	76	67	74	49	36	54
St. Martin (a) .....	.185	.249	.204	5	.574	26	.069	81	77	79	59	30	67
Toronto (a) .....	.209	.216	.214	4	.461	21	.075	82	59	78	61	30	53
Windsor .....	.228	.235	.223	2	.517	16	.092	84	62	81	51	29	60
Wolfville .....	.206	.245	.216	2	.529	16	.106	79	72	82	54	39	62
MAINE—													
Perry .....	.228	.238	.263	2	.449	12	.000	90	66	97	58	0	58
Portland .....	.203	.222	.218	2	.466	26	.061	77	57	75	58	25	50
Steuben .....	.194	.228	.213	13	.460	8	.037	78	66	78	58	14	47
VERMONT—													
Burlington .....	.207	.223	.214	4	.515	21	.065	70	63	70	42	40	45
Lunenburg .....	.184	.221	.208	5	.581	17	.000	90	74	92	48	0	58
MASSACHUSETTS—													
Amherst .....	.239	.271	.248	5	.554	26	.095	90	60	78	61	36	57
Bridgewater .....	.272	.402	.296	2	.664	19	.087	95	94	88	70	32	27
Cambridge .....								89	80	83	78	68	73
Lawrence .....	.197	.227	.223	18	.518	26	.047	70	52	72	48	21	58
Nantucket .....	.265	.276	.283	8	.576	26	.104	68	59	73	49	39	50
New Bedford .....	.258	.251	.267	2	.590	20	.057	86	59	81	62	22	48½
Westfield .....	.208	.217	.231	5	.564	27	.064	79	48	75	51	25	38
Worcester .....	.242	.296	.261	4	.597	26	.117	89	69	84	67	46	36
RHODE ISLAND—													
Providence (b) .....													
CONNECTICUT—													
Middletown .....	.233	.218	.237	18	.500	26	.055	84	42	74	53	23	52
Pomfret .....	.245	.306	.246	5	.631	26	.165	91	74	85	77	56	62
Wallingford .....	.231	.224	.228	18	.556	27	.058	81	45	73	49	21	46
NEW YORK—													
Bellport .....	.269	.296	.277	14	.618	20	.108	81	66	82	60	40	42
Buffalo (a) .....	.248	.250	.249	13	.543	21	.097	79	64	71	61	39	50
Cazenovia .....	.197	.194	.201	1	.441	26	.074	82	59	76	60	33	46
Charlotte (c) .....	.224	.258	.243	1	.497	26	.066	79	65	66	57	43	46
Danville .....	.237	.247	.241	1	.505	21	.096	86	65	84	66	42	56
Fordham .....	.253	.273	.264	1	.539	21	.083	77	52	68	52	32	40
Henrietta .....	.308	.295	.240	5	.585	21	.099	72	71	84	36	29	64
New York city .....	.250	.268	.266	1	.559	26	.069	70	54	65	37	31	29
Rochester .....	.217	.211	.218	5	.439	21	.053	78	53	74	50	26	33
Sackett's Harbor (d) .....	.209	.229	.225	4	.503	26	.090	73	61	63	45	49	49
PENNSYLVANIA—													
Berwick .....	.241	.271	.263	8	.516	24	.117	84	64	79	64	32	63
Carlisle (a) .....	.266	.299	.298	1	.549	21	.092	77	58	71	32	24	50
Chambersburg .....	.351	.403	.430	1	.612	10	.176	71	68	71	40	45	27
Easton (a) .....	.238	.219	.246	4	.492	28	.052	75	46	75	35	18	49
Harrisburg, [Hickok] .....	.211	.216	.225	1	.549	21	.051	67	43	58	25	19	23
Lewisburg .....	.230	.238	.226	1	.508	21	.066	84	53	71	43	26	45
Mount Joy .....	.297	.432	.362	4	.773	24	.138	78	77	79	53	66	61
Norristown .....	.246	.269	.267	14	.619	21	.077	83	56	72	41	27	44
Philadelphia .....	.259	.274	.280	1	.569	21	.065	75	50	75	50	23	33
Somerset .....	.231	.279	.248	4	.568	29	.074	91	62	83	76	24	68
MARYLAND—													
Annapolis .....	.292	.311	.351	1	.668	21	.048	85	51	78	59	15	49
Chestertown .....	.260	.263	.262	12	.619	21	.066	69	53	64	43	23	37
Frederick .....	.253	.276	.266	3	.611	21	.087	79	58	74	48	36	54
DISTRICT OF COLUMBIA—													
Washington .....	.277	.278	.310	1	.612	21	.066	78	53	77	47	23	40
VIRGINIA—													
Montross .....	.255	.338	.274	18	.586	14	.068	83	78	83	58	45	64

\* The maxima being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Mean relative humidity, 57.

c Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .239. Mean relative humidity at 9 a. m., 74.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .225. Mean relative humidity, at 9 a. m., 70.



## No. 35.—PSYCHROMETER, OCTOBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
NORTH CAROLINA—													
Murfreesborough.....	.369	.546	.437	14	.785	22	.188	96	82	94	90	63	89
SOUTH CAROLINA—													
All Saints.....	.410	.475	.416	6	.884	29	.133	83	63	78	57	28	49
St. John's.....	.375	.436	.418	18	.785	31	.148	84	57	79	60	32	40
GEORGIA—													
Augusta.....	.397	.453	.439	1	.652	31	.169	68	55	63	55	45½	45
Clarksville.....	.294	.419	.387	13	.685	27	.127	95	59	89	60	25	60
Savannah.....	.416	.426	.459	1	.760	29	.150	78	49	72	53	32	35
Thomaston.....	.392	.539	.526	1	.914	31	.178	82	71	77	39	56	63
FLORIDA—													
Jacksonville.....	.568	.675	.581	13	.922	29	.283	84	73	84	73	60	63
Micanopy.....	.500	.525	.521	■	.826	30	.176	84	57	79	57	30	60
Warrington.....	.642	.939	.614	6	1.111	30	.265	94	92	94	80	82	81
ALABAMA—													
Greensborough (b).....	.365	.376	.412	---	?	---	?	84	44	82	?	?	?
Orville.....	.389	.384	.409	18	.626	27	.163	88	51	76	57	26	25
MISSISSIPPI—													
Columbus.....	.338	.369	.391	17	.761	27	.112	86	48	79	42	19	47
Hernando.....	.326	.359	.352	17	.785	30	.090	76	46	71	43	29	41
TEXAS—													
Austin, [Palm].....	.370	.337	.367	17	.731	27	.023	72	38	64	7	4	14
Austin, [Van Nostrand]....	.435	.411	.445	17	.826	27	.110	85	45	75	28	17	32
Bonham.....	.345	.331	.347	17	.977	29	.064	76	37	64	40	18	25
Larissa.....	.405	.445	.419	17	.792	27	.137	80	50	67	43	24	36
Sisterdale.....	.373	.384	.393	17	.727	27	.037	79	42	77	21	■	24
TENNESSEE—													
Glenwood.....	.277	.277	.293	3	.641	26	.035	81	42	73	14	15	5
Memphis.....	.297	.346	.377	17	.731	28	.094	85	50	79	50	26	38
KENTUCKY—													
Bardstown.....	.276	.302	.295	17	.583	29	.111	86	53	79	46	28	34
Springdale (b).....	.221	.283	.274	2	.570	21	.090	79	49	60	37	27	32
Lexington.....	.242	.280	.255	14	.551	30	.095	73	49	65	32	21	22
OHIO—													
Avon.....	.243	.302	.258	4	.588	27	.127	77	69	76	61	47	50
Breeksville.....	.211	.335	.235	14	.516	27	.070	67	72	67	39	53	39
Cincinnati, [Harper].....	.279	.380	.309	4	.639	21	.123	87	66	81	70	49	63
Elk Run.....	.213	.311	.258	3	.581	27	.099	81	69	80	46	36	54
Hillsborough.....	.238	.240	.240	17	.556	21	.092	80	50	65	54	25	37
Montville.....	.238	.254	.242	17	.513	31	.110	84	62	76	66	14½	44
Savannah.....	.222	.275	.247	4	.470	28	.129	87	65	83	68	39	65
Westerville.....	.256	.282	.298	17	.591	20	.097	89	58	85	68	39	58
MICHIGAN—													
Detroit.....	.236	.301	.215	3	.554	29	.092	76	67	78	57	34	50
Grand Haven.....	.232	.255	.235	17	.505	■	.076	78	68	72	45	31	14
Marquette.....	.174	.191	.182	17	.356	11	.088	73	66	77	37	14	43
Monroe Piers (d).....	.224	.229	.236	4	.462	29	.085	78	56	62	49	26	30
Ottawa Point (e).....	.230	.262	.263	4	.577	20	.066	83	71	77	43	35	50
Thunder Bay Island (f)....	.198	.213	.212	3	.429	20	.105	75	66	71	59	51	55
Ypsilanti.....	.203	.208	.214	17	.507	20	.090	75	54	66	50	25½	49
INDIANA—													
Michigan City (g).....	.226	.253	.250	12	.465	15	.087	75	71	68	62	26	21
New Harmony.....	.294	.351	.334	17	.644	29	.097	90	58	86	63	25	39
ILLINOIS—													
Augusta.....	.231	.299	.234	8	.606	28	.031	79	55	69	20	37	41

a Same amount on the 30th.

b For changes in hours of observation, &amp;c., see table of the thermometer for this month.

c Same amount on the 23d.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .229. Mean relative humidity, at 9 a. m., 72.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .236. Mean relative humidity at 9 a. m., 80.

f Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .194. Mean relative humidity at 9 a. m., 65.

g Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .238. Mean relative humidity at 9 a. m., 72.

## No. 35.—PSYCHROMETER, OCTOBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
ILLINOIS—Continued.													
Batavia, [Mead] .....	.217	.292	.227	14	.529	14	.090	83	55	78	57	31	28
Manchester (a) .....	.302	.424	.315	3	.829	31	.118	94	65	91	79	24	65
Peoria .....	.227	.246	.244	17	.686	27	<i>b</i> .084	75	43	64	48	18	32
Wheaton .....	.213	.212	.223	17	.588	14	.048	81	46	75	49	9	42
MISSOURI—													
St. Louis .....	.265	.261	.275	17	.639	30	.100	75	42	<del>56</del>	42½	20	44
WISCONSIN—													
Appleton .....	.205	.281	.246	3	.969	20	.047	74	64	78	24	13	27
Milwaukee, [Lapham] .....	.210	.217	.216	17	.529	31	.096	68	51	64	45	25	25
Milwaukee, [Larkin] .....	.285	.344	.283	10	.500	25	<i>c</i> .212						
Superior City, [Stuntz] (d) ..	.183	.215	.211	4	.452	31	.092	85	68	72	65	32	29
IOWA—													
Dubuque .....	.228	.215	.211	17	.512		.039	77	45	62	47	7	22
Fairfield .....	.210	.210	.194	16	.456	14	.063	67	40	54	34	20	22
Muscatine .....	.335	.348	.364	3	.631	18	.177	84	80	82	65	66	68
MINNESOTA—													
Beaver Bay, [Clark] .....	.197	.196	.194	16	.412	28	.095	90	66	82	64	32	51
Beaver Bay, [Wieland] .....	.175	.240	.189	10	.449	20	.063	84	77	87	65	36	52
CALIFORNIA—													
Sacramento .....	.320	.370	.411	8	.543	17	.186	71	51	70	50	32	45
San Francisco .....	.360	.370	.373	19	.491	1	<i>e</i> .256	83	57	<del>80</del>	44	17	29
Santa Clara .....	.303	.351	.367	4	.489	17	.192	79	43	75	45	14	46
MEXICO—													
Mirador (f) .....	1.452	1.512	1.564	17	1.880	9	1.000						
WEST INDIES—													
St. George's, Bermuda (g) ..				?	.887	?	.348						
CENTRAL AMERICA—													
Guatemala (h) .....	.497	.517	.517					71	71.5	93			
SOUTH AMERICA—													
Catharina Sophia, Surinam (a)	.781	.859	.834	7	.983	30	.706	<del>80</del>	65	82	82	53	74

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 28th.

c Same amount on the 27th and 29th.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .187. Mean relative humidity at 9 a. m., 74.

e Same amount on the 2d.

f Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to  $\frac{1}{1000000}$  water in the cubic space of air."

g Mean force of vapor, .643; mean relative humidity, 79; minimum 53.

h Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m. Mean force of vapor at 4 a. m., .503. Mean relative humidity at 4 a. m., 97.



## No. 36.—PSYCHROMETER, NOVEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
BRITISH AMERICA —													
Montreal .....	.149	.165	.162	18	.323	29	.063	83	78	82	64	52	53
St. Martin (a) .....	.127	.167	.150	18	.328	25	.042	81	79	84	69	66	67
Toronto (a) .....	.183	.199	.194	18	.328	28	.095	83	72	80	53	35	49
Windsor .....	.172	.195	.183	19	.487	30	.057	89	72	84	76	50	56
Wolfville .....	.169	.218	.161	18	.478	30	.056	83	77	81	64	48	55
MAINE—													
Gardiner .....	.173	.208	.170	19	.466	27	.005	95	79	92	50	2	43
Portland .....	.175	.185	.190	19	.410	29	.068	80	67	81	46	29	54
Steuben .....	.176	.196	.184	9	.456	29	.040	86	72	83	58	23	31
VERMONT—													
Burlington .....	.164	.156	.159	19	.478	29	.055	72	55	67	49	19	33
MASSACHUSETTS—													
Amherst .....	.202	.233	.212	19	.581	24	.083	85	67	81	58	36	49
Bridgewater .....	.221	.297	.247	5	.740	29	.072	88	79	86	36	36	24
Cambridge .....								89	84	88	73	67	68
Lawrence .....	.158	.198	.191	13	.516	16	.073	71	59	74	52	25	57
Nantucket .....	.223	.240	.229	10	.438	29	b. 117	72	63	75	46	43	51
New Bedford .....	.224	.246	.237	19	.474	3	.090	88	66	88	58	26	70
Westfield .....	.168	.198	.194	19	.568	7	.073	80	56	80	55	29	59
Worcester .....	.216	.250	.203	13	.537	14	.135	92	75	88	73	46	65
RHODE ISLAND—													
Providence (c) .....													
CONNECTICUT—													
Middletown .....	.174	.197	.186	19	.480	25	d. 052	76	49	73	47	13	34
Pomfret .....	.206	.253	.216	13	.518	15	.100	89	78	88	68	57	62
Wallingford .....	.189	.211	.203	19	.500	7	.099	85	55	79	54	25	56
NEW YORK—													
Bellport .....	.225	.239	.232	19	.436	20	.008	80	68	83	54	2	36
Buffalo (a) .....	.196	.215	.203	18	.375	14	.106	70	68	69	43	40	43
Cazenovia .....	.174	.168	.172	19	.445	7	.066	78	61	73	43	18	31
Charlotte (e) .....	.175	.200	.189	18	.380	19	.062	75	68	69	45	22	23
Dansville .....	.182	.185	.194	19	.395	20	.088	80	58	76	55	24	45
Fordham .....	.217	.246	.241	19	.518	6	.085	78	62	76	43	21	53
Henrietta .....	.219	.236	.205	5	.695	30	.087	75	72	83	30	44	56
New York city .....	.217	.250	.232	17	.483		.070	72	63	69	42	36	24
Rochester, [Mathews] .....	.166	.177	.181	18	.388	14	.076	74	59	73	45	27	46
Sackett's Harbor (f) .....	.164	.185	.177	18	.356	28	.088	72	65	67	49	44	35
PENNSYLVANIA—													
Berwick .....	.199	.233	.213	19	.473	14	.106	80	65	79	58	39	63
Chambersburg .....	.371	.412	.471	18	.608	14	.269	71	69	71	62	53	64
Easton (a) .....	.199	.191	.198	19	.523	14	.071	76	52	77	51	21	45
Harrisburg, [Hickok] .....	.179	.184	.186	20	.460	28	.048	68	46	64	28	15	26
Lewisburg .....	.182	.190	.186	18	.418	16	.000?	79	55	73	50	0?	40
Norristown .....	.215	.255	.243	18	g. 518	25	.123	85	64	81	49	38	45
Philadelphia .....	.227	.241	.241	19	.559	14	.112	77	56	71	42	32	46
Somerset .....	.188	.230	.214	18	.433	13	.074	86	63	80	61	44	55
MARYLAND—													
Annapolis .....	.241	.261	.283	13	.476	13	.093	85	62	80	54	38	56
Chestertown .....	.217	.229	.221	18	.517	13	.076	69	50	62	29	23	23
Frederick .....	.208	.206	.211	19	.469	16	.043	77	53	72	42	12	47
DISTRICT OF COLUMBIA—													
Washington .....	.238	.237	.262	18	.523	14	.077	79	55	76	52	26	33
NORTH CAROLINA—													
Murfreesborough .....	.345	.476	.393	18	.695	14	.135	98	89	95	93	79	87
SOUTH CAROLINA—													
All Saints .....	.373	.438	.406	18	.655	14	.100	87	70	84	57	42	42

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a For changes in hours of observation, &amp;c., see table of the thermometer for this month.

b Same amount on the 25th.

c Mean relative humidity, 61.

d Same amount on the 6th.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .185; mean relative humidity at 9 a. m., 72.

f Observations taken at 6 a. m., 9 a. m., 3 p. m. and 6 p. m. Mean force of vapor at 9 a. m., .168; mean relative humidity at 9 a. m., 70.

g Same amount on the 19th.

## No. 36.—PSYCHROMETER, NOVEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
SOUTH CAROLINA—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Columbia, [White] .....	.450	.711	.499	25	1.065	29	.241	87	85	85	64	60	26
St. John's.....	.340	.396	.376	13	.671	14	.130	87	62	83	74	44	73
GEORGIA—													
Augusta.....	.290	.397	.366	27	.586	14	.127	67	58	64	49	46	29½
Clarksville.....	.227	.323	.299	26	.537	14	.000	93	55	87	70	0	61
Thomaston.....	.338	.491	.423	11	.691	14	.100	82	75	76	46	55	57
FLORIDA—													
Jacksonville.....	.471	.580	.481	12	.829	13	.142	85	75	84	52	53	51
Micanopy.....	.411	.421	.455	13	.752	13	.097	88	56	83	55	35	35
Warrington.....	.584	.732	.661	30	.977	14	.298	94	82	93	88	68	87
ALABAMA—													
Greensborough (a).....	.333	.357	.346	—	?	—	?	80	51	75	?	?	?
Orville.....	.309	.371	.371	11	.563	13	.094	90	55	81	60	32	49
MISSISSIPPI—													
Columbus.....	.304	.362	.347	26	.630	13	.081	88	55	77	64	26	41
Hernando.....	.291	.352	.352	24	.637	13	.065	73	59	75	36	27	31
TEXAS—													
Austin, [Palm].....	.368	.342	.369	25	.695	14	.003	78	41	64	29	1	12
Austin, [Van Nostrand].....	.402	.385	.410	23	.745	13	.043	87	43	69	51	9	27
Bonham.....	.327	.306	.300	23	.639	14	.000	73	39	56	0	0	0
Larissa.....	.404	.433	.424	26	.724	?	?	82	54	68	43?	12?	42?
Sisterdale.....	.332	.341	.362	30	.785	13	b.000	82	40	75	0	0	40
TENNESSEE—													
Glenwood.....	.234	.246	.266	30	.529	13	.070	79	49	70	32	21	28
Memphis.....	.286	.303	.309	30	.591	14	.073	78	54	70	53	20	30
KENTUCKY—													
Bardstown.....	.217	.282	.263	11	.505	13	.032	76	59	76	38	34	46
Lexington.....	.208	.239	.225	12	.457	?	?	72	54	66	?	?	?
Springdale (a).....	.199	.258	.244	25	.497	28	.038	73	60	67	32	0	14
OHIO—													
Avon.....	.187	.228	.216	12	.537	13	.048	72	64	73	40	31	34
Brecksville.....	.160	.253	.194	9	c.451	15	.048	65	67	67	37	32	37
Cincinnati.....	.221	.318	.256	12	.537	14	.060	83	69	78	60	44	58
Elk Run.....	.184	.273	.213	4	.503	14	.078	82	76	79	47	47	51
Hillsborough.....	.187	.224	.206	12	.505	14	.070	73	58	65	48	29	31
Montville.....	.180	.225	.198	12	.476	14	.078	76	66	71	47	32	43
Savannah.....	.178	.235	.210	12	.518	14	.070	83	67	80	60	37	40
Westerville.....	.210	.261	.251	12	.502	13	.074	86	65	83	64	21	60
MICHIGAN—													
Detroit.....	.157	.256	.150	17	.529	14	.076	67	71	67	40	44	45
Grand Haven.....	.189	.212	.198	4	.378	18	.064	79	77	79	18	48	15
Marquette.....	.139	.162	.149	7	.340	9	.019	77	76	78	0	42	52
Monroe Piers (d).....	.179	.192	.195	10	.321	14	.080	78	68	73	63	39	40
Ottawa Point (e).....	.183	.192	.192	8	.334	15	f.089	87	77	81	63	41	52
Thunder Bay Island (g).....	.152	.153	.162	8	.290	24	.078	74	68	74	61	43	59
Ypsilanti.....	.163	.189	.173	4	.408	28	.042	66	61	64	27	20	30
INDIANA—													
Cannelton.....	.231	.246	.259	12	.558	14	.085	75	57	75	31	33	27
Michigan City (h).....	.188	.202	.209	6	.465	14	.109	73	68	68	54	45	46
New Harmony.....	.253	.320	.289	0	.695	12	i.094	86	71	82	61	38	51
ILLINOIS—													
Augusta.....	.188	.239	.212	8	.549	13	.048	81	67	76	48	28	42
Batavia.....	.192	.256	.216	8	.478	15	.069	83	75	81	64	49	63
Manchester (a).....	.236	.322	.282	4	.519	13	.075	96	81	93	64	49	63
Peoria.....	.188	.218	.217	30	.436	13	.067	79	63	73	51	22	41

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 16th and 19th.

c Same amount on the 5th, 6th, and 10th.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .183; mean relative humidity at 9 a. m., 75.

e Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .179; mean relative humidity at 9 a. m., 85.

f Same amount on the 20th.

g Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .145; mean relative humidity at 9 a. m., 67.

h Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .197; mean relative humidity at 9 a. m., 72.

i Same amount on the 13th.



## No. 36.—PSYCHROMETER, NOVEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
ILLINOIS—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
West Urbana ( <i>a</i> )	.170	.193	.194	30	.389	12	.078	83	27	27	13	10	10
Wheaton	.170	.193	.194	30	.389	12	.078	83	64	81	42	14	36
MISSOURI—													
St. Louis	.217	.250	.249	30	.478	13	.063	80	58	73	53	19	36
WISCONSIN—													
Appleton	.132	.177	.162	7	.438	20	.012	63	63	73	10	25	53
Milwaukee, [Lapham]	.171	.190	.186	4	.384	13	.079	72	65	70	51	26	49
Superior City, [Stuntz] ( <i>b</i> )	.126	.150	.145	7	.264	30	.046	85	76	79	70	46	54
IOWA—													
Fairfield	.158	.167	.184	3	.457	5	.020	69	52	71	36	5	32
Muscatine	.236	.268	.255	4	.478	13	.123	86	84	84	71	73	75
CALIFORNIA—													
Sacramento	.317	.366	.358	11	.529	7	.189	83	79	85	56	51	71
San Francisco	.338	.362	.355	10	.523	7	.202	86	74	86	62	38	71
Santa Clara	.311	.346	.337	11	.529	17	.177	89	69	85	68	26	63
MEXICO—													
Mirador ( <i>c</i> )	1.061	1.197	1.285	23	1.630	15	.605						
WEST INDIES—													
St. George's, Bermuda ( <i>d</i> )				?	.873	?	.304						
CENTRAL AMERICA—													
Guatemala ( <i>e</i> )	.398	.402	.413					65	58.5	85			
SOUTH AMERICA—													
Catharina Sophia, Surinam ( <i>f</i> )	.728	.851	.843	11	<i>g</i> .923	29	.631	86	68	85	81	59	74

*a* Dalton's hygrometer.*b* Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .129; mean relative humidity at 9 a. m., 84.*c* Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to  $\frac{1}{1000000}$  water in the cubic space of air."*d* Mean force of vapor, .599; mean relative humidity, 83; minimum, 59.*e* Observations taken at 4 a. m., 10 a. m., 4 p. m., and 10 p. m. Mean force of vapor at 4 a. m., .403; mean relative humidity, 90.5.*f* For changes in hours of observation, &c., see table of the thermometer for this month.*g* Same amount on the 23d.

## No. 37.—PSYCHROMETER, DECEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
Montreal .....	.071	.080	.081	1	.293	24	a.008	77	75	75	40	23	32
St. Martin (b) .....	.061	.079	.073	1	.261	28	.007	80	80	83	52	57	60
Toronto (b) .....	.097	.110	.094	1	.370	31	.033	89	83	87	65	71	67
Windsor .....	.134	.136	.129	1	.383	28	.019	86	77	84	68	42	54
Wolfville .....	.136	.141	.129	2	.403	28	.037	90	86	88	59	60	40
MAINE—													
Portland .....	.102	.117	.110	1	.310	29	.031	96	85	96	61	55	68
Steuben .....	.102	.112	.103	1	.335	29	.013	82	74	83	39	23	37
VERMONT—													
Burlington .....	.058	.096	.093	1	.350	29	.016	75	72	83	54	47	59
MASSACHUSETTS—													
Amherst .....	.118	.142	.129	2	.433	29	.029	92	81	91	64	63	55
Bridgewater .....	.158	.167	.148	2	.542	29	.035	99	84	87	83	40	40
Cambridge .....								97	91	93	85	77	79
Lawrence .....	.097	.119	.104	1	.390	29	.013	75	73	77	37	45	38
Nantucket .....	.164	.172	.165	7	.407	1	.039	77	70	78	51	29	58
New Bedford .....	.152	.161	.156	7	.483	29	.033	89	74	86	62	46	50
Westfield .....	.100	.117	.112	1	.404	29	.010	88	67	80	49	26	57
Worcester .....	.129	.142	.127	2	.471	29	.029	94	82	93	?	?	?
RHODE ISLAND—													
Providence (c) .....													
CONNECTICUT—													
Middletown .....	.108	.117	.106	2	.391	28	.028	76	61	72	40	29	44
Pomfret .....	.140	.169	.145	2	.418	?	?	92	91	92	?	?	?
Wallingford .....	.120	.131	.123	2	.420	29	.026	86	69	84	52	42	56
NEW YORK—													
Buffalo (b) .....	.111	.111	.106	1	.376	28	.020	78	69	74	54	32	49
Cazenovia .....	.102	.108	.108	1	.407	29	.022	90	81	89	63	51	60
Charlotte (d) .....	.105	.120	.117	1	.478	29	.030	83	79	80	63	62	66
Dansville .....	.112	.125	.126	1	.484	28	.029	83	75	87	63	48	59
Henrietta .....	.121	.140	.112	1	.491	28	e.036	89	94	95	31	70	38
New York city .....	.142	.167	.139	2	.526	28	.028	74	72	70	42	28	36
Rochester .....	.101	.104	.097	1	.518	12	f.016	79	61	71	39	14	18
Sackett's Harbor (g) .....	.838	.977	.977	1	.393	29	.009	73	72	74	30	54	52
PENNSYLVANIA—													
Berwick .....	.128	.138	.128	7	.407	31	.038	82	70	80	64	46	59
Chambersburg .....	.349	.381	.427	4	.655	8	.232	69	70	70	58	43	55
Harrisburg .....	.112	.135	.124	1	.490	31	.017	63	62	68	35	18	31
Lewisburg .....	.113	.123	.114	1	.374	31	.027	78	64	76	33	41	51
Norristown .....	.145	.155	.145	2	.476	31	.037	80	71	84	57	44	45
Philadelphia .....	.148	.171	.158	2	.551	28	.043	76	69	77	48	46	53
Somerset .....	.143	.170	.140	2	.476	31	.047	93	83	93	80	65	54
MARYLAND—													
Annapolis .....	.163	.187	.189	2	.542	31	h.068	84	71	81	58	48	58
Frederick .....	.135	.149	.129	2	.519	31	.042	76	68	69	46	31	41
DISTRICT OF COLUMBIA—													
Washington .....	.156	.162	.165	2	.469	24	i.043	81	67	74	50	39	40
NORTH CAROLINA—													
Murfreesborough .....	.258	.338	.285	7	.695	25	.118	99	95	97	92	81	91
SOUTH CAROLINA—													
All Saints .....	.310	.367	.322	7	.680	8	.094	88	72	86	57	30	50
St. John's .....	.289	.373	.306	5	.680	25	.096	88	68	83	66	36	50
GEORGIA—													
Augusta .....	.252	.310	.258	6	.596	?	?	73	58	70	51 ?	33 ?	53 ?

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a Same amount on the 30th.

b For changes in hours of observations, &amp;c., see table of the thermometer for this month.

c Mean relative humidity for the month, 56.

d Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .113; mean relative humidity at 9 p. m., 83.

e Same amount on the 29th.

f Same amount on the 17th.

g Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean force of vapor at 9 a. m., .053; mean relative humidity at 9 a. m., 70.

h Same amount on the 24th.

i Same amount on the 31st.



## No. 37.—PSYCHROMETER, DECEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
GEORGIA—Continued.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>		<i>Inches.</i>						
Clarksville .....	.214	.239	.249	1	.639	8	.035	94	61	93	63	17	63
Thomaston .....	.310	.319	.333	4	.635	8	.103	85	74	83	54	36	55
FLORIDA—													
Jacksonville .....	.372	.517	.417	30	.900	24	.144	83	79	84	63	67	69
Micanopy .....	.324	.372	.388	4	.671	10	.110	88	55	85	56	25	60
Warrington .....	.444	.575	.489	2	.927	8	.191	95	85	93	84	69	68
ALABAMA—													
Orville .....	.255	.263	.273	2	.596	24	.084	92	65	88	71	36	55
MISSISSIPPI—													
Columbus .....	.233	.247	.231	1	.680	8	.061	90	72	86	75	42	58
Hernando .....	.139	.171	.148	1	.668	31	.000	62	53	59	15	24	0
Paulding .....	.204	.231	.209		?		?	64	44	51			
TEXAS—													
Austin, [Palm] .....	.168	.162	.169	1	.591	9	.022	73	42	63	42	6	26
Austin, [Van Nostrand] .....	.186	.200	.197	1	.642	7	.041	77	46	69	52	15	41
Bonham .....	.165	.171	.154	1	.577	7	.043	87	53	75	64	15	46
Larissa .....	.214	.274	.245	27	.640	7	.050	90	74	83	61	44	51
Sisterdale .....	.176	.194	.173	1	.604	7	.051	81	51	78	46	12	45
TENNESSEE—													
Glenwood .....	.159	.167	.156	1	.543	23	.042	89	70	84	61	36	47
Memphis .....	.161	.174	.173	1	.577	7	.045	83	67	79	46	37	53
KENTUCKY—													
Bardstown .....	.157	.163	.147	1	.526	20	.029	87	71	81	54	38	55
Springdale (a) .....	.123	.140	.136	1	.516	7	.001	73	70	74	45	34	2
OHIO—													
Avon .....	.116	.131	.113	1	.552	4	.000	79	78	82	50	0	49
Brecksville .....	.096	.112	.083	1	.478	15	.015	69	69	68	16	36	32
Cincinnati, [Harper] .....	.141	.167	.137	1	.556	24	.000	84	79	85	0	?	?
Elk Run .....	.121	.156	.125	1	.505	8	.041	88	91	87	63	71	62
Hillsborough .....	.129	.142	.124	1	.523	31	.017	84	77	81	39	49	57
Montville .....	.119	.123	.115	1	.505	31	.027	91	84	88	67	62	71
Savannah .....	.106	.142	.110	1	.518	31	.000	81	85	86	0	56	58
Westerville .....	.126	.127	.125	1	.491	8	.026	86	66	83	48	33	54
MICHIGAN—													
Detroit .....	.080	.102	.065	1	.422	31	.003	62	66	60	22	33	10
Grand Haven .....	.107	.119	.108	1	.235	31	.054	85	85	81	67	69	36
Marquette .....	.059	.076	.067	10	.194	30	b.000	64	66	66	0	0	3
Monroe Piers (c) .....	.103	.109	.105	1	.382	31	.023	85	75	80	66	55	66
Ottawa Point (d) .....	.097	.105	.099	1	.275	30	.027	86	80	82	63	33	50
Thunder Bay Island (e) .....	.079	.079	.079	18	.178	7	.000	67	66	70	0	16	15
Ypsilanti .....	.098	.105	.092	1	.321	8	b.000	73	62	63	0	19	0
INDIANA—													
Cannelton .....	.143	.153	.136	1	.527	22	.038	86	74	82	72	45	57
Michigan City (f) .....	.073	.100	.100	1	.195	8	g.010	56	64	62	19	28	31
New Harmony .....	.138	.144	.141	1	.570	23	.048	92	77	91	64	37	33
ILLINOIS—													
Augusta .....	.083	.108	.094	8	.181	31	.019	91	77	87	71	44	47
Batavia .....	.071	.096	.085	1	.244	8	.008	72	73	81	23	49	51
Manchester (a) .....	.107	.152	.129	10	.273	31	h.036	100	94	100	100	71	100
Peoria .....	.090	.108	.105	5	.196	31	.025	95	76	88	81	52	67
West Urbana (i) .....								36	35	32	29	27	27
Wheaton .....	.085	.096	.092	1	.237	12	.001?	92	79	90	66	1?	61
MISSOURI—													
St. Louis .....	.113	.120	.119	1	.305	31	.030	87	69	82	69	37	64

a For changes in hours of observation, &c., see table of the thermometer for this month.

b Same amount on the 31st.

c Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 9 a. m., .106; mean relative humidity at 9 a. m., 83.

d Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 9 a. m., .098; mean relative humidity at 9 a. m., 85.

e Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 9 a. m., .080; mean relative humidity at 9 a. m., 65.

f Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 9 a. m., .077; mean relative humidity at 9 a. m., 54. No observations after the 25th of the month.

g Same amount on the 17th.

h Same amount on the 6th and 7th.

i Dalton's hygrometer.

## No. 37.—PSYCHROMETER, DECEMBER, 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Amt.	Date.	Amt.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
	Inches.	Inches.	Inches.		Inches.		Inches.						
WISCONSIN—													
Appleton .....	.054	.082	.072	17	.178	31	<i>a</i> .000	53	60	69	0	0	0
Milwaukee, [Lapham] .....	.079	.090	.089	18	.181	30	.012	74	66	71	54	45	46
Superior City [Stuntz] ( <i>b</i> ) .....	.050	.068	.060	10	.155	7	.009	98	84	89	83	24	72
IOWA—													
Fairfield .....	.057	.074	.067	10	.170	1	.000	62	53	58	35	25	0
Muscatine .....	.099	.102	.095	10	<i>c</i> .203	31	.038	85	85	85	60	63	60
CALIFORNIA—													
Sacramento .....	.203	.252	.230	4	<i>d</i> .334	5	.090	83	77	81	53	30	38
San Francisco .....	.232	.240	.252	24	.380	5	.073	76	60	74	32	20	45
Santa Clara .....	.200	.248	.222	20	.381	5	.062	81	58	75	33	17	22
MEXICO—													
Mirador ( <i>e</i> ) .....	.400	.466	.461	2	.642	19	.325	84	74	93	55	46	77
Mirador ( <i>f</i> ) .....	1.048	1.178	1.177	2	1.585	16	.740						
WEST INDIES—													
St. George's, Bermuda ( <i>g</i> ) .....				?	.733	?	.295						
CENTRAL AMERICA—													
Guatemala ( <i>h</i> ) .....	.372	.377	.406					63	54	88.5			
SOUTH AMERICA—													
Catharina Sophia, Surinam( <i>i</i> ) .....	.737	.853	.832	18	.923	14	.644	88	71	83	85	62	78

*a* Same amount on the 6th, 7th, 8th, 23d, and 30th.*b* Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 9 a. m., .051; mean relative humidity at 9 a. m., 95.*c* Same amount on the 11th.*d* Same amount on the 25th.*e* For changes in hours of observation, &c., see table of the thermometer for this month.*f* Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to  $\frac{1}{1000000}$  water in the cubic space of air."*g* Mean force of vapor, .472; mean relative humidity, 81; minimum, 57.*h* Observations taken at 4 and 10 a. m., and 4 and 10 p. m. Mean force of vapor at 4 a. m., .391; mean relative humidity at 4 a. m., 93.



## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal.....	21	18	0	0	4	16	16	9	9	93	13	12	0	0	2	17	11	5	60	
Red River Settlement.....	5	4	1	0	28	6	7	12	24	87	6	3	5	15	2	0	0	2	33	
Rigolet.....	4	2	4	1	0	5	1	39	6	62	—	—	—	—	—	—	—	—	—	
St. John's.....	15	2	1	1	5	8	18	43	0	93	18	2	1	1	5	11	0	40	87	
St. Martin.....	0	35	1	17	2	25	3	10	0	93	—	—	—	—	—	—	—	—	—	
Stanbridge.....	4	8	7	27	13	5	12	7	10	93	—	—	—	—	—	—	—	—	—	
Toronto.....	2	21	1	6	0	40	5	13	5	93	—	—	—	—	—	—	—	—	—	
Windsor.....	10	11	8	2	0	12	8	18	17	86	0	0	0	0	0	0	0	1	1	
Wolfville.....	4	11	3	7	0	4	22	15	0	66	4	2	1	0	1	8	8	21	45	
MAINE—																				
Cornish.....	14	12	6	0	3	33	16	9	0	93	0	0	0	0	0	0	3	1	4	
Cornishville.....	4	8	2	0	8	12	14	39	0	93	—	—	—	—	—	—	—	—	—	
Dexter.....	13	9	4	2	12	10	11	24	8	93	—	—	—	—	—	—	—	—	—	
Gardiner.....	3	27	1	13	3	9	0	30	7	93	2	0	0	2	4	12	3	8	31	
Perry.....	3	20	0	5	6	12	4	43	0	93	9	1	0	0	2	7	5	10	25	
Portland.....	22	18	0	5	4	12	21	10	0	92	1	0	0	0	1	8	8	2	20	
Steuben.....	3	35	0	2	0	21	2	23	7	93	2	5	0	2	0	11	7	7	34	
NEW HAMPSHIRE—																				
Shelburne.....	0	0	18	0	0	0	40	0	23	81	1	0	0	1	0	2	18	12	34	
Stratford.....	0	6	23	3	9	15	24	3	10	93	0	0	2	3	1	8	25	6	45	
VERMONT—																				
Brandon.....	14	0	4	7	35	5	5	22	1	93	1	0	0	0	0	0	6	24	37	
Burlington.....	12	13	0	6	23	19	1	16	0	90	—	—	—	—	—	—	—	—	—	
Craitsbury.....	0	15	1	4	40	7	5	20	1	93	0	2	0	0	3	1	17	10	33	
Rupert.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
St. Johnsbury.....	42	0	7	1	23	1	7	9	3	93	1	0	1	0	2	1	3	0	8	
Woodstock.....	5	2	0	3	6	11	8	8	15	68	0	0	0	0	0	1	9	7	12	
MASSACHUSETTS—																				
Amherst.....	0	1	6	25	7	5	3	41	0	88	0	0	0	1	1	1	6	9	18	
Bridgewater.....	17	5	4	3	9	22	17	16	0	93	1	2	1	1	1	8	7	4	25	
Cambridge.....	10	7	0	1	2	31	11	10	19	91	—	—	—	—	—	—	—	—	—	
Danvers.....	17	11	1	3	3	7	7	25	19	93	—	—	—	—	—	—	—	—	—	
Florida.....	0	6	0	6	4	16	41	20	0	93	0	7	0	0	4	16	29	15	77	
Lawrence.....	1	18	2	3	1	24	1	43	0	93	—	—	—	—	—	—	—	—	—	
Mendon.....	3	22	1	0	4	9	15	39	0	93	1	20	1	3	8	7	17	26	78	
Nantucket.....	7	7	0	5	4	19	9	34	8	93	—	—	—	—	—	—	—	—	—	
New Bedford.....	6	—	3	3	4	21	9	38	1	93	1	1	0	0	0	4	3	4	13	
Richmond.....	0	21	0	8	0	24	0	40	0	93	0	21	0	8	3	17	0	23	72	
Westfield.....	10	7	8	18	4	6	16	24	0	93	0	0	0	0	0	1	0	2	3	
Weymouth.....	0	5	0	0	2	17	6	26	0	62	—	—	—	—	—	—	—	—	—	
Williamstown.....	13	0	8	7	21	7	11	12	14	93	—	—	—	—	—	—	—	—	—	
Worcester.....	10	19	0	5	5	14	8	26	0	87	1	2	0	1	1	4	6	10	25	
CONNECTICUT—																				
Columbia.....	3	12	0	1	4	6	0	41	26	93	3	9	0	0	3	5	0	19	39	
Middletown.....	16	1	0	1	10	20	0	28	11	93	1	0	0	2	0	0	17	5	34	
Pomfret.....	14	11	0	3	8	20	0	37	0	93	—	—	—	—	—	—	—	—	—	
Saybrook.....	13	9	4	3	4	7	14	19	15	88	7	2	0	4	1	7	14	3	38	
Wallingford.....	21	23	1	2	1	27	0	18	0	93	0	0	2	0	0	5	10	4	21	
NEW YORK—																				
Baldwinsville.....	2	5	22	1	5	11	33	14	0	93	3	0	13	2	4	0	38	8	68	
Bellport.....	14	10	8	3	2	16	13	26	1	93	—	—	—	—	—	—	—	—	—	
Beverly.....	0	14	0	10	0	37	0	14	0	81	0	6	0	5	5	27	7	6	56	
Cazenovia.....	0	0	2	3	21	18	12	35	1	92	0	0	0	3	3	25	21	22	74	
Eden.....	1	4	7	8	30	26	9	1	0	86	0	0	0	0	2	7	28	9	46	
Morrisania.....	5	15	1	7	14	19	15	17	0	93	—	—	—	—	—	—	—	—	—	
Nichols.....	6	1	1	11	38	4	5	27	0	93	—	—	—	—	—	—	—	—	—	
Ogdensburg.....	6	4	0	0	7	7	5	2	0	31	—	—	—	—	—	—	—	—	—	
Oswego.....	5	6	3	27	18	8	23	3	0	93	—	—	—	—	—	—	—	—	—	
Penn Yan.....	2	1	0	3	31	20	32	4	0	93	—	—	—	—	—	—	—	—	—	
Rochester.....	5	1	10	1	6	15	20	2	0	60	8	0	8	1	3	3	38	6	67	
Saratoga.....	0	33	0	0	0	47	3	10	0	93	0	34	0	0	0	47	2	10	93	
Wampsville.....	0	0	20	7	9	7	59	1	0	93	0	1	21	4	11	6	42	0	85	

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY—																				
Lambertville.....	6	13	1	■	12	15	4	32	0	85	—	—	—	—	—	—	—	—	—	
Moorestown.....	4	5	6	■	0	10	5	18	0	48	—	—	—	—	—	—	—	—	—	
Newark.....	8	11	1	2	0	20	5	14	1	62	—	—	—	—	—	—	—	—	—	
PENNSYLVANIA—																				
Bellefonte.....	14	3	3	1	9	15	28	14	4	91	3	1	0	0	■	0	8	14	29	
Berwick.....	1	5	29	0	4	2	40	12	0	93	—	—	—	—	—	—	—	—	—	
Cannonsburg.....	0	0	8	3	0	18	60	4	0	93	—	—	—	—	—	—	—	—	—	
Carlisle.....	0	0	8	11	0	1	6	27	38	91	0	0	0	4	0	1	4	24	33	
Chambersburg.....	3	1	33	16	6	1	4	0	29	93	5	1	2	0	5	1	55	7	76	
Chromedale.....	0	0	4	4	0	30	0	34	0	78	—	—	—	—	—	—	—	—	—	
Easton.....	10	17	0	0	9	0	5	37	0	93	—	—	—	—	—	—	—	—	—	
Fleming.....	1	2	18	10	1	19	12	30	0	93	1	0	0	3	1	4	26	26	61	
Gettysburg.....	10	11	0	0	10	27	11	16	8	93	—	—	—	—	—	—	—	—	—	
Harrisburg, [Helsely].....	11	2	14	13	8	1	11	28	2	90	3	0	1	3	2	1	4	11	25	
Harrisburg, [Hickok].....	0	9	11	4	13	3	29	14	0	92	0	0	0	0	1	2	3	3	9	
Lewisburg.....	8	4	0	2	10	5	21	3	40	93	0	0	0	0	1	5	11	1	18	
Linden.....	3	4	19	3	1	0	22	3	2	57	—	—	—	—	—	—	—	—	—	
Morrisville.....	5	5	9	1	11	28	11	21	2	93	0	0	8	0	2	22	15	11	61	
Mount Joy.....	2	1	0	22	3	6	1	6	52	93	1	0	0	0	1	3	0	0	5	
Murrysville.....	0	5	9	4	0	48	9	3	12	90	0	0	0	0	1	30	7	7	45	
Norristown.....	0	3	10	12	3	10	37	3	0	78	0	0	4	6	4	13	32	1	60	
North Whitehall.....	0	2	2	0	1	3	10	14	61	93	0	0	0	0	1	0	15	5	21	
Philadelphia.....	0	13	0	1	4	28	17	30	0	93	0	1	0	0	0	3	6	4	14	
Pittsburg, [Marine Hosp.].....	2	0	9	14	18	15	19	11	0	93	1	0	1	2	1	28	12	2	47	
Pocopson.....	10	0	1	3	5	24	24	10	0	83	0	1	0	0	0	0	28	0	41	
Shamokin.....	0	0	37	1	5	0	50	0	0	93	0	0	0	0	0	0	55	0	61	
Somerset.....	0	0	0	3	6	22	23	18	21	93	1	0	0	1	2	19	28	0	59	
Tarentum.....	6	1	1	1	9	28	6	0	32	92	1	0	0	0	2	26	23	14	66	
West Haverford.....	1	2	1	0	7	15	3	18	0	62	1	1	1	1	1	2	13	15	35	
Westtown.....	9	4	3	12	6	16	3	38	2	93	1	1	0	4	1	6	7	20	40	
Worthington.....	0	1	10	3	4	5	16	2	0	41	—	—	—	—	—	—	—	—	—	
MARYLAND—																				
Annapolis.....	12	9	0	0	26	15	1	15	9	93	1	0	0	0	0	26	0	0	27	
Baltimore.....	21	5	10	8	11	3	11	20	0	89	0	0	0	0	2	0	0	0	2	
Bladensburg.....	0	3	0	0	0	13	4	21	0	47	—	—	—	—	—	—	—	—	—	
Chestertown.....	0	6	0	23	4	16	1	42	0	92	0	0	0	10	3	14	0	23	53	
Frederick.....	6	21	0	1	5	17	23	5	15	93	0	0	0	0	0	3	23	2	30	
Leitersburg.....	8	0	0	0	13	22	14	16	20	93	1	0	0	2	2	14	24	16	59	
Leonardtown.....	14	10	9	0	14	20	5	13	2	93	2	0	0	0	1	0	5	25	33	
Sykesville.....	8	0	5	7	16	16	22	10	0	93	0	1	7	2	2	7	55	0	74	
DISTRICT OF COLUMBIA—																				
Washington.....	6	6	2	3	29	2	14	12	13	87	0	0	0	0	0	0	6	0	6	
VIRGINIA—																				
Crichton's Store.....	24	4	2	2	33	18	0	1	0	93	0	0	0	0	1	7	3	0	11	
Cross Creek.....	—	—	—	—	—	—	—	—	—	—	0	0	0	0	7	7	36	9	50	
Lewinsville.....	1	4	2	18	14	12	11	30	0	92	—	—	—	—	—	—	—	—	—	
Lewisburg.....	1	22	3	4	6	30	0	9	0	75	—	—	—	—	—	—	—	—	—	
Meadow Dale.....	12	1	0	1	69	7	0	0	1	93	0	1	0	2	28	18	5	10	64	
Montross.....	3	0	0	0	7	11	14	15	33	93	1	0	0	0	0	2	7	1	11	
Point Pleasant.....	15	0	34	0	0	0	38	0	0	93	3	0	33	0	1	0	33	0	70	
Poplar Grove.....	0	1	11	0	0	5	22	20	32	93	0	0	0	0	0	20	22	10	52	
Portsmouth.....	7	12	0	11	1	20	10	31	0	92	—	—	—	—	—	—	—	—	—	
Rougemont.....	8	10	1	0	27	8	24	12	0	90	0	2	0	1	9	8	17	2	34	
Smithfield.....	17	11	1	3	17	25	10	9	0	93	6	0	0	1	2	15	14	6	47	
Stribling Springs.....	7	1	0	2	4	47	2	30	0	93	2	0	0	1	0	14	2	13	34	
Winchester.....	0	0	0	0	3	0	7	9	74	93	0	0	0	0	1	0	0	0	1	
NORTH CAROLINA—																				
Chapel Hill.....	17	13	1	2	14	22	14	10	0	93	3	2	0	0	3	23	10	0	43	
Davidson College.....	1	36	0	1	2	38	6	0	0	92	0	2	0	0	2	46	0	6	55	
Murfreesborough.....	3	13	3	5	0	25	12	16	14	93	2	5	1	2	2	6	29	5	52	



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NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
SOUTH CAROLINA—																			
Aiken .....	0	5	17	0	4	1	18	0	0	45	—	—	—	—	—	—	—	—	—
All Saints .....	23	7	4	8	15	18	10	8	0	93	—	4	2	0	5	32	11	5	67
Charleston .....	7	3	2	1	2	—	0	10	0	31	—	—	—	—	—	—	—	—	—
Columbia, [Barton] .....	12	5	12	10	10	1	—	26	—	93	1	1	—	—	12	3	25	1	52
Columbia, [White] .....	8	11	—	3	12	10	12	6	—	62	—	0	1	0	0	2	—	0	3
St. John's .....	7	23	4	10	3	14	4	11	—	76	2	0	2	2	4	6	12	5	33
GEORGIA—																			
Athens .....	4	5	15	9	9	3	7	21	18	91	0	0	0	1	2	5	10	5	23
Atlanta .....	3	7	16	—	9	0	20	38	0	93	—	—	—	—	—	—	—	—	—
Augusta .....	12	23	0	1	—	22	19	7	0	93	2	6	0	18	5	23	3	1	58
Savannah .....	—	21	7	11	7	19	7	12	0	93	0	0	—	1	3	1	0	0	5
Thomaston .....	17	13	—	14	5	4	5	23	0	90	—	—	—	—	—	—	—	—	—
Thomson .....	1	31	0	10	—	30	1	18	0	91	—	1	1	1	0	1	1	1	6
Whitemarsh Island .....	16	13	1	3	6	8	5	16	23	91	1	2	0	0	3	15	8	3	32
Zebulon .....	2	6	34	12	2	2	20	12	0	90	—	9	8	0	1	1	2	—	27
FLORIDA—																			
Alligator .....	4	20	5	7	5	13	8	11	20	93	5	4	2	—	4	13	11	8	47
Atsena .....	20	19	19	7	7	2	—	13	—	93	6	13	7	7	10	2	4	0	49
Belair .....	10	29	23	—	2	0	1	4	13	91	0	0	0	—	0	20	26	10	56
Gainesville .....	7	33	0	10	0	18	4	16	1	89	—	—	—	—	—	—	—	—	—
Jacksonville .....	23	9	1	6	12	10	—	26	0	93	11	3	0	1	—	25	5	7	60
Micanopy .....	3	23	1	16	4	5	7	12	12	83	1	2	5	1	0	0	0	1	10
St. Augustine .....	11	41	2	21	—	4	0	14	0	93	4	40	1	17	0	4	0	12	78
Salt Ponds .....	17	22	11	4	5	0	1	1	1	62	—	—	—	—	—	—	—	—	—
ALABAMA—																			
Carlowville .....	12	12	16	6	8	5	24	7	—	90	1	1	3	1	1	0	0	0	7
Greene Springs .....	10	6	12	11	0	6	20	3	12	80	2	0	0	0	3	5	11	3	24
Greensborough .....	5	2	13	22	5	2	8	25	0	82	0	0	1	3	3	3	16	—	32
Montgomery .....	5	0	0	0	0	0	0	—	1	—	0	—	2	0	2	18	7	6	35
Selma .....	29	2	3	26	3	6	0	24	0	93	0	1	—	—	4	8	6	28	56
MISSISSIPPI—																			
Columbus .....	16	5	14	11	8	6	16	17	0	93	1	—	0	4	—	7	15	6	41
Natchez .....	20	10	1	23	8	13	3	15	0	93	0	—	0	—	1	6	6	0	13
Paulding .....	2	14	5	15	2	16	2	33	0	89	—	3	—	14	1	26	3	18	65
LOUISIANA—																			
Black River (a) .....	28	12	4	8	27	1	7	6	0	93	4	0	0	0	4	21	2	4	35
New Orleans .....	—	36	—	15	—	8	0	34	—	93	—	—	—	—	—	—	—	—	—
TEXAS—																			
Austin, [Palm] .....	16	4	11	4	19	20	10	9	0	93	1	0	—	0	4	0	1	1	7
Austin, [Van Nostrand] .....	28	2	—	3	23	3	15	13	0	93	5	0	2	0	8	16	8	0	39
Larissa .....	6	4	10	28	5	—	6	20	5	92	0	0	0	0	1	4	1	1	7
New Braunfels .....	55	—	5	8	7	1	5	6	0	93	—	—	—	—	—	—	—	—	—
Northern tier of counties .....	21	12	5	15	4	7	5	11	0	80	—	—	—	—	—	—	—	—	—
Union Hill .....	34	2	18	13	21	2	2	1	0	93	8	3	3	10	21	4	5	6	60
Washington .....	27	—	0	3	26	0	0	3	31	90	4	1	0	2	1	0	0	0	8
TENNESSEE—																			
Glenwood .....	12	2	7	32	13	7	3	13	4	93	4	1	0	4	3	20	10	16	58
La Grange .....	3	11	—	11	8	14	15	5	19	92	4	0	1	3	5	13	10	0	36
Memphis .....	7	7	13	14	11	11	11	18	1	93	—	—	—	—	—	—	—	—	—
KENTUCKY—																			
Bardstown .....	5	2	2	9	24	15	26	—	0	91	0	1	—	2	5	14	33	7	62
Danville .....	3	3	4	5	11	23	24	20	0	93	—	0	0	0	0	27	22	2	51
Louisville .....	5	4	2	19	11	26	6	18	0	91	—	0	0	0	0	18	6	7	31
Paris .....	0	0	0	2	16	26	19	22	0	92	0	0	0	0	—	11	31	0	51
Springdale .....	1	5	3	1	8	33	—	10	23	93	—	—	—	—	—	—	—	—	—
OHIO—																			
Avon .....	1	0	0	3	13	35	35	6	0	93	1	—	0	—	0	9	39	4	53
Bellefontaine .....	0	1	5	16	—	25	27	14	0	88	1	1	0	4	0	41	14	17	78
Bowling Green .....	—	3	0	2	4	55	11	8	—	91	0	0	1	0	1	28	13	12	55

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Cincinnati, [Harper].....	0	2	3	2	24	30	23	9	0	93									
Cleveland.....	2	2	1	13	31	21	10	13	0	93	2	0	0	1	2	9	15	8	37
Hillsborough.....	0	5	0	19	4	39	2	21	0	93	0	0	0	0	0	5	0	4	9
Hiram.....	3	1	0	9	27	23	12	11	0	86	0	0	1	1	0	12	15	5	34
Hudson.....	1	0	2	9	11	31	23	9	0	86									
Jackson, (Monroe county).....	8	5	1	1	2	0	0	1	36	54	0	0	0	0	0	1	0	0	1
Lancaster, [Davis].....	0	3	1	6	10	32	22	19	0	93	0	0	0	1	2	23	23	4	53
Lancaster, [Dayton].....	0	0	2	5	0	28	8	8	14	65	0	0	0	0	0	20	15	7	42
Madison, [Atkins].....	0	2	0	8	19	29	14	7	7	86	0	0	0	0	0	3	12	0	15
Madison, [King].....	1	1	1	13	13	31	9	22	2	93	1	0	0	0	0	47	24	10	82
Montville.....	7	0	6	4	28	39	5	10	0	93	1	0	0	0	3	23	9	5	31
New Lisbon.....	4	0	1	13	13	37	12	13	0	93	1	0	1	7	6	33	9	11	68
Northwood.....	1	7	1	14	7	46	7	10	0	93	1	0	0	2	0	12	12	17	44
Portsmouth.....	5	3	4	12	17	35	5	12	0	93									
Ripley.....	0	5	10	4	0	0	2	17	25	63	0	0	0	0	0	0	0	12	12
Rockport.....	2	2	0	0	6	40	42	1	0	93									
Savannah.....	0	3	0	10	4	46	8	22	0	93	0	3	0	3	3	36	4	20	69
Troy.....	2	4	5	2	13	5	30	13	19	93									
Urbana.....	0	1	0	8	11	30	16	10	17	93	0	1	0	1	3	17	25	14	61
Welchfield.....	1	1	1	22	6	32	21	9	0	93	0	0	0	0	0	4	2	1	7
Westerville.....	1	0	0	3	12	27	42	4	0	89	0	0	0	2	10	17	33	5	67
MICHIGAN—																			
Battle Creek.....	1	1	2	3	16	22	35	7	7	93	0	0	0	0	0	21	42	11	74
Detroit.....	1	0	0	4	16	33	32	7	0	93	0	0	0	7	11	46	29	0	93
Grand Rapids, [Streng].....	8	4	6	5	14	31	11	14	0	93	7	3	6	1	0	24	38	10	89
Lansing.....	1	4	1	11	7	34	27	8	0	93	1	1	1	4	3	17	42	6	75
Marquette.....	1	1	4	14	0	15	34	24	0	93									
Monroe.....	0	5	3	16	0	49	3	17	0	93	0	5	3	15	0	41	3	17	84
New Buffalo.....											0	0	2	4	1	15	12	20	54
Ottawa Point (a).....	6	7	3	7	27	36	10	28	0	124	9	17	6	7	1	0	0	1	41
Port Huron.....	1	4	1	5	28	24	17	10	0	90	0	1	0	0	6	15	10	7	39
Thunder Bay Island.....	24	4	1	9	16	27	12	26	5	124	8	0	0	2	5	7	7	7	36
Ypsilanti.....	0	3	1	3	1	41	19	19	5	92	0	1	0	2	0	21	17	13	54
INDIANA—																			
Aurora.....	0	2	0	0	5	4	2	2	0	15									
Cannelton.....	1	1	4	31	11	15	12	18	0	93	1	0	0	3	10	14	7	6	41
Logansport.....	2	10	2	5	2	28	14	30	0	93	3	5	2	5	2	11	26	21	75
Mishawaka.....	0	1	3	6	17	23	30	13	0	93									
New Harmony.....	7	0	1	12	16	20	7	18	0	81									
Richmond, [Austin].....	3	3	3	3	6	22	5	12	0	57	0	0	0	1	1	9	8	6	25
Richmond, [Moore].....	0	0	2	5	1	30	24	9	18	89									
ILLINOIS—																			
Angusta.....	2	8	2	9	16	20	13	22	1	93	0	1	0	1	0	8	15	11	36
Aurora.....	2	3	1	3	20	22	29	13	0	93	0	0	0	1	0	10	30	13	54
Batavia, [Capon].....	11	3	1	1	28	18	21	10	0	93									
Batavia, [Mead].....	0	4	0	4	2	51	10	22	0	93	0	4	0	3	2	40	7	18	74
Brighton.....	7	6	2	17	7	14	18	23	0	93	1	2	1	12	4	5	2	10	37
Edgington.....	4	4	0	5	4	38	4	34	0	93	3	2	0	4	3	35	3	23	78
Elgin.....	4	0	1	4	22	22	16	20	4	93	0	0	0	0	0	0	1	3	4
Jacksonville.....	1	0	0	1	5	8	10	6	0	31									
Manchester.....	11	2	1	0	39	12	14	14	0	93	6	0	1	0	22	12	11	9	61
Marengo.....	0	1	0	15	17	45	15	0	0	93	0	2	2	1	0	3	0	0	8
Ottawa.....	4	2	0	6	12	29	6	28	1	88	0	0	0	0	0	9	5	4	18
Pekin.....	10	6	1	9	31	8	7	21	0	93	5	0	1	0	2	9	14	17	48
Peoria.....	1	5	6	4	4	13	47	13	0	93	0	0	0	0	1	1	3	1	6
Riley.....	10	2	1	8	12	16	30	13	1	93									
Sandwich.....	4	2	0	7	16	24	8	32	0	93									
Upper Alton.....	0	11	0	11	2	35	5	23	0	92	0	12	0	11	4	33	4	28	92
Waynesville.....	6	3	0	4	21	7	39	10	3	93	0	0	0	0	2	6	13	2	23

a In recording the motion of the clouds at this place, it is uncertain whether the direction toward which they moved was noted, or that from which they came.



## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
ILLINOIS—Continued.																			
West Salem.....	3	6	0	5	34	3	4	19	19	93	0	0	0	0	0	21	17	1	39
West Urbana.....	2	4	0	8	14	31	14	20	0	93	0	0	0	0	0	0	0	1	7
Wheaton.....	5	3	2	3	5	35	14	21	3	91	1	0	0	0	0	2	2	2	7
Winnebago.....	8	3	2	4	21	27	8	20	0	93	3	12	1	1	3	45	4	1	70
MISSOURI—																			
St. Louis, [Engelmann] ..	4	2	1	19	22	5	34	6	0	93	0	0	0	0	0	2	2	9	13
St. Louis, [Fendler] ..	4	0	0	3	7	5	2	4	3	28	0	0	0	0	0	2	2	9	13
WISCONSIN—																			
Appleton.....	7	12	2	0	5	62	4	1	0	93	3	12	1	1	3	45	4	1	70
Bay City.....	1	13	0	0	8	49	10	12	0	93	1	0	0	0	0	7	4	1	13
Bayfield.....	1	7	0	0	0	27	7	20	0	62	1	7	0	0	0	29	2	21	60
Beloit.....	3	0	0	3	14	20	31	22	0	93	0	0	0	0	0	2	1	0	3
Kenosha.....	3	1	1	2	1	37	22	16	3	86	1	0	1	0	0	0	0	0	2
Madison.....	2	3	2	5	18	21	25	12	0	88	0	0	0	0	0	4	7	7	18
Manitowoc.....	5	0	1	3	7	30	16	31	0	93	0	0	0	0	0	4	7	7	18
Milwaukee.....	3	1	1	4	0	31	21	32	0	93	0	0	0	0	0	1	0	1	2
Mosinee.....	9	8	0	14	13	26	17	5	1	93	12	5	0	8	3	20	0	4	52
Platteville.....	9	0	1	14	16	9	27	17	0	93	7	1	1	8	8	5	17	12	59
Waukesha.....	10	0	1	0	5	13	12	9	16	66	0	0	0	0	0	1	0	1	2
Wausau.....	1	0	18	7	2	23	27	7	8	93	0	12	16	2	0	4	3	39	39
IOWA—																			
Bellevue.....	4	1	1	14	9	19	22	23	0	93	0	0	0	0	1	3	3	3	10
Border Plains.....	7	0	0	18	11	14	2	37	4	93	0	0	0	0	0	10	8	19	41
Dubuque.....	15	3	0	3	14	12	5	27	14	93	1	3	0	0	0	10	8	19	41
Fairfield.....	1	0	0	4	0	26	0	31	31	93	0	0	0	0	0	15	23	9	53
Fort Madison.....	2	4	1	14	0	36	2	34	0	93	4	0	1	1	0	9	0	3	12
Muscataine.....	3	1	0	1	18	17	28	25	0	93	0	0	0	0	0	7	2	2	13
Pleasant Plain.....	2	8	0	8	19	18	6	30	2	93	0	2	0	0	0	7	2	2	13
Rossville.....	6	2	4	6	9	23	24	15	4	93	2	0	0	0	1	1	6	11	11
Sioux City.....	6	2	1	2	10	1	3	22	0	47	2	0	0	0	1	1	1	6	11
MINNESOTA—																			
Beaver Bay.....	18	12	6	0	0	35	17	4	0	92	8	7	3	0	1	19	7	2	47
Burlington.....	6	2	6	2	8	6	7	56	0	93	7	2	7	2	9	5	6	33	71
Forest City.....	0	0	2	5	7	3	26	9	41	93	0	0	4	0	0	0	1	3	8
Hazlewood.....	5	3	1	10	21	5	16	32	0	93	0	0	4	0	0	0	1	3	8
Kandotta.....	23	10	1	12	6	2	1	23	15	93	8	1	6	0	2	0	9	4	30
Princeton.....	6	1	4	7	9	11	27	10	10	85	8	1	6	0	2	0	9	4	30
NEBRASKA—																			
Bellevue.....	39	4	1	1	38	4	2	2	1	92	12	0	0	0	1	3	4	2	22
Brownville.....	1	1	0	6	4	27	7	47	0	93	1	1	0	3	1	13	3	18	40
Elkhorn.....	9	3	1	8	20	21	6	23	2	93	0	0	0	0	0	0	1	0	1
Fontenelle.....	33	0	0	8	18	17	5	12	0	93	0	0	0	0	0	0	0	0	0
Gilbert's Trading Post.....	3	1	1	1	11	27	40	0	1	85	2	0	0	0	3	4	25	10	44
Omaha, [Byers].....	9	0	0	11	11	17	6	26	13	93	10	0	0	1	3	8	1	20	43
Omaha, [Rain].....	8	0	0	5	21	22	11	24	2	93	5	0	4	2	5	0	3	4	23
KANSAS—																			
Burlingame.....	21	2	1	3	16	15	3	14	18	93	0	0	0	0	0	0	0	0	0
Lawrence.....	18	4	4	5	38	4	7	12	1	93	0	0	0	0	0	0	0	0	0
Leav' nthCity, [Berthoud].....	8	8	2	6	2	42	4	18	3	93	2	12	1	13	1	26	0	9	64
Leav' nthCity, [McCarty].....	18	4	2	8	26	8	7	14	2	89	5	0	0	0	0	5	13	11	34
Manhattan.....	12	8	0	1	20	20	3	5	21	90	9	4	3	0	8	11	8	12	55
MEXICO—																			
Cordova.....	6	11	1	2	0	5	2	4	0	31	0	0	0	0	0	0	0	0	0
CALIFORNIA—																			
Marysville.....	6	0	0	0	48	29	0	10	0	93	0	0	0	7	0	8	5	2	22
Sacramento.....	34	19	4	19	6	3	0	8	0	93	0	0	0	7	0	8	5	2	22
San Francisco.....	3	3	0	0	8	2	1	0	10	27	3	1	0	0	7	3	1	1	16
WEST INDIES—																			
Centre Signal Station, Ber.....	1	5	0	1	4	0	1	2	0	14	0	0	0	0	0	0	0	0	0
Nassau, Bahamas.....	1	12	4	3	1	3	0	1	1	26	0	0	0	0	0	0	0	0	0
St. George's, Bermuda.....	9	30	9	9	7	35	9	16	0	124	0	0	0	0	0	0	0	0	0

## No. 38.—WINDS—NUMBER OF OBSERVATIONS, JANUARY, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
CENTRAL AMERICA—																				
Guatemala .....	1	95	0	0	0	2	0	12	14	124										
SOUTH AMERICA—																				
Catharina Sophia, Surinam	0	35	26	17	0	0	0	0	0	78	0	15	36	11	0	0	0	0	62	
Chanarcillo, Chili .....	0	3	5	15	2	112	0	0	0	137										
EASTERN CONTINENT—																				
Jerusalem, Palestine ....	1	1	7	12	6	7	14	8	37	93	0	0	6	5	4	2	9	4	30	



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal .....	16	10	1	0	10	14	10	17	5	83	7	8	1	0	9	16	2	13	56
Red River Settlement .....	10	1	6	1	11	0	4	6	29	68	6	1	2	9	3	1	0	1	24
Rigolet .....	6	1	7	0	0	1	3	30	8	56	—	—	—	—	—	—	—	—	—
St. John's .....	22	1	0	0	7	5	12	37	0	84	22	1	0	0	8	5	13	27	76
St. Martin .....	1	26	4	12	2	31	3	5	0	84	—	—	—	—	—	—	—	—	—
Stanbridge .....	7	5	5	31	12	7	10	4	3	84	—	—	—	—	—	—	—	—	—
Toronto .....	4	12	2	6	0	24	3	22	11	84	—	—	—	—	—	—	—	—	—
Windsor .....	16	2	5	1	7	16	6	9	12	74	3	3	0	1	4	5	10	16	42
Wolfville .....	0	6	10	5	2	6	15	26	0	70	—	—	—	—	—	—	—	—	—
MAINE—																			
Cornish .....	13	6	3	3	9	29	9	12	0	84	0	0	0	0	0	2	3	1	0
Cornishville .....	5	3	1	4	8	6	31	26	0	84	—	—	—	—	—	—	—	—	—
Dexter .....	14	14	7	3	7	8	4	17	10	84	—	—	—	—	—	—	—	—	—
Gardiner .....	2	8	0	1	5	12	8	37	11	84	0	1	0	1	0	3	5	15	25
Perry .....	10	6	7	3	8	12	7	31	0	84	1	5	0	0	0	4	5	8	23
Portland .....	15	17	0	0	8	11	15	18	0	84	0	0	0	0	1	3	6	3	13
Stenben .....	3	23	0	2	1	22	0	29	4	84	0	3	0	0	0	15	7	9	34
NEW HAMPSHIRE—																			
Concord .....	1	0	0	2	1	12	9	39	0	64	0	0	0	0	0	0	0	4	4
Shelburne .....	0	0	17	0	0	0	42	0	14	73	0	0	2	1	0	3	10	29	45
Stratford .....	2	11	11	4	7	7	17	14	11	84	0	0	0	0	0	1	24	12	37
VERMONT—																			
Brandon .....	15	0	1	10	22	5	3	21	7	84	1	0	0	0	0	0	4	16	21
Burlington .....	23	6	0	1	20	16	0	16	0	82	—	—	—	—	—	—	—	—	—
Craftsbury .....	3	11	0	8	24	11	11	14	2	84	0	0	0	0	0	1	9	14	24
Lunenburg .....	0	0	4	1	13	3	17	10	0	48	—	—	—	—	—	—	—	—	—
Rupert .....	—	—	—	—	—	—	—	—	—	—	7	0	0	3	8	38	6	0	62
St. Johnsbury .....	35	2	1	1	19	0	6	12	5	81	5	0	0	0	6	0	11	4	26
MASSACHUSETTS—																			
Amherst .....	4	3	2	18	4	5	1	41	0	78	0	0	0	0	0	1	3	11	15
Cambridge .....	11	4	8	7	2	10	14	12	15	83	—	—	—	—	—	—	—	—	—
Danvers .....	7	11	3	4	7	7	3	21	14	77	—	—	—	—	—	—	—	—	—
Florida .....	0	8	0	14	0	6	30	25	1	84	0	5	3	13	0	6	23	19	69
Lawrence .....	4	21	1	4	1	17	2	34	0	84	—	—	—	—	—	—	—	—	—
Mendon .....	0	13	5	3	2	14	6	41	0	84	1	13	5	3	5	9	15	30	81
Nantucket .....	13	12	7	7	2	14	7	18	4	84	—	—	—	—	—	—	—	—	—
New Bedford .....	5	19	2	6	3	18	9	22	0	84	—	—	—	—	—	—	—	—	—
Richmond .....	0	20	0	11	0	6	0	47	0	84	0	16	0	6	0	8	0	25	55
Westfield .....	16	11	1	12	4	6	21	13	0	84	—	—	—	—	—	—	—	—	—
Williamstown .....	7	1	15	5	9	1	17	17	11	83	—	—	—	—	—	—	—	—	—
Worcester .....	4	13	0	6	2	13	3	39	0	80	0	0	0	0	0	1	3	12	16
RHODE ISLAND—																			
Providence .....	5	16	3	2	12	8	12	24	0	82	—	—	—	—	—	—	—	—	—
CONNECTICUT—																			
Columbia .....	4	16	2	4	0	11	2	33	12	84	1	7	0	1	0	8	1	19	37
Middletown .....	19	6	2	4	4	22	4	21	2	84	0	0	0	0	0	3	29	4	36
Pomfret .....	3	19	3	5	5	9	3	35	0	82	2	14	1	4	4	10	3	11	49
Saybrook .....	6	17	9	2	2	4	13	22	9	84	3	5	1	2	2	2	14	13	42
Wallingford .....	9	22	4	5	6	12	5	21	0	84	1	0	0	0	0	3	11	9	24
NEW YORK—																			
Baldwinsville .....	6	5	19	3	4	8	31	8	0	84	4	0	1	0	0	2	33	8	53
Bellport .....	13	17	5	7	2	20	8	12	0	84	—	—	—	—	—	—	—	—	—
Beverly .....	1	20	1	12	7	14	1	25	0	80	0	0	2	9	5	14	10	8	54
Cazenovia .....	6	2	3	5	17	15	15	20	1	84	0	0	2	7	7	8	27	20	71
Eden .....	3	9	3	14	18	7	15	4	0	73	0	0	0	0	0	14	26	6	46
Morrisania .....	15	9	1	4	11	15	16	13	0	84	—	—	—	—	—	—	—	—	—
Nichols .....	8	1	2	25	21	5	2	20	0	84	10	0	0	2	13	5	2	21	53
Ogdensburg .....	2	5	3	0	2	11	5	1	0	29	—	—	—	—	—	—	—	—	—
Oswego .....	3	8	8	11	23	4	20	6	1	84	—	—	—	—	—	—	—	—	—
Penn Yan .....	4	6	0	0	20	18	31	5	0	84	—	—	—	—	—	—	—	—	—
Rochester .....	2	0	10	1	8	13	21	1	0	56	8	0	11	1	12	7	30	2	71
Saratoga .....	0	23	1	2	0	41	8	9	0	84	1	24	1	1	0	40	8	9	84

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1859.

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK--Continued.																			
Wampsville.....	■	0	25	6	5	6	36	6	8	84	1	1	13	3	3	8	43	2	74
NEW JERSEY--																			
Lambertville.....	6	18	2	3	9	7	6	23	0	74									
Moorestown.....	8	4	4	1	4	3	9	1	0	34	3	0	1	0	2	2	0	2	10
Newark.....	3	21	0	3	1	14	3	11	0	56									
PENNSYLVANIA--																			
Bellefonte.....	15	1	9	2	13	8	20	8	0	76	4	0	0	0	3	0	2	12	21
Berwick.....	6	8	35	1	3	3	21	7	0	84									
Cannonsburg.....	1	1	28	2	2	5	36	6	0	81	0	0	0	0	0	0	1	0	1
Carlisle.....	0	9	9	7	0	7	9	12	28	81	0	2	1	1	0	6	5	10	25
Chambersburg.....	3	1	31	11	8	5	9	0	21	84	11	0	7	0	9	5	28	8	68
Chromedale.....	0	13	0	9	2	32	0	28	0	84									
Easton.....	15	19	0	6	4	9	9	19	3	84									
Fleming.....	0	3	9	11	0	18	15	28	0	84	1	0	0	4	1	8	15	24	53
Gettysburg.....	8	16	3	0	17	17	8	13	2	84	3	2	0	0	5	14	19	15	58
Harrisburg, [Heisely].....	7	2	16	20	4	0	13	21	0	83	1	0	1	1	1	0	8	12	24
Harrisburg, [Hickok].....	10	16	21	1	3	3	25	5	0	84	0	0	0	0	1	0	8	0	9
Lewisburg.....	9	3	4	3	10	8	13	7	27	84	1	0	0	0	0	1	8	2	12
Linden.....	3	6	18	2	0	1	18	2	0	50									
Morrisville.....	3	17	9	3	3	24	12	12	1	84	1	16	6	0	0	25	6	10	64
Mount Joy.....	0	3	0	26	1	1	0	17	36	84	0	1	1	2	1	1	1	0	7
Murrysville.....	2	3	22	6	0	24	5	14	7	83	4	1	1	0	0	16	9	7	38
Norristown.....	0	3	20	2	1	4	34	8	0	72	0	0	15	2	0	10	28	0	55
North Whitehall.....	5	7	3	0	0	0	2	13	54	84	3	0	0	0	0	0	6	9	18
Philadelphia.....	2	23	0	4	2	19	6	28	0	84	0	3	0	0	0	3	5	8	19
Pittsburg, [Marine Hosp'l].....	6	2	10	12	3	8	12	27	4	84	0	1	1	1	0	16	13	7	59
Pocopson.....	14	20	1	3	4	12	14	13	0	81	4	0	0	0	1	6	9	8	28
Shamokin.....	4	0	33	2	19	1	25	0	0	84	0	0	0	0	0	0	54	3	57
Somerset.....	3	0	0	14	5	12	27	6	17	84	0	0	0	0	1	9	22	5	37
Tarentum.....	0	4	0	4	5	16	7	10	38	84	0	0	0	1	2	7	30	12	52
West Haverford.....	1	13	7	1	3	8	7	14	2	56	0	1	3	0	0	3	8	13	28
Westtown.....	6	11	9	5	5	10	5	33	0	84	1	1	0	1	5	2	5	19	34
Worthington.....	0	0	11	1	2	6	14	1	0	35									
MARYLAND--																			
Annapolis.....	12	20	1	7	18	10	3	8	5	84	1	0	0	0	1	13	0	1	16
Baltimore.....	19	4	10	8	6	4	11	13	1	76									
Bladensburg.....	1	7	3	5	1	7	1	15	0	40									
Chestertown.....	0	0	0	34	0	14	1	33	1	83	0	0	0	7	1	9	1	12	30
Frederick.....	1	29	0	2	8	7	16	9	12	84	0	0	0	0	4	2	23	5	34
Leitersburg.....	7	0	4	4	15	17	8	19	10	84	3	0	1	0	9	8	27	19	67
Leonardtown.....	22	9	0	20	3	9	5	14	2	84	2	0	0	0	0	0	1	23	26
Sykesville.....	2	13	5	12	11	8	20	13	0	84	0	6	4	10	2	10	41	0	73
DISTRICT OF COLUMBIA--																			
Washington.....	8	11	4	8	19	5	6	19	3	83	0	0	0	0	0	0	7	0	7
VIRGINIA--																			
Crichton's Store.....	■	10	4	4	14	20	14	7	2	84	0	0	0	0	1	2	5	0	8
Cross Creek.....											0	0	2	0	6	10	43	5	66
Kanawha.....	18	0	0	1	35	7	6	11	4	82	0	0	0	1	0	11	3	0	15
Lewinsville.....	6	9	0	18	8	12	6	25	0	84									
Lewisburg.....	4	5	3	0	2	33	7	12	1	67									
Meadow Dale.....	12	4	0	1	57	3	2	0	3	82	1	0	0	2	36	11	11	9	72
Montross.....	3	1	7	4	4	8	15	9	33	84	0	0	0	0	1	6	8	2	17
Mont View.....	0	8	0	11	17	19	24	5	0	84	0	5	6	2	7	2	24	2	48
Point Pleasant.....	3	0	21	0	1	2	57	0	0	84	1	0	33	0	3	0	33	0	70
Poplar Grove.....	0	0	14	1	1	1	26	17	22	84	7	0	0	0	1	8	25	9	50
Portsmouth.....	5	18	6	4	0	18	13	19	0	83									
Rougemon.....	6	12	12	1	16	11	24	2	0	84	0	1	0	1	6	2	18	4	32
Smithfield.....	16	13	5	5	9	21	5	10	0	84	4	4	3	0	0	8	13	10	42
Stribling Springs.....	8	1	0	0	12	42	0	21	0	84	1	0	0	0	0	34	0	7	42
Westwood.....	19	0	0	0	8	1	2	0	0	30	0	0	0	0	1	0	0	0	1
Winchester.....	0	1	2	0	0	0	7	3	69	84									
NORTH CAROLINA--																			
Chapel Hill.....	12	20	0	0	3	22	15	12	0	84	1	4	0	0	1	27	12	3	48



## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NORTH CAROLINA—Cont'd.																			
Davidson College .....	0	25	0	1	2	38	6	10	0	82	0	10	0	2	4	35	4	3	58
Murfreesborough .....	2	14	7	7	0	16	20	6	9	81	1	9	1	4	0	6	28	2	51
SOUTH CAROLINA—																			
Aiken .....	3	9	12	1	9	3	23	2	0	62									
All Saints .....	6	3	14	5	11	26	11	7	1	84	0	2	5	0	0	37	12	3	59
Charleston .....	5	5	1	4	0	7	2	4	0	28									
Columbia, [Barton] .....	4	0	3	8	8	5	18	18	6	82	3	1	2	1	2	3	33	4	49
Columbia, [White] .....	10	3	3	6	3	9	14	11	0	56	0	1	2	0	0	2	9	4	18
St. John's .....	3	7	7	7	4	23	5	18	0	74	1	0	0	0	0	3	17	10	31
GEORGIA—																			
Athens .....	2	8	6	1	4	18	9	17	18	83	0	0	0	0	0	2	14	8	24
Atlanta .....	3	0	6	2	13	26	16	18	0	84									
Savannah .....	1	12	6	10	5	32	8	10	0	84									
Sparta .....	5	8	9	11	4	23	8	16	0	84	0	2	0	0	0	10	27	6	45
Thomaston .....	2	10	0	2	6	21	11	26	0	84									
Thomson .....	1	12	0	16	1	31	0	21	0	82	1	2	0	0	0	1	5	5	14
Whitemarsh Island .....	3	7	0	8	10	12	7	14	23	84	0	1	0	0	0	0	10	11	32
Zebulon .....	7	14	20	4	4	13	11	11	0	84	9	2	1	1	11	4	6	2	35
FLORIDA—																			
Alligator .....	0	17	2	0	2	15	6	4	29	75	0	0	0	0	0	19	2	1	22
Atsena .....	8	17	6	14	14	8	9	11	2	84	4	9	2	7	12	8	6	3	51
Belair .....	8	21	13	15	7	3	4	2	11	84	0	3	3	5	0	19	13	8	51
Gainesville .....	0	25	0	16	0	25	3	12	0	81									
Jacksonville .....	8	16	0	7	3	32	1	17	0	84	0	3	0	1	3	29	7	9	52
Micanopy .....	2	11	3	13	3	10	11	8	14	75	0	0	0	0	0	1	8	1	10
St. Augustine .....	4	46	1	15	0	8	2	8	0	84	3	37	1	6	0	6	2	6	61
Salt Ponds .....	9	7	11	21	5	2	1	0	0	56									
Seville .....	0	8	0	1	0	5	0	3	9	26									
ALABAMA—																			
Carlsville .....	2	5	7	13	22	16	14	5	0	84	6	4	2	3	1	2	7	9	34
Greene Springs .....	4	5	4	10	6	13	13	4	21	80	3	1	1	0	0	11	18	8	42
Greensborough .....	5	1	3	26	10	7	1	23	0	76	1	1	0	3	1	8	19	6	38
Montgomery .....											0	0	0	1	0	23	14	6	44
Selma .....	12	11	2	15	8	23	3	10	0	84	12	3	0	4	1	1	27	24	72
MISSISSIPPI—																			
Columbus .....	8	0	0	14	23	2	5	18	0	84	1	0	0	3	5	20	19	3	51
Natchez .....	12	14	3	20	20	12	0	3	0	84	1	0	0	0	0	17	6	0	24
Paulding .....	0	10	1	19	0	32	1	19	2	84	2	4	0	6	2	40	2	14	70
LOUISIANA—																			
Black River (a) .....	25	7	1	13	34	3	1	0	0	84	4	2	0	1	18	21	5	0	51
New Orleans .....	0	26	0	32	0	9	0	17	0	84									
TEXAS—																			
Austin, [Palm] .....	12	4	6	4	18	24	12	4	0	84	4	0	0	2	14	17	4	2	43
Austin, [Van Nostrand] ..	14	4	0	7	34	5	7	12	1	84	4	0	0	2	22	24	6	2	60
Larissa .....	4	7	4	21	9	20	4	11	2	82	0	0	0	0	5	14	1	0	20
New Braunfels .....	27	4	5	11	28	2	4	3	0	84									
Northern tier of counties ..	18	10	6	14	12	16	2	13	0	91									
Sisterdale .....	10	8	4	21	14	7	4	16	0	84	0	0	0	0	2	1	1	1	5
Union Hill .....	24	1	12	15	25	2	2	0	3	84	8	0	3	5	48	2	1	2	69
Washington .....	0	0	0	2	19	0	43	2	14	80	0	5	0	0	0	0	17	0	22
Webberville .....	20	1	2	3	45	1	2	2	2	78									
TENNESSEE—																			
Glenwood .....	11	6	7	15	16	8	4	14	3	84	2	2	1	1	5	17	22	8	58
La Grange .....	1	11	2	7	15	18	7	14	8	83	1	2	0	2	4	17	14	2	42
Memphis .....	4	6	13	17	17	1	5	17	4	84									
KENTUCKY—																			
Bardstown .....	7	1	7	6	22	12	12	15	0	82	7	3	5	1	16	7	15	10	64
Danville .....	1	5	2	10	17	16	16	17	0	84	3	1	0	1	1	20	21	8	55
Louisville .....	5	9	8	16	13	5	9	18	0	83	2	1	0	0	1	16	8	10	38
Paris .....	5	1	4	6	17	11	9	23	1	82	4	2	2	2	0	1	3	4	18
Springdale .....	0	17	3	1	4	32	7	12	8	84									

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

## No. 39.—WINDS—NUMBER OF OBSERVATIONS, FEBRUARY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
Ohio—																			
Avon.....	5	3	5	11	13	19	19	6	1	82	1	1	1	1	3	15	21	8	51
Bellefontaine.....	0	8	3	22	0	13	12	21	0	79	0	9	0	7	0	34	8	18	7
Bowling Green.....	2	8	4	6	4	28	6	5	15	78	1	4	0	0	0	9	10	6	30
Cincinnati, [Harper].....	5	1	10	4	13	15	20	16	0	84									
Cincinnati, [Phillips].....	4	6	6	5	5	12	10	28	8	84	4	7	5	2	0	16	9	26	69
Cleveland.....	10	4	6	7	30	6	14	4	1	82	5	1	0	0	1	1	9	0	17
College Hill.....	4	16	1	5	14	15	10	19	0	84	4	12	1	5	10	8	9	17	66
Hillsborough.....	0	19	1	17	1	21	3	22	0	84	0	0	2	0	0	2	0	1	5
Hiram.....	5	10	2	15	8	18	5	6	0	79	4	1	1	4	1	7	9	11	29
Hudson.....	4	5	11	11	7	17	13	13	3	84									
Jackson, (Monroe county).....	3	9	1	3	16	0	0	0	47	79	1	1	0	0	0	6	2	0	10
Madison.....	3	3	7	4	18	12	15	0	9	77	0	0	3	0	1	3	6	0	13
Madison, [King].....	6	13	1	9	6	34	6	9	0	84	2	12	1	0	2	34	12	11	71
Montville.....	10	5	0	19	16	20	3	11	0	84	1	2	0	0	8	4	5	0	20
New Lisbon.....	6	3	6	14	8	24	10	13	0	84	5	4	6	7	4	26	7	16	75
Northwood.....	0	21	2	11	3	27	5	12	0	81	0	3	0	0	0	15	5	2	25
Portsmouth.....	13	8	10	9	1	16	16	10	0	83									
Ripley.....	1	3	10	10	0	1	1	24	11	61	0	0	0	0	0	0	0	5	5
Rockport.....	9	2	4	2	17	14	28	8	0	84									
Savannah.....	2	11	1	16	2	24	10	18	0	84	6	10	1	5	2	25	7	18	68
Troy.....	3	3	6	1	4	1	40	3	23	84	0	6	9	7	2	11	18	7	60
Urbana.....	1	12	6	12	9	10	11	10	13	84	2	5	1	1	1	11	19	9	52
Welchfield.....	8	4	3	22	6	18	9	14	0	84	1	0	0	0	0	1	0	0	2
Westerville.....	11	2	1	8	11	22	18	0	2	84	4	4	0	5	9	13	13	16	64
Michigan—																			
Battle Creek.....	1	12	9	5	8	20	14	11	4	84	0	0	0	1	1	16	33	10	66
Detroit.....	0	5	7	7	8	30	21	6	0	84	0	6	4	4	12	29	27	2	84
Lansing.....	2	4	4	10	15	17	24	6	0	82	2	3	5	6	10	11	24	2	63
Marquette.....	7	1	10	10	4	4	28	20	0	84									
Monroe.....	0	12	3	16	0	17	0	21	0	69	0	12	3	16	0	13	0	18	62
New Buffalo.....											0	2	14	12	2	13	18	11	72
Ottawa Point (a).....	5	19	3	10	20	21	6	28	0	112	5	6	17	2	2	4	0	0	36
Port Huron.....	4	7	4	7	13	20	14	13	0	82	2	1	0	0	0	17	10	6	36
Thunder Bay Island.....	16	8	5	16	16	9	8	23	11	112	8	4	0	4	8	6	6	9	45
Ypsilanti.....	3	11	5	9	4	29	11	12	0	84	1	5	1	3	0	5	22	4	41
Indiana—																			
Aurora.....	0	5	0	2	1	5	4	1	0	18									
Cannelton.....	1	0	8	29	6	5	24	10	1	84	0	0	1	2	10	4	3	5	25
Logansport.....	2	9	10	16	2	19	16	10	0	84	3	17	6	6	3	16	20	10	81
New Harmony.....	9	0	6	13	20	8	2	19	0	77									
Richmond, [Austin].....	1	5	1	3	6	4	8	0	5	33	1	4	0	1	3	2	5	1	17
Richmond, [Moore].....	2	2	7	6	4	11	18	7	25	82									
Illinois—																			
Augusta.....	2	8	2	11	11	13	15	22	0	84	0	1	1	4	2	4	15	12	39
Aurora.....	4	9	6	14	13	12	14	12	0	84	2	2	1	0	0	15	24	3	47
Batavia, [Capon].....	3	16	3	5	6	31	13	7	0	84									
Batavia, [Mead].....	0	19	0	7	1	36	2	19	0	84	0	17	0	3	0	33	11	11	66
Brighton.....	3	3	2	26	1	4	11	34	0	84	2	2	3	17	6	11	3	9	53
Edgington.....	5	16	0	8	2	26	1	26	0	84	4	13	0	6	1	27	1	23	75
Elgin.....	5	7	6	14	13	7	12	18	2	84	0	0	0	0	1	1	3	0	5
Manchester.....	10	7	2	5	27	6	20	7	0	84	3	6	2	1	18	8	14	5	57
Marango.....	1	1	14	20	3	34	10	0	1	84									
Ottawa.....	1	10	2	13	2	23	6	20	1	78	0	0	1	0	0	8	2	2	13
Pekin.....	6	8	2	15	19	4	6	21	0	84	3	2	3	3	2	6	18	12	49
Peoria.....	0	9	11	2	11	7	36	8	0	84	0	0	0	0	0	2	0	0	2
Riley.....	5	3	9	6	17	8	18	13	4	83									
Sandwich.....	3	13	1	20	4	14	3	26	0	84	0	0	0	0	0	0	16	2	18
Upper Alton.....	3	1	2	2	3	7	3	13	0	34	3	1	2	0	4	7	5	13	37
Waynesville.....	6	0	17	1	21	7	23	9	0	84	1	0	0	0	4	3	14	0	22
West Salem.....	5	8	4	9	19	5	3	15	16	84	0	0	0	0	0	23	20	0	43
West Urbana.....	5	5	7	16	13	12	13	13	0	84	0	0	0	0	1	2	0	1	4

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ILLINOIS—Continued.																			
Wheaton .....	0	10	8	8	5	20	6	25	2	84	0	0	0	0	0	6	2	0	8
Winnebago .....	9	12	3	13	8	16	9	14	0	84	0	0	0	0	0	4	13	5	22
MISSOURI—																			
St. Louis, [Englemann] ..	0	7	5	24	10	11	21	6	0	84	—	—	—	—	—	—	—	—	—
St. Louis, [Fendler] .....	4	8	6	23	28	5	10	28	8	120	1	1	1	0	5	8	31	10	57
WISCONSIN—																			
Appleton .....	8	21	0	3	7	33	4	8	0	84	8	17	0	3	5	18	2	9	62
Bay City .....	0	29	0	0	21	20	8	6	0	84	0	8	0	0	0	5	13	1	27
Bayfield .....	4	14	0	0	2	19	—	13	2	56	1	16	0	0	2	17	4	13	53
Beloit .....	17	0	5	6	19	9	22	6	0	84	—	—	—	—	—	—	—	—	—
Kenosha .....	2	6	3	5	16	20	19	6	2	79	—	—	—	—	—	—	—	—	—
Madison .....	2	12	1	11	11	14	11	22	0	84	0	1	1	0	0	0	0	1	3
Manitowoc .....	7	5	5	4	11	14	12	26	0	84	1	0	1	0	0	4	9	3	18
Milwaukee, [Pomeroy] .....	1	14	4	16	2	14	14	19	0	84	0	0	0	0	1	0	0	0	1
Milwaukee, [Winkler] .....	3	12	4	9	3	11	15	27	0	84	—	—	—	—	—	—	—	—	—
Mosinee .....	10	13	0	7	10	11	7	16	10	84	6	11	0	2	2	7	8	11	47
Platteville .....	6	8	11	14	6	12	8	19	0	84	3	4	12	7	4	13	6	9	58
Wausau .....	8	7	12	10	5	11	6	21	0	80	2	0	2	6	0	2	6	2	20
IOWA—																			
Bellevue .....	6	5	7	15	9	4	14	23	1	84	—	—	—	—	—	—	—	—	—
Border Plains .....	3	4	1	13	24	2	3	33	1	84	1	0	0	0	0	7	1	3	12
Dubuque .....	6	7	5	8	5	8	13	24	7	83	0	1	1	0	0	5	15	12	34
Fairfield .....	0	9	0	15	0	7	2	24	27	84	—	—	—	—	—	—	—	—	—
Fort Madison .....	1	12	4	11	2	25	3	26	0	84	4	1	4	0	1	13	17	10	50
Muscatine .....	0	3	7	8	16	12	17	21	0	84	0	0	0	0	1	8	1	0	10
Pleasant Plain .....	0	6	4	11	11	10	5	29	0	76	0	0	0	0	0	10	7	1	18
Rossville .....	11	7	8	6	6	16	12	13	5	84	—	—	—	—	—	—	—	—	—
MINNESOTA—																			
Beaver Bay, [Clark] .....	16	21	0	1	3	14	5	23	2	85	4	7	2	0	1	20	5	4	43
Burlington .....	4	7	12	2	9	5	10	30	3	82	2	6	12	1	6	6	7	11	51
Forest City .....	5	0	10	1	6	5	4	8	45	84	—	—	—	—	—	—	—	—	—
Hazlewood .....	5	5	5	10	18	7	7	27	0	84	2	4	10	0	1	0	1	2	20
Kandotta .....	9	6	0	9	10	8	10	21	11	84	—	—	—	—	—	—	—	—	—
Princeton .....	12	9	11	10	2	4	16	9	11	84	3	0	2	0	7	1	16	3	32
NEBRASKA—																			
Bellevue .....	36	8	2	1	19	6	3	7	2	84	3	1	1	0	2	1	6	3	17
Brownville .....	5	4	5	4	4	17	4	41	0	84	1	6	3	12	8	4	2	3	39
Elkhorn .....	14	11	3	16	8	11	4	17	0	84	1	0	0	0	0	1	1	0	3
Fontenelle .....	31	6	1	4	32	1	2	7	0	84	—	—	—	—	—	—	—	—	—
Omaha, [Byers] .....	3	2	5	10	16	4	4	28	12	84	1	3	4	2	6	6	1	14	37
Omaha, [Rain] .....	4	4	3	3	17	19	8	26	0	84	1	1	2	1	1	1	7	0	14
KANSAS—																			
Burlingame .....	25	3	9	8	15	2	2	2	18	84	—	—	—	—	—	—	—	—	—
Lawrence .....	11	2	2	1	22	3	9	11	5	66	—	—	—	—	—	—	—	—	—
Leavenworth, [Berthoud] ..	14	8	2	6	3	24	7	18	2	84	6	6	5	10	2	18	3	14	64
Manhattan .....	18	5	6	6	14	5	5	11	14	84	11	6	3	0	3	16	8	11	58
MEXICO—																			
Cordova .....	1	9	4	0	1	8	1	4	0	28	—	—	—	—	—	—	—	—	—
CALIFORNIA—																			
Marysville .....	0	0	0	9	61	14	0	0	0	84	—	—	—	—	—	—	—	—	—
Sacramento .....	13	3	2	21	25	11	6	0	0	84	0	0	0	24	1	18	12	0	55
San Francisco .....	6	—	0	0	22	8	5	6	35	84	2	0	0	1	6	27	30	4	70
WEST INDIES—																			
Centre Signal Station, Ber.	9	0	0	1	3	13	0	1	0	27	—	—	—	—	—	—	—	—	—
Nassau, Bahamas .....	0	8	5	—	1	3	1	1	3	24	—	—	—	—	—	—	—	—	—
St. George's, Bermuda .....	22	5	8	6	17	32	16	6	0	112	—	—	—	—	—	—	—	—	—
CENTRAL AMERICA—																			
Guatemala .....	0	74	1	2	0	13	0	1	21	112	—	—	—	—	—	—	—	—	—
SOUTH AMERICA—																			
Catharina Sophia, Surinam ..	0	53	14	17	0	0	0	0	0	84	0	42	27	5	0	0	0	0	74
Chanarcillo, Chili .....	1	12	5	13	5	87	5	1	0	129	—	—	—	—	—	—	—	—	—
EASTERN CONTINENT—																			
Jerusalem, Palestine .....	1	4	4	15	4	6	8	7	35	84	1	1	2	8	1	4	7	6	30

## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal	1	16	2	9	7	13	21	20	4	93	1	12	2	7	7	12	12	14	67
Red River Settlement	15	2	0	3	11	1	6	4	33	75	3	5	0	5	1	0	0	1	2
Rigolet	12	10	8	0	2	1	1	21	7	62									
St. John's	21	8	0	4	13	15	6	24	2	93	12	7	0	4	0	12	5	20	69
St. Martin	0	27	1	17	4	33	5	0	0	93									
Stanbridge	1	4	3	32	10	5	17	13	8	93									
Toronto	0	31	2	8	1	23	5	18	5	93									
Windsor	18	3	3	10	7	15	8	13	6	83									
Wolfville	7	0	4	7	0	9	7	37	0	77									
MAINE—																			
Cornish	6	7	9	0	0	16	23	14	0	93	0	0	0	0	0	1	3	2	0
Cornishville	7	3	1	11	16	4	13	35	3	93									
Dexter	2	11	7	7	14	3	8	38	3	93									
Gardiner	0	10	0	12	10	14	5	30	10	91	0	0	0	2	0	3	2	18	25
Perry	0	7	3	13	6	12	2	43	0	92	9	1	0	3	3	7	3	0	35
Portland	13	8	7	14	8	0	14	21	0	93	2	0	0	0	1	1	5	12	21
Steuben	1	16	2	10	1	24	2	31	6	93	0	3	1	0	0	12	11	10	37
NEW HAMPSHIRE—																			
Shelburne	0	0	16	0	0	0	34	0	11	61	0	0	0	2	2	2	7	18	31
Stratford	1	10	17	3	8	17	16	8	13	93	1	0	0	0	2	1	20	5	29
VERMONT—																			
Brandon	11	0	3	20	22	5	6	24	2	93	0	0	0	0	1	14	4	24	43
Burlington	18	6	1	4	24	15	4	21	0	93									
Craftsbury	0	6	2	7	34	4	8	29	3	93	0	0	0	0	7	5	8	13	33
Lunenburg	0	0	4	1	0	5	16	24	0	56									
Rupert											7	0	0	8	17	27	16	3	78
St. Johnsbury	37	0	0	4	29	1	10	10	2	93	0	0	0	0	6	1	12	2	21
MASSACHUSETTS—																			
Amherst	3	4	0	16	2	8	5	51	0	89	1	0	0	5	2	4	4	16	32
Bridgewater	3	7	3	5	6	9	10	19	0	62	2	1	0	1	6	2	8	0	29
Cambridge	4	6	8	5	5	17	8	15	19	87									
Florida	0	8	0	23	1	11	14	33	0	93	0	8	4	19	1	13	7	23	75
Lawrence	1	14	3	16	1	13	2	43	0	93									
Mendon	0	18	2	0	15	12	4	39	0	90	0	19	2	0	15	12	3	40	91
Nantucket	5	3	5	17	0	21	7	24	5	93									
New Bedford	7	12	2	17	2	18	8	26	0	92	2	0	0	0	0	3	7	2	14
Richmond	0	10	0	21	0	17	0	45	0	93	1	6	0	21	0	20	1	17	66
Westfield	5	6	7	11	1	15	19	29	0	93	0	0	0	0	0	2	0	0	2
Williamstown	0	0	28	5	3	12	27	17	1	93	0	1	0	0	0	0	0	3	4
Worcester	4	14	3	15	2	10	6	36	0	90	0	0	0	0	1	5	9	14	29
RHODE ISLAND—																			
Providence	6	8	4	8	11	12	6	38	0	93									
CONNECTICUT—																			
Columbia	1	7	0	12	1	13	2	43	14	93	0	6	0	11	1	9	2	30	59
Middletown	13	2	0	15	8	11	5	31	8	93	2	0	0	0	0	9	20	9	40
Pomfret	2	12	1	11	8	11	2	44	0	91	0	9	1	8	0	12	5	21	62
Saybrook	5	12	15	7	4	7	9	22	12	93	2	2	1	1	2	8	17	7	40
Wallingford	13	9	1	19	9	10	8	26	0	93	3	0	0	0	3	12	17	7	42
NEW YORK—																			
Baldwinsville	4	3	18	6	8	3	32	19	0	93	3	1	2	0	5	4	45	13	73
Bellport	14	7	3	21	5	12	5	26	0	93									
Beverly	5	12	0	15	0	33	0	19	0	84	1	4	3	13	5	20	7	5	58
Cazenovia	7	1	0	13	19	11	16	25	0	92	0	0	0	11	8	18	24	14	75
Eden	2	4	6	28	12	14	19	0	0	85	0	0	0	1	4	21	31	0	67
Morrisania	8	13	6	10	8	17	12	19	0	93									
Nichols	5	1	7	26	11	3	11	29	0	93	6	0	0	5	16	4	4	29	64
Ogdensburg	8	7	1	0	3	4	2	6	0	31									
Oswego	9	4	8	25	6	8	27	6	0	93									
Penn Yan	6	3	0	1	26	26	24	7	0	93									
Rochester	1	3	12	5	2	7	27	5	0	62	0	1	4	2	7	7	34	6	61
Saratoga	1	23	0	4	0	41	4	20	0	93	1	23	0	4	0	41	4	20	93
Wampsville	0	0	26	8	6	4	45	4	0	93	0	0	22	9	5	5	31	3	75



No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW JERSEY--																				
Lambertville.....	3	8	3	13	4	11	10	33	0	85										
Moorestown.....	2	■	8	7	6	8	7	7	0	45	■	0	0	2	0	1	1	2		
Newark.....	1	15	4	■	1	12	■	19	0	62										
PENNSYLVANIA--																				
Bellefonte.....	10	1	2	6	21	17	15	14	1	87	2	0	0	■	9	3	■	17	40	
Berwick.....	3	4	25	7	5	6	37	6	0	93										
Cannonsburg.....	0	3	16	13	1	15	41	4	0	93	0	0	0	0	0	3	0	0	■	
Carlisle.....	0	3	1	22	0	10	14	14	29	93	0	1	0	14	0	7	9	5	36	
Chambersburg.....	8	2	41	10	0	0	10	2	20	93	1	0	9	1	12	6	33	1	63	
Easton.....	4	16	1	18	6	2	1	40	3	91										
Fleming.....	2	3	5	9	1	9	18	37	0	84	1	0	0	4	2	6	21	20	54	
Gettysburg.....	6	8	1	3	14	29	11	18	3	93	0	0	0	1	1	21	22	15	60	
Harrisburg, [Heisely].....	3	2	10	15	7	3	12	57	3	92	2	0	2	4	2	2	5	14	31	
Harrisburg, [Hickok].....	16	7	15	4	5	12	29	5	0	93	0	0	0	0	5	3	10	1	19	
Lewisburg.....	9	5	2	5	17	2	18	7	0	65	0	0	0	0	4	6	15	1	26	
Linden.....	2	5	18	5	0	1	20	1	2	54										
Morrisville.....	2	4	10	14	7	17	11	26	2	93	0	2	4	7	2	24	14	12	65	
Mount Joy.....	0	1	0	26	4	3	0	47	11	92	0	0	0	9	0	3	0	8	20	
Murrysville.....	0	3	26	10	1	32	7	2	7	88	0	0	0	3	0	24	12	7	46	
Norristown.....	1	2	17	4	2	■	46	3	0	81	0	0	0	1	2	15	40	1	68	
North Whitehall.....	2	2	10	0	5	5	16	16	37	93	0	0	3	0	7	5	17	14	46	
Philadelphia.....	0	7	3	18	1	26	15	23	0	93	0	0	0	0	0	5	9	6	20	
Pittsburg, [Marine Hosp.].....	1	1	9	20	14	13	15	17	3	93	0	0	0	5	6	18	12	1	42	
Pocopson.....	11	4	3	7	12	21	24	8	0	90	2	0	0	1	3	12	17	5	40	
Shamokin.....	0	1	21	4	8	5	54	0	0	93	0	0	0	0	0	0	68	1	69	
Somerset.....	0	1	0	17	6	10	33	4	22	93	0	0	0	5	6	9	29	4	53	
Tarentum.....	1	3	4	3	30	■	7	30	92	0	0	0	1	5	24	28	■	64		
West Haverford.....	1	2	1	7	7	9	7	23	5	62	0	1	0	1	2	4	15	18	41	
Westtown.....	1	4	8	12	6	14	8	38	0	91	1	0	1	1	0	7	12	14	36	
Worthington.....	0	0	10	3	1	1	16	3	0	34										
MARYLAND--																				
Annapolis.....	5	6	2	5	27	13	5	14	12	93	0	0	0	0	0	25	0	3	28	
Baltimore.....	8	2	41	10	0	0	10	2	20	93										
Bladensburg.....	1	2	3	7	4	5	3	15	0	40										
Chestertown.....	1	7	0	23	0	18	7	37	0	93	1	4	0	8	0	7	9	12	41	
Frederick.....	1	16	9	1	6	15	25	14	15	93	0	1	0	0	6	■	31	1	48	
Leitersburg.....	1	1	3	1	20	19	21	20	6	92	0	0	0	1	7	11	21	16	56	
Leonardtown.....	5	6	3	26	4	9	16	11	2	85	1	0	0	0	0	1	4	21	27	
Sykesville.....	4	8	6	11	■	22	29	7	0	93	1	1	5	4	0	21	35	0	67	
DISTRICT OF COLUMBIA--																				
Washington.....	3	8	3	16	16	6	11	24	4	91										
VIRGINIA--																				
Crichton's Store.....	11	12	3	6	17	25	10	7	■	93	0	0	0	0	1	4	5	0	10	
Cross Creek.....											0	0	0	2	10	18	24	1	55	
Kanawha.....	6	0	1	3	32	7	8	1	7	65	0	0	0	0	0	6	8	2	16	
Lewinsville.....	2	4	1	29	■	9	11	28	0	93										
Lewisburg.....	■	8	5	2	5	22	19	24	0	93										
Montross.....	2	4	9	13	6	12	17	7	23	93	0	0	0	0	10	9	8	2	29	
Mont View.....	0	11	2	10	8	22	36	4	0	93	0	3	1	0	12	3	14	3	36	
Point Pleasant.....	0	0	70	0	0	5	0	18	0	93	0	0	13	0	0	0	25	0	38	
Poplar Grove.....	0	2	20	4	0	3	21	19	24	93	0	1	0	1	7	18	17	7	51	
Portsmouth.....	9	5	7	24	4	19	10	15	0	93										
Rougemon.....	11	9	7	4	21	7	30	0	0	89	1	0	0	1	11	5	22	0	40	
Stibbling Springs.....	2	6	0	2	6	39	0	38	0	93	0	1	0	2	5	32	0	8	48	
The Plains.....	1	0	0	3	9	13	0	25	0	51	0	0	0	0	0	0	0	1	1	
Winchester.....	0	0	2	0	4	2	28	1	53	90										
NORTH CAROLINA--																				
Chapel Hill.....	9	16	4	4	17	13	24	6	0	93	0	1	0	0	9	27	10	1	48	
Murfreesborough.....	0	8	7	16	1	18	17	6	20	93	0	0	0	9	0	12	37	0	58	
SOUTH CAROLINA--																				
Aiken.....	2	6	15	3	10	7	15	0	0	58										

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NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
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SOUTH CAROLINA—Cont'd.																			
All Saints.....	8	5	4	11	16	21	23	5	0	93	3	1	1	0	2	25	20	1	53
Charleston.....	1	5	2	3	11	11	1	6	0	31	1	1	6	4	3	4	33	2	54
Columbia, [Barton].....	1	3	11	16	8	5	28	11	8	92	1	1	6	4	3	4	33	2	54
Columbia, [White].....	3	4	5	10	4	10	18	8	28	90	1	1	4	1	0	0	0	0	7
St. John's.....	0	4	3	22	5	18	3	23	0	78	1	0	1	1	1	14	15	3	36
GEORGIA—																			
Athens.....	0	6	11	7	11	16	18	11	11	91	0	0	1	0	2	4	10	2	19
Atlanta.....	0	0	13	11	20	5	28	16	0	93	0	0	1	0	0	31	1	0	55
Augusta.....	3	11	1	9	7	32	28	2	0	93	0	7	1	6	0	31	1	0	55
Savannah.....	4	8	5	23	7	24	13	9	0	93	0	0	0	1	0	0	4	0	5
Sparta.....	2	10	9	13	9	19	14	17	0	93	1	4	1	1	5	14	20	7	53
Thomaston.....	8	12	10	8	4	10	14	19	0	85	0	0	0	0	1	4	0	0	5
Thomson.....	0	15	0	19	1	41	3	12	0	91	0	0	0	0	1	4	0	0	5
Whitemarsh Island.....	2	14	2	8	18	11	6	16	16	93	0	4	0	1	8	13	14	5	45
Zebulon.....	0	5	38	4	2	16	23	5	0	93	0	0	0	1	10	18	12	4	45
FLORIDA—																			
Alligator.....	1	8	6	1	3	29	6	9	30	93	0	0	0	0	0	0	0	0	0
Atsena.....	7	16	6	17	12	18	9	8	0	93	8	4	13	10	11	8	4	0	58
Belair.....	8	14	21	18	1	2	2	11	16	93	0	0	0	6	0	38	25	1	70
Gainesville.....	4	8	2	29	2	25	3	17	0	90	0	0	0	0	0	0	0	0	0
Jacksonville.....	9	16	0	9	8	37	0	8	0	87	0	6	1	3	7	33	2	2	54
Micanopy.....	1	8	9	11	7	12	13	5	9	75	0	0	0	0	1	4	0	0	5
St. Augustine.....	5	36	3	16	1	14	1	17	0	93	1	28	3	14	0	12	1	16	75
Salt Ponds.....	6	3	6	21	14	5	2	2	3	62	0	0	0	0	0	0	0	0	0
Seville.....	0	7	1	3	2	8	0	2	13	36	0	1	1	2	2	6	0	0	12
ALABAMA—																			
Carlowville.....	3	4	18	2	20	4	36	6	0	93	0	0	0	0	1	1	4	1	7
Greene Springs.....	0	2	0	33	3	15	18	2	15	88	0	0	0	5	1	20	8	9	43
Greensborough.....	3	3	2	30	8	3	15	11	0	75	0	1	2	3	0	10	21	2	39
Montgomery.....	0	0	2	3	0	1	1	5	0	12	0	0	4	2	2	18	29	2	57
Moulton.....	3	3	7	18	10	11	5	10	25	92	0	0	0	0	0	13	11	1	34
Selma.....	0	3	4	25	1	24	7	29	0	93	0	0	1	10	3	28	19	10	71
MISSISSIPPI—																			
Columbus.....	7	4	16	18	14	3	22	2	0	93	1	0	3	4	13	9	14	0	50
Natchez.....	7	7	3	22	14	15	1	24	0	93	0	0	0	0	0	7	9	0	16
LOUISIANA—																			
Black River (a).....	13	5	0	13	40	7	3	12	0	93	1	1	0	0	15	26	7	2	52
New Orleans.....	0	30	0	22	0	0	0	32	0	93	0	0	0	0	0	0	0	0	0
TEXAS—																			
Austin, [Palm].....	11	4	3	11	14	41	4	5	0	93	0	0	0	1	2	1	0	0	7
Austin, [Van Nostrand].....	7	0	2	6	36	7	14	17	4	93	0	0	0	0	22	25	3	1	51
Kaufman.....	33	1	4	1	30	6	0	18	0	93	0	0	0	0	0	0	0	0	0
Larissa.....	12	4	5	19	16	10	13	8	4	91	10	4	0	4	4	7	5	0	34
New Braunfels.....	25	1	6	15	19	4	8	12	0	90	0	0	0	0	0	0	0	0	0
Northern tier of counties.....	12	11	6	14	19	34	4	14	2	116	0	0	0	0	0	0	0	0	0
Union Hill.....	19	2	7	5	42	3	6	7	2	93	5	0	2	2	38	3	4	1	50
Sisterdale.....	8	3	1	27	9	6	9	30	0	93	0	0	0	0	0	1	0	0	1
Washington.....	0	0	0	1	42	0	12	16	19	90	0	0	0	0	4	2	2	0	8
Webberville.....	13	0	0	5	41	2	2	11	7	81	0	0	0	0	0	0	0	0	0
ARKANSAS—																			
Washington.....	20	0	0	0	4	10	1	8	0	43	0	0	0	0	0	0	0	0	0
TENNESSEE—																			
Glenwood.....	4	7	4	35	11	11	5	12	4	93	0	1	0	10	7	16	24	7	65
La Grange.....	1	4	5	23	14	27	8	5	6	93	2	0	0	4	11	18	16	0	51
KENTUCKY—																			
Bardstown.....	2	4	7	7	20	21	25	6	0	92	2	1	2	6	4	29	18	4	50
Danville.....	2	4	9	12	18	13	30	5	0	93	0	0	0	0	3	28	19	6	56
Louisville.....	3	5	2	17	32	17	14	3	0	93	1	0	0	1	10	22	13	2	40
Paris.....	1	2	3	14	8	24	27	13	1	93	1	1	1	3	1	16	15	6	44
Springdale.....	0	15	8	6	15	26	10	2	11	93	0	0	0	0	0	0	0	0	0

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.



## No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
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OHIO—																				
Avon.....	0	6	2	12	9	25	28	8	0	90	0	2	0	2	5	19	27	6	6	
Bellefontaine.....	0	3	10	19	1	24	16	16	0	89	0	10	3	22	2	25	6	13	81	
Bowling Green.....	2	12	3	9	2	27	10	3	21	89	0	0	0	2	2	22	10	8	44	
Cincinnati, [Harper].....	0	3	5	5	26	16	33	5	0	93	0	0	0	0	7	18	19	11	55	
Cincinnati, [Phillips].....	0	1	9	0	15	12	23	20	13	93	0	0	0	0	1	4	9	7	21	
Cleveland.....	8	3	0	19	23	7	26	4	2	92	0	0	0	1	4	9	7	0	21	
College Hill.....	2	2	1	25	12	31	11	7	2	93	0	0	1	9	9	21	9	7	56	
Hillsborough.....	0	5	0	35	3	28	12	9	0	93	0	0	0	0	0	1	0	0	1	
Hiram.....	1	1	1	13	18	29	11	10	0	84	0	0	0	1	3	10	11	12	37	
Hudson.....	2	2	11	18	6	19	24	8	0	90	0	0	0	0	0	0	0	0	0	
Madison, [Atkins].....	0	3	2	10	14	9	25	4	7	74	0	0	0	0	3	2	13	0	18	
Madison, [King].....	3	3	0	15	13	28	12	14	5	93	1	0	0	2	5	46	11	7	72	
Montville.....	4	3	0	21	18	27	8	10	0	91	0	0	0	4	1	22	5	3	36	
New Lisbon.....	1	2	10	17	9	29	13	11	1	93	0	0	4	12	5	22	11	11	65	
Northwood.....	3	18	11	15	0	7	5	16	0	75	0	1	1	0	10	5	7	6	33	
Portsmouth.....	1	14	2	9	0	53	6	7	0	92	0	0	0	0	0	0	0	0	0	
Rockport.....	5	4	2	7	12	14	44	5	0	93	0	0	0	0	0	0	0	0	0	
Savannah.....	0	2	0	16	4	36	16	19	0	93	1	1	0	2	5	35	12	14	70	
Troy.....	0	0	4	0	5	0	60	0	24	93	0	0	0	0	1	0	58	0	59	
Urbana.....	0	4	4	18	6	19	13	4	23	91	1	0	0	2	7	23	32	1	66	
Welchfield.....	1	0	1	34	2	29	17	9	0	93	0	0	0	0	0	3	1	0	4	
Westerville.....	2	1	2	8	16	35	24	4	0	92	2	0	0	0	11	16	28	0	63	
MICHIGAN—																				
Battle Creek.....	2	4	9	15	17	8	25	8	5	93	1	0	0	0	3	18	37	10	69	
Detroit.....	0	7	2	20	5	46	11	2	0	93	1	0	2	11	4	33	35	5	91	
Grand Rapids.....	3	15	15	10	6	27	8	11	0	93	2	4	9	3	7	10	39	13	87	
Lansing.....	0	2	4	8	1	3	4	3	0	25	0	1	5	5	1	1	2	1	23	
Marquette.....	2	2	8	25	2	6	12	36	0	93	0	1	0	0	0	0	0	1	2	
Monroe.....	0	21	0	19	0	5	0	9	0	55	0	17	0	17	0	5	0	9	48	
New Buffalo.....	0	0	0	0	0	0	0	0	0	0	0	0	5	2	5	20	41	9	82	
Ottawa Point (a).....	5	35	8	10	8	26	5	25	0	124	7	13	14	3	2	1	0	1	41	
Port Huron.....	7	3	0	12	15	21	10	15	5	88	2	0	0	2	2	16	9	2	33	
Thunder Bay Island.....	20	7	9	31	19	11	4	22	1	124	11	2	1	13	10	2	7	9	55	
Ypsilanti.....	5	4	15	19	3	20	19	5	1	92	2	0	4	7	6	10	32	7	68	
INDIANA—																				
Aurora.....	0	2	0	4	2	3	9	2	0	22	0	0	0	4	9	10	10	4	37	
Cannelton.....	1	2	11	24	21	5	19	7	2	93	0	0	0	4	9	10	10	4	37	
Logansport.....	0	9	4	14	1	23	15	27	0	93	2	8	8	8	5	17	23	21	93	
Mishawaka.....	0	0	7	14	27	5	38	2	0	93	0	0	0	0	0	0	0	0	0	
New Harmony.....	2	2	5	30	12	21	8	9	0	89	0	0	0	0	0	0	0	0	0	
Richmond.....	1	7	5	1	16	7	10	10	0	57	0	0	0	0	10	9	10	9	38	
ILLINOIS—																				
Augusta.....	0	9	9	24	7	12	19	12	1	93	0	0	1	4	2	5	15	14	47	
Aurora.....	5	13	3	18	15	11	20	8	0	93	0	2	0	1	7	24	21	10	65	
Batavia, [Mead].....	0	23	1	15	0	30	9	15	0	93	0	16	1	9	0	32	8	17	83	
Edgington.....	0	0	5	16	8	13	3	39	0	93	0	6	4	11	5	29	3	31	89	
Elgin.....	3	11	10	16	6	17	3	25	2	93	0	0	0	0	1	4	5	1	11	
Manchester.....	5	5	3	4	34	11	21	10	0	93	4	3	2	2	29	10	15	8	73	
Marengo.....	0	5	14	17	5	46	6	0	0	93	0	0	0	0	0	0	0	0	0	
Ottawa.....	2	13	3	24	4	28	8	11	0	93	1	4	0	0	0	14	5	11	35	
Pekin.....	8	3	10	20	23	7	10	11	1	93	0	2	3	3	7	13	19	12	65	
Peoria.....	3	17	18	2	9	9	35	0	0	93	0	0	0	0	1	0	8	0	9	
Riley.....	9	6	17	10	8	13	19	8	3	93	0	0	0	0	0	0	0	0	0	
Sandwich.....	0	23	1	22	6	8	9	24	0	93	0	0	0	0	0	0	29	5	34	
Upper Alton.....	1	1	0	0	0	11	3	13	0	29	1	1	0	0	0	11	3	13	29	
Waynesville.....	8	1	22	6	22	3	28	3	0	93	3	0	1	2	11	4	16	3	40	
West Salem.....	1	0	7	25	13	12	7	13	15	93	0	0	0	0	0	26	20	1	47	
West Urbana.....	1	4	3	33	9	21	5	17	0	93	1	0	0	0	3	2	2	0	5	
Wheaton.....	5	10	15	13	7	13	10	16	1	91	1	0	0	0	1	5	5	3	15	
Winnebago.....	7	14	4	21	8	19	10	10	0	93	1	1	1	1	0	15	11	8	38	

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

No. 40.—WINDS—NUMBER OF OBSERVATIONS, MARCH, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MISSOURI—																				
St. Louis, [Engelmann] ..	2	0	16	23	5	19	26	2	0	93	0	0	3	11	14	25	32	16	104	
St. Louis, [Fendler] .....	5	0	6	40	29	8	18	31	11	148	0	0	3	11	14	25	32	16	104	
WISCONSIN—																				
Appleton .....	12	23	0	6	10	29	0	7	0	93	11	22	5	3	4	21	3	7	76	
Bay City .....	2	42	6	1	10	13	2	17	0	93	1	6	3	0	0	13	2	6	31	
Bayfield .....	0	28	0	2	0	11	3	16	2	62	1	15	0	1	0	22	3	11	53	
Beloit .....	5	3	14	13	11	14	28	5	0	93	0	0	1	0	0	1	0	0	2	
Kenosha .....	3	8	12	10	11	15	23	4	3	89	0	0	0	0	1	0	2	0	3	
Madison .....	3	0	1	18	13	18	9	23	0	91	0	0	0	0	1	0	2	0	3	
Manitowoc .....	11	9	9	15	11	10	12	16	0	93	1	0	0	0	1	4	12	4	22	
Milwaukee, [Pomeroy] ..	2	19	6	27	3	17	6	13	0	93	5	7	3	15	4	15	16	13	78	
Milwaukee, [Winkler] ..	4	24	3	14	2	13	13	20	0	93	0	3	1	0	0	2	0	0	6	
Platteville .....	2	0	11	24	4	9	11	23	0	93	0	3	1	0	0	2	0	0	6	
Waukesha .....	1	15	5	1	2	1	14	8	11	58	0	3	1	0	0	2	0	0	6	
Wausau .....	10	11	21	4	4	11	7	16	0	84	8	2	4	2	1	1	4	7	29	
IOWA—																				
Bellevue .....	3	7	19	8	5	14	17	19	0	92	0	0	0	1	0	3	1	1	6	
Border Plains .....	0	4	2	27	7	3	0	46	1	93	0	0	0	1	0	3	1	1	6	
Burlington .....	0	6	3	13	7	24	7	31	1	92	6	3	0	1	2	12	4	0	28	
Dubuque .....	13	2	1	18	13	8	10	22	6	93	3	2	0	8	5	8	8	18	52	
Fairfield .....	0	7	0	29	3	15	11	20	8	93	0	0	0	0	0	0	0	0	0	
Fort Madison .....	1	10	1	27	0	23	5	26	0	93	8	3	2	5	12	14	20	0	73	
Muscatine .....	6	5	5	19	9	17	19	13	0	93	0	0	0	1	1	17	7	0	28	
Pleasant Plain .....	1	12	1	20	13	26	5	14	1	93	0	1	0	4	3	10	10	8	36	
Rossville .....	10	0	14	0	9	0	17	17	2	93	0	0	0	0	0	0	0	0	0	
MINNESOTA—																				
Beaver Bay, [Clark] .....	18	24	1	0	2	8	16	11	13	93	9	8	0	1	3	13	9	0	52	
Burlington .....	7	9	28	5	8	0	10	11	0	84	8	0	14	5	4	6	20	5	62	
Forest City .....	9	6	16	0	0	2	15	8	25	93	4	11	7	0	3	0	3	3	31	
Hazlewood .....	3	17	8	1	16	5	7	36	0	93	4	4	8	4	3	3	5	5	36	
Princeton .....	19	11	12	9	4	3	0	23	3	93	4	4	8	4	3	3	5	5	36	
NEBRASKA—																				
Bellevue .....	29	8	2	7	19	3	5	8	1	92	16	0	1	4	7	7	4	2	41	
Brownville .....	0	3	1	21	1	18	5	44	0	93	5	1	0	7	0	13	4	19	58	
Elkhorn .....	12	16	1	18	6	8	0	26	0	93	0	0	0	0	1	1	0	0	2	
Omaha, [Bain] .....	20	7	1	12	14	11	12	16	0	93	1	1	0	0	1	1	3	0	7	
KANSAS—																				
Burlingame .....	18	1	3	11	24	0	2	16	12	93	0	0	0	0	0	0	0	0	0	
Lawrence .....	23	3	0	2	39	2	11	9	2	91	0	0	0	0	0	0	0	0	0	
Manhattan .....	14	4	3	4	15	19	3	17	14	93	15	0	0	1	7	29	11	16	79	
Nescho Falls .....	2	4	2	14	13	21	0	26	0	93	0	0	0	0	0	0	0	0	0	
MEXICO—																				
Cordova .....	2	14	2	2	1	8	2	0	0	31	0	0	0	0	0	0	0	0	0	
Minatitlan .....	4	17	0	0	4	22	2	2	36	93	0	0	0	0	0	0	0	0	0	
CALIFORNIA—																				
Marysville .....	19	0	0	21	28	16	0	9	0	93	0	0	0	0	0	10	16	4	37	
Sacramento .....	26	3	0	15	12	14	12	0	0	93	0	0	7	0	0	10	16	4	37	
San Francisco .....	22	1	0	0	7	8	13	14	28	93	5	0	0	0	1	7	22	14	40	
WEST INDIES—																				
Nassau, Bahamas .....	2	6	5	5	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	
St. George's, Bermuda ..	19	16	6	7	15	25	13	23	0	124	0	0	0	0	0	0	0	0	0	
CENTRAL AMERICA—																				
Guatemala .....	1	36	0	0	0	55	0	5	27	124	0	0	0	0	0	0	0	0	0	
SOUTH AMERICA—																				
Catharina Sophia, Surinam	5	36	11	12	1	3	0	1	0	69	0	0	0	0	0	0	0	0	0	
Chanarcillo, Chili .....	1	22	3	12	8	86	1	5	1	139	0	0	0	0	0	0	0	0	0	
EASTERN CONTINENT—																				
Jerusalem, Palestine .....	0	1	1	11	0	1	25	19	35	93	0	0	0	0	0	0	0	0	0	



## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Halifax.....	3	3	0	3	0	0	3	12	0	24	—	—	—	—	—	—	—	—	—	
Red River Settlement.....	16	3	3	1	16	7	5	17	20	88	0	1	0	6	0	2	1	14	24	
Rigolet.....	23	24	5	0	0	2	0	0	6	60	—	—	—	—	—	—	—	—	—	
St. John's.....	15	5	0	4	4	12	12	38	0	90	12	7	0	2	6	8	12	34	80	
St. Martin.....	2	16	0	12	1	23	9	27	0	90	—	—	—	—	—	—	—	—	—	
Stanbridge.....	8	11	5	18	7	4	16	17	4	90	—	—	—	—	—	—	—	—	—	
Toronto.....	1	21	5	16	3	15	5	22	2	90	—	—	—	—	—	—	—	—	—	
Windsor.....	14	2	3	6	2	10	11	17	11	76	—	—	—	—	—	—	—	—	—	
Wolfville.....	8	6	2	6	5	5	13	27	0	72	5	6	2	5	4	4	4	23	53	
MAINE—																				
Cornish.....	5	8	9	6	6	7	25	24	0	90	1	0	0	0	0	2	1	4	8	
Cornishville.....	10	2	2	8	12	5	6	45	0	90	0	0	0	0	0	0	0	2	2	
Dexter.....	5	2	0	14	9	1	1	57	1	90	0	0	0	0	0	0	0	5	5	
Gardiner.....	4	5	2	12	0	9	2	42	12	88	1	1	0	2	2	5	2	16	29	
Lisbon.....	4	9	7	5	11	2	9	43	0	90	2	3	6	4	6	2	5	28	56	
Perry.....	5	3	12	5	5	11	4	45	0	90	7	2	0	0	0	4	2	17	32	
Portland.....	12	14	3	11	9	2	14	24	0	89	3	2	1	1	3	1	7	11	29	
Steuben.....	5	16	2	10	2	17	1	35	2	90	3	5	1	0	0	10	9	10	38	
NEW HAMPSHIRE—																				
Shelburne.....	0	0	19	0	0	0	55	0	14	88	3	0	4	4	0	1	21	24	57	
Stratford.....	2	10	15	4	3	13	19	13	11	90	2	0	0	1	0	4	15	9	31	
VERMONT—																				
Brandon.....	25	0	3	9	13	1	10	22	7	90	2	0	0	3	3	5	2	31	46	
Burlington.....	21	4	1	2	14	4	12	31	0	89	—	—	—	—	—	—	—	—	—	
Craftsbury.....	4	12	3	5	14	8	10	28	6	90	3	1	0	1	1	4	15	18	43	
Lunenburg.....	0	0	0	0	10	2	33	15	0	60	—	—	—	—	—	—	—	—	—	
Rupert.....	—	—	—	—	—	—	—	—	—	—	10	0	8	3	4	21	24	2	73	
St. Johnsbury.....	24	3	1	1	18	1	16	25	1	90	4	2	1	1	5	0	18	2	33	
MASSACHUSETTS—																				
Amherst.....	1	5	6	10	3	6	7	48	0	86	0	3	2	0	1	1	9	15	31	
Boston.....	4	9	13	1	2	0	11	12	0	52	1	0	9	1	1	5	4	1	22	
Bridgewater.....	7	16	11	7	3	5	23	17	1	90	2	5	4	2	2	7	16	10	48	
Cambridge.....	3	8	4	4	2	5	11	10	9	56	—	—	—	—	—	—	—	—	—	
Florida.....	3	4	0	12	0	8	27	36	0	90	0	4	0	14	0	5	27	31	81	
Lawrence.....	1	16	2	10	1	4	2	53	0	89	—	—	—	—	—	—	—	—	—	
Mendon.....	0	26	5	0	1	15	1	42	0	90	0	27	5	0	0	16	0	36	84	
Nantucket.....	8	16	3	9	4	17	9	21	2	89	—	—	—	—	—	—	—	—	—	
New Bedford.....	4	16	0	11	5	14	8	33	1	90	3	2	0	0	1	1	7	12	26	
Richmond.....	0	6	2	18	0	2	0	62	0	90	0	10	0	14	1	5	3	27	60	
Westfield.....	5	13	5	8	1	10	21	27	0	90	0	0	0	0	0	1	1	1	3	
Williamstown.....	1	7	21	0	1	5	29	16	9	89	4	1	10	3	0	13	7	2	40	
Worcester.....	8	17	4	13	3	1	3	40	0	87	2	1	0	1	1	1	2	20	28	
RHODE ISLAND—																				
Providence.....	8	17	4	8	4	10	0	39	0	90	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Columbia.....	1	17	1	2	2	5	0	51	11	90	5	10	1	6	0	6	2	25	51	
Middletown.....	10	9	1	7	2	13	8	25	17	90	0	2	0	1	1	8	17	19	48	
Pomfret.....	5	20	0	9	3	8	0	45	0	90	0	10	0	7	3	7	2	33	62	
Saybrook.....	7	10	7	9	6	10	13	21	8	89	2	2	1	3	0	1	20	12	41	
Wallingford.....	14	7	2	13	4	12	2	36	0	90	1	0	1	4	0	3	24	12	45	
NEW YORK—																				
Baldwinsville.....	10	12	13	3	1	5	16	29	0	89	5	1	3	2	2	4	28	19	64	
Bellport.....	4	10	4	13	5	20	4	29	0	89	0	3	2	7	2	5	2	4	25	
Beverly.....	8	15	0	5	4	42	2	10	0	86	0	8	5	5	4	15	22	2	61	
Cazenovia.....	6	2	3	6	2	6	16	31	0	72	1	2	1	3	0	7	23	16	53	
Eden.....	20	2	11	4	13	6	24	7	1	88	0	0	1	1	2	1	34	1	40	
Morrisania.....	6	15	4	13	2	12	28	10	0	90	6	9	1	8	1	11	16	8	60	
Nichols.....	10	2	7	14	13	1	8	35	0	90	10	1	2	6	5	4	6	38	72	
Ogdensburg.....	4	2	0	0	1	9	1	1	0	18	0	0	0	0	0	0	2	0	8	
Oswego.....	15	9	11	3	6	2	31	5	7	89	—	—	—	—	—	—	—	—	—	
Penn Yan.....	18	1	0	1	17	24	28	1	0	90	—	—	—	—	—	—	—	—	—	
Rochester, [Dewey].....	0	4	5	4	1	8	32	6	0	60	0	0	4	2	1	1	45	3	56	

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Saratoga.....	1	30	1	4	1	16	1	16	0	70	1	24	2	7	0	19	2	15	70	
Wampsville.....	0	2	7	12	4	3	59	8	0	90	0	10	3	3	4	46	4	0	70	
NEW JERSEY—																				
Freehold.....	9	11	26	8	4	11	0	3	0	72										
Lambertville.....	6	14	4	11	6	8	8	27	0	82										
Newark.....	2	9	6	11	2	8	5	18	0	61										
PENNSYLVANIA—																				
Bellefonte.....	0	8	2	1	7	2	64	6	0	90	7	12	15	12	3	0	35	3	87	
Berwick.....	4	3	30	1	4	3	40	5	0	90										
Bedford.....	2	2	12	2	4	19	29	0	76	0	1	5	7	2	0	23	20	58		
Cannonsburg.....	3	1	22	1	1	9	40	12	1	90										
Carlisle.....	1	12	7	9	0	17	10	16	15	87	0	11	6	7	0	17	7	11	54	
Chambersburg.....	6	2	20	2	6	3	27	1	23	90	5	1	7	0	2	10	38	7	70	
Easton.....	2	8	2	22	2	8	3	42	1	90										
Fleming.....	1	6	14	18	0	11	12	28	0	90	0	0	3	10	0	4	24	27	68	
Gettysburg.....	4	10	4	15	20	9	17	8	90	2	6	1	2	1	10	27	23	72		
Harrisburg, [Heisely].....	5	2	11	16	0	11	29	7	90	0	0	1	1	5	0	9	12	28		
Harrisburg, [Hickok].....	12	7	15	4	9	33	4	0	90	1	0	3	0	0	1	5	0	10		
Lewisburg.....	8	4	1	6	13	5	27	8	0	72	0	2	0	1	0	14	5	22		
Linden.....	1	5	16	0	3	0	36	1	2	64										
Morrisville.....	3	7	11	12	5	16	10	20	1	90	0	0	0	10	0	19	18	13	72	
Mount Joy.....	0	0	0	16	0	3	1	22	0	42	1	0	2	4	0	6	8	6	27	
Norristown.....	3	5	23	5	0	5	36	1	0	78	0	0	9	1	0	10	36	2	64	
North Whitehall.....	0	8	7	0	12	10	21	28	90	0	3	7	0	1	5	13	10	39		
Philadelphia.....	1	20	2	5	12	17	21	0	90	0	4	0	0	1	7	12	3	27		
Pittsburg, [Marine Hosp.].....	4	4	10	9	7	16	17	23	0	90	2	11	9	11	1	8	8	1	51	
Pocopson.....	6	7	10	6	5	17	26	8	0	85	4	1	0	1	1	8	15	4	34	
Shamokin.....	0	2	37	4	5	0	41	1	0	90	0	0	1	0	0	3	65	1	70	
Somerset.....	0	3	9	1	10	29	8	24	90	1	1	2	1	0	5	41	6	57		
Tarentum.....	2	9	3	3	1	15	15	9	30	87	1	2	3	1	0	10	33	8	58	
West Haverford.....	0	9	3	5	8	8	8	17	2	60	1	0	0	2	2	3	16	16	42	
Worthington.....	0	3	11	0	1	2	9	0	35											
MARYLAND—																				
Annapolis.....	2	21	2	8	13	18	4	16	7	91	0	0	0	0	0	20	0	2	24	
Baltimore.....	13	3	12	11	6	7	15	11	2	80	0	0	2	0	0	0	0	0	2	
Bladensburg.....	0	10	5	5	2	16	5	18	0	61										
Chestertown.....	0	0	0	3	0	12	1	13	0	29	0	0	0	1	0	3	2	5	11	
Frederick.....	5	17	0	3	6	9	19	11	19	89	1	1	0	1	0	0	40	0	43	
Leitersburg.....	2	6	4	5	8	22	25	13	5	90	2	1	4	2	3	5	37	19	73	
Leonardtown (a).....	17	7	4	15	5	14	14	13	1	90	0	0	4	8	0	2	8	0	31	
Sykesville.....	6	11	6	8	16	16	19	6	0	88	0	4	2	9	0	11	48	2	76	
DISTRICT OF COLUMBIA—																				
Washington.....	2	11	6	2	16	6	13	15	18	89	0	0	0	0	0	0	4	0	4	
VIRGINIA—																				
Crichton's Store.....	12	5	0	2	11	39	12	9	0	90	0	0	0	0	0	14	1	0	15	
Cross Creek.....											7	0	2	0	14	9	29	0	70	
Kanawha.....	13	0	0	0	29	4	5	8	15	74	0	0	1	0	0	9	15	4	29	
Lewinsville.....	3	12	4	18	4	10	17	22	0	90										
Lewisburg.....	6	0	1	0	8	34	23	18	0	90										
Montross.....	5	7	10	2	8	12	19	6	21	90	0	3	3	1	2	10	16	1	36	
Mont View.....	9	8	4	4	10	26	23	5	0	90	0	0	7	3	5	7	18	5	57	
Point Pleasant.....	0	0	35	0	0	0	55	0	0	90	0	0	54	0	0	0	14	0	68	
Poplar Grove.....	0	1	7	4	0	9	14	27	28	90	0	1	2	0	1	18	22	12	56	
Portsmouth.....	1	22	4	7	1	25	11	19	0	90										
Rougemon.....	3	15	4	1	16	12	22	7	4	84	0	3	0	0	4	3	33	4	47	
Smithfield.....	6	19	4	3	16	25	2	7	0	82	0	8	0	3	2	4	28	0	54	
Stribling Springs.....	4	4	0	1	1	50	0	30	0	90	0	1	0	3	0	48	0	7	59	
The Plains.....	11	4	0	7	1	27	15	25	0	90										
Winchester.....	0	0	0	0	0	1	19	10	59	89	0	0	2	0	0	0	3	2	7	

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## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NORTH CAROLINA—																				
Chapel Hill .....	14	14	1	2	5	26	18	10	0	90	5	4	0	0	1	32	9	3	54	
Davidson College .....	0	13	1	4	1	51	9	5	0	84	0	5	0	0	0	47	6	7	65	
Murfreesborough .....	2	12	3	12	1	30	7	9	13	89	2	3	1	3	0	12	34	3	58	
SOUTH CAROLINA—																				
Aiken .....	6	10	7	3	5	10	31	1	0	73										
All Saints .....	8	3	4	1	6	36	21	9	0	88	3	2	0	0	1	9	35	5	55	
Charleston .....	3	3	0	2	3	13	0	6	0	30										
Columbia, [Barton] .....	0	9	6	2	14	11	25	21	2	99	1	0	1	0	0	5	42	4	53	
Columbia, [White] .....	3	6	1	2	6	14	19	9	30	90	0	0	0	0	0	0	10	0	10	
St. John's .....	2	7	1	8	7	26	8	16	0	75	1	1	0	0	1	0	20	16	39	
GEORGIA—																				
Athens .....	4	5	5	0	1	4	32	23	15	89	0	0	0	0	0	3	21	5	29	
Atlanta .....	3	4	4	4	6	25	15	29	0	90										
Augusta .....	1	0	3	8	6	40	25	0	0	89	1	1	2	1	2	44	1	1	53	
Savannah .....	5	8	4	3	23	30	10	6	0	89	0	0	0	0	0	2	3	1	6	
Sparta .....	3	3	2	7	5	37	10	23	0	90	1	2	0	1	1	14	15	0	43	
Thomaston .....	5	4	8	7	3	38	6	19	0	90										
Thomson .....	0	8	0	7	1	40	3	16	7	82	0	0	0	0	0	2	0	1	3	
Whitemarsh Island .....	2	11	0	2	14	14	17	19	8	87	3	2	1	0	1	5	9	12	33	
FLORIDA—																				
Alligator .....	3	8	4	4	6	27	8	0	26	90										
Atsena .....	10	6	9	7	7	24	12	11	4	90	2	2	8	2	4	15	9	5	47	
Belair .....	21	18	8	26	1	0	0	1	15	90	1	0	0	3	1	28	23	3	59	
Gainesville .....	0	15	0	11	1	29	5	28	0	89	0	0	0	0	3	4	1	0	8	
Jacksonville .....	0	10	0	5	4	52	3	13	0	87	0	3	1	1	0	26	4	2	37	
Micanopy .....	4	3	2	14	6	8	17	10	21	85	0	0	0	0	0	0	5	4	0	
Salt Ponds .....	6	5	8	22	11	2	4	2	0	60										
Seville .....	0	7	0	2	2	0	0	1	8	20	0	3	0	1	1	2	1	0	8	
St. Augustine .....	6	26	4	22	1	19	0	12	0	90	5	20	2	13	0	8	0	1	49	
ALABAMA—																				
Carlowville .....	7	8	6	22	24	14	5	4	0	90	3	1	1	5	3	11	13	8	43	
Greene Springs .....	2	2	5	25	4	8	22	4	12	84	2	1	0	0	0	21	9	4	37	
Greensborough .....	5	0	1	13	9	1	2	13	0	44	0	0	0	1	1	0	6	4	18	
Montgomery .....	0	1	0	1	3	0	1	6	0	12	3	0	0	0	1	25	18	8	55	
Moulton .....	12	1	1	13	14	16	4	13	16	90	1	1	0	1	8	20	15	10	56	
Selma .....	3	4	1	6	1	36	0	39	0	90	2	1	1	2	0	15	11	24	56	
MISSISSIPPI—																				
Columbus .....	4	0	0	4	37	2	5	32	0	90	0	0	0	1	10	12	27	3	53	
Natchez .....	21	11	0	9	19	22	1	7	0	90	0	0	0	0	0	14	9	1	24	
Paulding .....	0	13	5	4	3	32	8	18	0	83	0	3	0	3	3	40	9	9	67	
LOUISIANA—																				
Black River (a) .....	17	4	0	12	35	5	2	14	1	90	0	0	0	0	24	23	2	0	55	
New Orleans .....	0	14	0	28	0	18	0	30	0	90										
TEXAS—																				
Austin, [Palm] .....	18	3	7	8	18	28	0	8	0	90	1	0	1	1	3	14	9	1	30	
Austin, [Van Nostrand] .....	17	10	4	9	36	3	0	8	2	89	1	0	0	1	30	31	4	0	67	
Larissa .....	23	2	3	2	42	6	5	5	0	88	16	7	8	1	2	1	3	3	41	
New Braunfels .....	17	3	28	21	12	1	3	5	0	90										
Northern ties of counties .....	7	14	3	9	28	42	7	22	0	132										
Sisterdale .....	9	5	13	22	25	3	2	9	2	90	0	0	0	0	3	0	1	0	4	
Union Hill .....	29	3	3	0	49	1	4	0	1	90	16	0	1	1	42	4	8	0	72	
Washington .....	0	0	0	4	42	0	12	11	20	89	0	0	0	0	18	2	0	0	20	
Webberville (a) .....	26	10	5	5	33	3	0	0	8	90	0	0	0	0	1	0	4	0	5	
TENNESSEE—																				
Glenwood .....	4	11	5	15	24	7	3	16	5	90	1	3	0	3	9	17	28	20	81	
La Grange .....	2	5	1	6	7	31	7	18	7	84	0	1	0	1	8	26	8	10	54	
Memphis .....	3	2	3	17	20	11	13	20	1	90										
KENTUCKY—																				
Bardstown .....	9	8	3	4	11	27	16	12	0	90	4	1	2	3	4	16	31	0	70	

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
Kentucky—Continued.																				
Danville.....	2	6	7	0	8	28	12	12	0	75	0	2	2	3	1	23	23	8	62	
Louisville.....	8	13	4	4	23	15	13	10	0	89	0	4	1	0	1	21	14	9	50	
Paris.....	1	1	7	1	5	26	24	19	0	84	1	3	5	0	2	12	15	12	50	
Springdale.....	0	25	4	1	11	26	9	2	12	90										
Ohio—																				
Avon.....	5	16	1	8	9	8	24	19	0	90	3	1	0	5	0	9	28	20	66	
Bellefontaine.....	0	11	2	12	0	25	17	16	0	83	0	4	11	10	0	38	13	9	74	
Bowling Green.....	1	18	11	2	1	26	16	5	10	90	2	1	2	2	0	12	13	7	39	
Cincinnati, [Harper].....	13	4	11	3	11	12	32	4	0	90	0	0	0	0	0	2	1	0	3	
Cincinnati, [Phillips].....	2	6	2	1	7	12	20	19	21	90	0	4	0	1	0	13	25	16	59	
Cleveland.....	11	19	5	6	9	11	20	5	2	89	0	0	0	0	1	1	15	1	18	
College Hill.....	3	6	4	2	3	18	33	29	1	90	5	3	2	1	1	13	27	13	65	
Hillsborough.....	0	9	1	23	2	23	13	18	0	89	0	0	0	0	0	0	0	2	2	
Hiram.....	9	8	3	8	5	9	16	20	1	79	1	0	0	0	0	3	11	3	18	
Hudson.....	1	10	10	7	4	7	13	13	0	65										
Kelley's Island.....	3	28	7	5	4	16	9	17	1	90	0	1	0	0	0	2	2	0	5	
Madison, [Atkins].....	2	15	1	3	2	6	29	10	21	89	0	0	0	0	0	1	17	1	19	
Madison, [King].....	4	20	1	10	3	16	13	16	2	85	3	3	0	1	1	27	26	11	72	
Montville.....	5	13	0	17	5	30	2	18	0	90	1	2	1	0	0	21	4	9	38	
Mount Union.....	2	5	1	2	1	26	10	11	17	75	2	2	0	1	1	15	13	4	38	
New Lisbon.....	0	1	1	13	8	37	9	21	0	90	2	0	1	10	5	29	5	16	68	
Northwood.....	1	4	1	15	3	27	16	23	0	90	0	0	1	6	0	15	20	4	46	
Portsmouth.....	0	3	1	2	0	56	14	10	0	86										
Rockport.....	17	12	12	4	4	12	22	7	0	90										
Savannah.....	3	10	0	13	1	30	24	9	0	90	1	4	0	5	0	34	20	14	78	
Troy.....	3	1	5	0	0	0	71	1	9	90	0	0	2	0	0	0	72	0	74	
Urbana.....	2	11	2	16	4	15	20	5	11	86	3	4	1	0	2	20	35	5	70	
Welchfield.....	7	7	0	24	5	21	9	17	0	90	0	0	0	0	0	3	0	1	4	
Westerville.....	9	7	1	0	13	21	30	8	1	90	7	4	1	0	7	20	29	5	73	
Michigan—																				
Battle Creek.....	7	5	12	11	7	9	23	14	2	90	0	2	3	0	0	23	31	11	70	
Detroit.....	2	16	7	20	2	31	5	7	0	90	1	2	1	13	2	28	32	11	90	
Grand Rapids.....	5	11	21	5	4	14	13	14	0	90	3	3	10	3	1	18	37	8	83	
Marquette.....	2	10	21	8	2	5	22	20	0	90										
Monroe, [Whelpley].....	0	6	10	31	1	24	9	9	0	90	0	6	10	28	0	21	9	8	82	
New Buffalo.....											1	1	8	1	1	12	28	15	67	
Ottawa Point (a).....	10	40	10	9	5	20	7	19	0	120	1	17	17	3	1	0	1	0	40	
Port Huron.....	32	3	0	6	8	15	10	9	1	84	0	0	0	0	0	14	4	9	27	
Thunder Bay Island.....	18	9	12	23	7	10	4	25	12	120	5	4	8	7	5	2	7	11	49	
Ypsilanti.....	2	10	15	13	1	24	14	11	0	90	1	2	4	8	0	13	25	12	65	
Indiana—																				
Aurora.....	1	2	1	0	4	6	11	2	0	30										
Cannelton.....	1	6	14	13	12	14	13	14	3	90	0	1	5	1	3	19	13	7	49	
Logansport.....	4	14	6	8	0	23	14	21	0	90	3	6	5	3	0	15	25	23	80	
Mishawaka.....	0	8	5	15	4	13	24	12	0	81	0	7	6	15	5	13	23	12	81	
New Harmony.....	6	5	7	12	14	17	14	10	0	85	1	0	1	0	1	0	3	2	8	
Richmond, [Austin].....	3	9	5	2	11	9	11	2	0	52	4	4	1	1	3	5	20	2	41	
Richmond, [Moore].....	0	7	2	13	4	13	31	8	9	87										
Illinois—																				
Augusta.....	4	17	3	13	5	11	13	23	1	90	1	6	2	1	2	7	11	18	48	
Aurora.....	6	2	4	10	9	4	24	7	0	90	3	3	3	0	1	12	25	4	51	
Batavia, [Capon].....	2	25	7	10	6	8	20	12	0	90										
Batavia, [Mead].....	2	38	1	9	0	10	15	15	0	90	4	15	1	4	0	22	16	18	80	
Edgington.....	2	26	2	10	1	7	13	29	0	90	0	12	0	3	0	27	16	22	80	
Elgin.....	3	23	7	12	6	5	18	14	2	90	1	2	0	0	0	2	6	0	11	
Manchester.....	10	13	4	2	22	7	20	12	0	90	9	2	2	1	17	4	26	7	68	
Marengo.....	0	8	25	15	5	33	2	2	0	90	0	0	2	0	0	1	1	0	4	

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NAME OF STATION.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or varia- ble.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>ILLINOIS—Continued.</b>																			
Ottawa .....	3	26	3	9	0	14	12	17	0	84	4	0	3	0	1	13	9	9	39
Pekin.....	7	2	19	3	12	3	16	3	0	65	2	1	4	2	2	11	23	0	4
Peoria.....	1	25	6	1	9	3	42	3	0	90	0	0	0	0	0	1	5	1	7
Riley.....	3	8	15	5	3	9	18	25	1	87	0	1	0	1	0	0	0	0	2
Sandwich.....	7	22	2	11	6	9	5	28	0	90	0	1	0	3	0	3	44	10	61
Upper Alton.....	4	13	1	3	3	25	5	36	0	90	3	13	1	3	3	25	5	38	91
West Salem.....	6	11	2	9	14	8	6	19	15	90	0	0	0	0	0	15	25	0	40
West Urbana.....	14	10	5	7	12	17	9	16	0	90	0	5	2	4	3	0	0	0	14
Wheaton.....	5	23	9	8	2	9	15	16	1	88	0	0	0	0	0	2	6	5	13
Winnebago.....	6	21	14	9	2	9	20	9	0	90	2	0	0	0	1	2	25	10	40
<b>MISSOURI—</b>																			
St. Louis, [Engelmann]..	7	6	9	16	6	11	29	6	0	90	---	---	---	---	---	---	---	---	---
St. Louis, [Fendler]....	13	8	16	32	15	24	8	64	11	191	3	8	5	11	5	40	28	54	154
<b>WISCONSIN--</b>																			
Appleton.....	11	21	6	11	9	23	4	5	0	90	5	10	3	3	5	14	5	9	54
Bay City.....	4	33	9	0	24	7	9	4	0	90	2	3	1	0	0	3	2	3	14
Beloit.....	11	14	14	10	3	5	29	4	0	90	---	---	---	---	---	---	---	---	---
Kenosha.....	4	9	21	8	6	8	21	3	3	83	---	---	---	---	---	---	---	---	---
Madison.....	0	4	1	19	3	28	5	25	2	87	---	---	---	---	---	---	---	---	---
Manitowoc.....	10	12	8	10	2	11	18	19	0	90	0	1	0	0	0	2	11	5	19
Milwaukee, [Pomeroy] ..	3	38	0	8	0	21	4	16	0	90	---	---	---	---	---	---	---	---	---
Milwaukee, [Winkler] .-	1	33	9	7	0	6	13	21	0	90	---	---	---	---	---	---	---	---	---
New Danemora.....	0	7	2	4	0	3	4	12	0	32	---	---	---	---	---	---	---	---	---
Platteville.....	7	10	14	14	0	7	16	22	0	90	3	7	10	8	0	10	19	15	72
Wausau.....	3	8	14	12	5	15	16	5	0	78	0	1	6	4	3	1	6	1	22
<b>IOWA--</b>																			
Bellevue.....	5	16	9	3	1	5	23	22	0	84	---	---	---	---	---	---	---	---	---
Border Plains.....	1	10	5	22	2	4	3	43	0	90	---	---	---	---	---	---	---	---	---
Burlington.....	3	14	1	13	1	13	0	34	0	79	1	5	1	2	0	6	11	11	37
Dubuque.....	21	6	6	7	3	4	7	26	10	90	7	3	2	5	1	1	8	29	56
Fairfield.....	3	14	0	16	0	8	1	30	17	89	---	---	---	---	---	---	---	---	---
Fort Madison.....	2	15	2	14	3	13	1	40	0	90	6	2	1	6	5	14			

## No. 41.—WINDS—NUMBER OF OBSERVATIONS, APRIL, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.																
	North.	Between north and east.		East.	Between south and east.		South.	Between south and west.		West.	Between north and west.		Calm or variable.	Total.	North.	Between north and east.		East.	Between south and east.		South.	Between south and west.		West.	Between north and west.		Total.
WEST INDIES --Continued.																											
St. George's, Bermuda....	10	4	6	2	3	34	31	25	0	120	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Turk's Island .....	2	2	2	16	2	0	0	0	6	39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CENTRAL AMERICA--																											
Guatemala .....	2	34	0	1	0	43	0	5	34	119	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SOUTH AMERICA--																											
Catharina Sophia, Surinam	3	31	13	16	3	0	0	0	0	66	0	33	22	4	0	0	0	0	0	0	0	0	0	0	0	0	59



## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Red River Settlement.....	11	0	2	5	38	7	2	7	9	81	7	0	0	0	17	5	6	4	39	
Rigolet.....	9	10	1	0	7	0	1	37	2	62										
St. John's.....	9	5	0	8	4	13	15	39	0	93	11	4	0	7	2	8	19	28	79	
St. Martin.....	1	17	0	37	3	31	0	4	0	93										
Stanbridge.....	13	9	2	31	25	6	2	1	4	93										
Toronto.....	1	25	11	17	2	10	0	18	9	93										
Windsor.....	16	3	0	2	13	14	10	3	19	80	0	0	0	0	0	0	1	0	1	
Wolfville.....	0	0	8	1	8	25	18	5	0	65	0	0	1	0	7	17	9	5	39	
MAINE—																				
Cornish.....	6	16	13	9	13	20	11	5	0	93	0	0	0	0	0	5	0	1	6	
Cornishville.....	2	1	10	5	26	15	12	21	0	93										
Dexter.....	6	5	5	16	12	13	3	28	5	93	0	1	0	0	0	0	1	7	9	
Gardiner.....	0	19	9	25	3	22	2	10	3	93	2	3	0	2	3	13	4	4	31	
Lisbon.....	4	11	9	8	41	7	0	13	0	93	0	5	4	9	10	3	16	6	53	
Newcastle.....	1	5	2	47	11	13	3	8	0	90										
North Belgrade.....	4	10	9	14	13	1	3	6	0	60										
Norway.....	5	7	1	26	17	25	1	11	0	93										
Perry.....	1	19	0	14	14	25	7	13	0	93	2	3	0	2	3	9	3	5	27	
Portland.....	5	8	40	6	3	2	0	4	0	63										
Portland.....	4	12	13	11	22	16	4	8	0	90	0	3	0	3	2	3	7	4	22	
Steuben.....	2	16	2	12	2	43	1	13	2	93	2	7	1	1	1	8	4	7	31	
Topsham.....	1	7	5	16	8	8	3	10	0	58										
NEW HAMPSHIRE—																				
Shelburne.....	5	0	32	0	0	0	38	0	14	84	0	0	2	9	1	4	35	8	59	
Stratford.....	2	15	19	1	13	20	11	4	8	93	0	0	0	0	1	4	18	1	24	
Stratham.....	4	21	11	11	6	13	3	9	0	78										
VERMONT—																				
Brandon.....	4	0	1	24	31	5	5	17	3	93	3	0	0	4	4	13	2	10	36	
Burlington.....	14	3	0	3	10	24	1	8	0	63										
Craftsbury.....	4	11	0	9	36	15	8	6	4	93	5	4	0	0	7	17	15	5	48	
Lunenburg.....	0	1	3	8	7	0	12	31	0	62										
Rupert.....											2	3	1	8	3	28	0	1	46	
St. Johnsbury.....	7	1	0	4	45	2	22	12	0	93	0	0	0	0	5	5	14	2	26	
MASSACHUSETTS—																				
Amherst.....	5	10	2	21	18	14	3	16	0	89	0	2	5	3	6	3	8	0	27	
Bridgewater.....	0	27	4	4	3	20	1	0	4	63	1	11	0	3	1	6	0	3	25	
Cambridge.....	4	24	10	9	6	15	4	5	14	91										
Florida.....	0	10	2	17	0	13	30	21	0	93	0	12	0	15	1	11	5	19	63	
Lawrence.....	0	27	2	14	0	30	1	19	0	93										
Mendon.....	0	38	2	0	6	45	0	2	0	93	0	23	0	0	8	32	7	1	71	
Nantucket.....	1	27	5	9	7	30	6	6	2	93										
New Bedford.....	2	28	0	10	3	41	0	5	1	90	0	7	0	7	3	4	4	3	28	
Richmond.....	0	31	0	2	3	32	1	24	0	93	1	21	0	9	0	8	0	3	42	
South Groton.....	0	27	5	16	3	31	0	11	0	93										
Springfield.....	18	3	11	1	25	0	9	2	0	69										
Westfield.....	4	25	4	21	12	5	5	16	0	93	0	0	0	0	0	2	0	0	2	
Williamstown.....	3	8	14	12	6	11	13	6	0	73	0	0	2	0	0	4	0	0	6	
Worcester.....	0	27	5	20	5	20	0	14	0	91	0	0	0	1	0	9	0	3	13	
RHODE ISLAND—																				
Providence.....	2	26	3	11	16	13	4	10	1	86										
CONNECTICUT—																				
Columbia.....	3	19	5	1	8	10	2	19	26	93	1	15	3	3	6	6	0	8	42	
Middletown.....	9	11	1	5	18	17	1	6	25	93	0	0	0	0	0	7	10	0	17	
Pomfret.....	2	31	0	8	24	13	0	15	0	93	0	18	0	5	9	2	5	6	45	
Saybrook.....	1	16	15	19	6	12	5	6	6	86	0	7	0	0	1	4	10	1	23	
Wallingford.....	9	14	1	13	27	17	3	9	0	93	0	5	1	0	2	5	13	0	26	
NEW YORK—																				
Baldwinsville.....	3	2	11	8	14	9	21	25	0	93	0	2	3	3	3	8	26	13	58	
Bellport.....	2	0	11	22	9	30	6	4	0	93	0	2	2	8	2	8	2	1	25	
Beverly.....	5	16	0	16	3	30	1	16	0	87	3	14	1	9	4	13	2	4	50	
Buffalo.....	7	14	1	2	7	22	4	9	0	67										
Cazenovia.....	3	2	3	12	21	14	6	26	1	88	2	1	3	7	8	15	11	13	60	





## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1859.

NAME OF STATION.	SURFACE CURRENT									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
VIRGINIA--Continued.																			
Point Pleasant.....	0	0	58	0	4	0	31	0	0	93	0	0	24	0	0	0	8	0	32
Poplar Grove.....	0	1	19	0	0	0	27	15	31	93	4	2	2	3	0	13	13	6	43
Portsmouth.....	2	36	12	13	1	21	4	4	0	93									
Rougemont.....	19	15	7	4	16	10	11	1	4	87	6	6	0	1	0	0	15	1	29
Smithfield.....	11	23	7	13	21	10	2	6	0	93	7	4	2	2	4	11	8	3	41
Winchester.....	1	4	5	2	1	2	11	0	67	93	0	0	3	0	0	0	2	0	5
NORTH CAROLINA--																			
Chapel Hill.....	20	20	3	2	5	13	24	3	0	90	9	5	1	1	4	13	7	2	42
Davidson College.....	0	42	1	1	0	25	4	0	0	73	0	7	1	1	1	16	3	2	31
Murfreesborough.....	1	12	2	8	4	15	3	3	11	59	3	5	0	0	3	13	3	5	32
Raleigh.....	9	21	9	6	11	11	8	6	0	81									
SOUTH CAROLINA--																			
Aiken.....	4	22	11	1	10	13	1	3	0	65									
All Saints.....	14	14	13	9	21	18	2	1	0	92	3	7	0	0	0	23	14	1	48
Charleston.....	2	14	4	4	2	5	0	0	0	31									
Columbia, [Barton].....	6	9	17	23	11	0	10	8	9	93	3	0	4	3	4	1	27	1	43
Columbia, [White].....	10	11	5	6	9	9	5	7	24	86	0	0	0	3	0	0	0	1	4
St. John's.....	1	15	4	29	2	17	4	13	0	85	2	10	2	0	1	9	8	8	40
GEORGIA--																			
Athens.....	5	26	4	4	1	1	7	20	15	83	0	3	1	2	0	1	6	1	14
Atlanta.....	2	5	25	14	9	6	22	10	0	93									
Augusta.....	13	21	1	25	3	11	4	14	0	92	5	5	0	6	1	20	1	7	45
Clarksville.....	4	1	0	4	1	9	23	12	0	54									
Covington.....	0	14	9	7	5	13	8	12	0	68									
Savannah.....	5	32	10	15	10	15	1	4	0	92	0	0	0	1	0	0	1	1	3
Sparta.....	9	25	10	20	8	12	2	5	0	91	2	7	3	3	2	11	10	12	50
Thomaston.....	15	16	14	16	2	11	8	11	0	93	1	0	0	1	1	0	0	0	3
Thomson.....	2	8	3	6	3	13	5	6	0	46									
Whitemarsh Island.....	5	28	5	13	10	8	9	2	13	93	3	11	2	5	2	4	10	5	42
FLORIDA--																			
Alligator.....	0	17	19	7	2	15	3	3	27	93	3	15	1	3	0	11	5	1	39
Atsena.....	6	31	15	2	1	9	28	1	0	93	5	11	3	0	6	13	2	5	45
Belair.....	4	20	29	9	3	2	2	2	5	76	0	1	4	7	2	20	15	6	55
Gainesville.....	0	46	1	8	2	15	0	17	0	89	0	11	2	2	0	7	0	2	24
Jacksonville.....	1	56	0	7	1	23	0	4	1	93	1	24	0	1	1	16	1	1	45
Micanopy.....	2	27	11	22	1	2	6	6	7	84	0	3	3	0	0	0	1	1	8
St. Augustine.....	0	67	3	7	0	0	1	15	0	93	0	47	2	3	0	0	0	14	66
Salt Ponds.....	12	19	11	9	2	2	2	3	2	62									
Seville.....	0	13	3	1	2	2	2	1	3	27									
ALABAMA--																			
Carlowville.....	3	3	18	6	8	9	42	4	0	93	3	0	5	0	0	0	6	0	14
Greene Springs.....	0	2	13	30	2	7	5	2	23	84	1	2	3	8	3	5	15	6	43
Greensborough.....	13	3	3	42	1	12	5	13	0	92	1	0	0	5	4	11	21	2	44
Montgomery.....	3	6	9	5	0	3	4	10	21	61	7	5	2	0	0	5	11	4	34
Moulton.....	6	5	3	38	1	5	1	14	19	92	2	3	2	12	4	22	4	9	58
Selma.....	5	14	4	40	0	22	1	7	0	93	10	7	2	3	5	7	6	22	62
Uniontown.....	0	0	0	3	4	5	7	5	16	40									
MISSISSIPPI--																			
Columbus.....	12	4	10	19	22	6	8	12	0	93	1	2	2	11	18	6	13	4	57
Natchez.....	14	4	6	23	16	21	5	4	0	93	1	2	0	2	1	17	5	8	36
Paulding.....	0	4	14	24	4	15	10	10	0	89	3	1	4	16	0	19	14	7	70
LOUISIANA--																			
Black River (a).....	13	6	7	35	20	8	1	2	1	93	5	0	4	6	21	12	7	3	58
New Orleans.....	0	34	0	17	0	39	0	3	0	93									
TEXAS--																			
Austin, [Palm].....	1	4	8	26	29	30	3	1	0	93	3	2	2	8	13	19	3	2	52
Austin, [Van Nostrand]..	4	7	4	11	57	2	2	2	4	93	1	3	1	0	33	11	4	2	64
Kaufman.....	4	0	6	16	42	2	4	2	0	76									
Larissa.....	8	2	8	11	57	3	1	1	0	91	19	6	4	0	14	1	2	1	47

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
TEXAS—Continued.																			
New Braunfels.....	5	1	20	39	18	3	3	1	0	90	1	0	8	5	16	0	1	1	32
Northern tier of counties.....	13	7	12	25	65	8	3	0	1	134	0	0	0	0	1	0	0	0	1
Sisterdale.....	2	3	5	44	26	5	1	7	9	93	0	0	0	0	1	0	0	0	1
Union Hill.....	11	2	11	9	56	1	0	1	2	93	4	3	0	4	48	0	7	1	67
Washington.....	7	0	0	1	43	0	0	1	3	55	0	0	0	0	7	0	0	0	7
Webberville.....	7	7	2	7	55	2	0	1	7	88	11	0	0	0	0	0	8	0	24
ARKANSAS—																			
Washington.....	21	0	0	0	17	11	0	2	0	51	—	—	—	—	—	—	—	—	—
TENNESSEE—																			
Glenwood.....	7	8	10	28	19	5	3	7	15	93	3	7	1	4	7	9	40	9	80
La Grange.....	1	10	8	29	5	15	1	3	13	85	1	1	5	13	4	5	10	3	42
Pomona.....	20	1	2	1	0	11	28	3	0	66	—	—	—	—	—	—	—	—	—
Winchester.....	0	2	3	2	24	3	5	13	0	52	—	—	—	—	—	—	—	—	—
KENTUCKY—																			
Bardstown.....	0	19	2	5	36	13	6	5	0	91	3	4	1	4	7	24	19	2	64
Danville.....	7	14	3	3	19	33	3	9	0	91	1	3	0	0	3	29	10	5	51
Louisville.....	4	13	1	24	26	18	3	4	0	93	1	2	0	0	4	24	21	2	54
Millersburg.....	3	2	6	8	6	5	10	4	49	93	0	3	3	2	1	2	37	5	53
Paducah.....	3	0	2	0	7	3	0	6	0	21	—	—	—	—	—	—	—	—	—
Paris.....	5	15	2	11	5	38	3	6	0	85	3	0	0	1	6	7	26	1	44
Springdale.....	1	13	9	13	6	15	0	0	36	93	—	—	—	—	—	—	—	—	—
OHIO—																			
Avon.....	4	33	6	10	13	9	8	7	0	90	1	3	0	0	0	3	27	24	58
Bellefontaine.....	0	21	5	17	2	23	10	6	0	84	0	7	0	5	0	39	12	8	71
Bowling Green.....	1	36	0	4	4	15	4	5	22	91	1	7	1	0	1	13	15	2	40
Cincinnati, [Harper].....	16	5	8	0	25	9	23	7	0	93	—	—	—	—	—	—	—	—	—
Cincinnati, [Phillips].....	0	8	5	0	9	15	6	12	10	65	0	3	0	0	1	20	7	17	48
Cleveland.....	15	17	1	11	10	0	1	2	3	69	0	0	0	1	0	3	7	2	13
College Hill.....	3	12	3	16	9	22	22	6	0	93	3	4	0	4	0	12	20	2	45
College Hill, [Hammit].....	12	3	0	3	13	12	43	7	0	93	—	—	—	—	—	—	—	—	—
Dallasburg.....	15	5	1	1	6	6	23	35	0	92	—	—	—	—	—	—	—	—	—
Freedom.....	20	2	6	0	7	13	25	8	12	93	3	3	6	3	2	6	22	27	72
Hillsborough.....	0	26	0	20	7	29	1	9	0	92	0	1	0	2	0	5	0	1	9
Hillsborough.....	11	14	4	4	10	5	11	0	0	59	—	—	—	—	—	—	—	—	—
Hockingport.....	1	2	0	0	0	6	22	3	5	39	—	—	—	—	—	—	—	—	—
Hudson.....	12	10	12	14	16	15	8	4	0	91	—	—	—	—	—	—	—	—	—
Jackson.....	8	1	2	0	18	0	1	0	41	71	—	—	—	—	—	—	—	—	—
Kelley's Island.....	5	41	5	6	6	14	4	5	7	93	0	0	0	0	0	0	1	0	1
Madison.....	7	10	7	6	21	9	4	1	4	69	—	—	—	—	—	—	—	—	—
Madison, [Atkins].....	11	7	1	4	13	5	11	18	23	93	0	1	0	0	0	4	2	2	9
Madison, [King].....	13	19	0	7	10	14	11	6	11	91	2	1	0	2	3	23	12	7	50
Montville.....	10	6	1	21	11	23	2	14	0	93	0	0	0	0	1	36	2	2	41
Mount Union.....	3	4	1	2	0	26	12	10	21	79	1	0	1	1	0	3	18	3	27
Mount Victory.....	6	3	5	10	4	24	21	13	0	86	—	—	—	—	—	—	—	—	—
Newark.....	23	11	0	3	31	19	1	2	1	91	—	—	—	—	—	—	—	—	—
New Lisbon.....	5	3	8	4	13	32	11	17	0	93	1	1	2	0	4	18	19	11	56
Northwood.....	1	1	1	10	7	18	3	0	0	47	0	0	1	0	1	12	4	4	22
Portsmouth.....	0	37	0	5	0	25	0	1	1	60	0	0	0	1	0	39	1	0	44
Rockport.....	10	20	14	2	4	11	18	14	0	93	—	—	—	—	—	—	—	—	—
Savannah.....	5	2	3	14	2	44	9	14	0	93	4	0	4	2	1	35	7	8	61
Sharonville.....	2	4	3	0	21	12	15	0	0	57	—	—	—	—	—	—	—	—	—
Troy.....	0	1	4	1	0	2	77	1	6	92	0	0	0	2	0	0	42	0	44
Urbana.....	2	6	2	16	12	7	11	6	31	93	2	3	0	3	5	15	36	4	68
Welchfield.....	15	5	1	25	17	19	2	9	0	93	0	0	0	0	0	2	0	0	2
Westerville.....	12	2	0	0	34	22	13	8	1	92	7	1	0	0	11	19	9	9	56
MICHIGAN—																			
Battle Creek.....	2	6	14	15	14	14	9	6	13	93	1	3	4	1	0	9	43	3	64
Detroit.....	2	2	6	19	1	35	26	2	0	93	0	5	9	14	4	22	33	6	93
Grand Rapids.....	3	9	15	7	15	26	13	5	0	93	2	1	9	0	1	12	55	5	85
Lake George.....	4	1	3	8	1	0	5	5	14	47	—	—	—	—	—	—	—	—	—
Lansing.....	4	9	7	7	4	18	5	6	0	60	—	—	—	—	—	—	—	—	—
Marquette.....	1	7	17	16	7	5	12	27	0	92	—	—	—	—	—	—	—	—	—



## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MICHIGAN—Continued.																				
Monroe.....	0	7	0	27	0	29	0	1	0	64	0	6	0	24	0	28	0	2	60	
New Buffalo.....											0	0	8	3	4	22	20	16	73	
Ottawa Point (a).....	4	57	7	9	21	12	4	10	0	124	3	31	7	4	1	3	0	0	49	
Port Huron.....	37	5	0	7	17	12	1	5	0	84	0	0	0	0	0	0	1	0	1	
Thunder Bay Island.....	23	15	12	41	14	4	1	4	10	124	5	1	2	4	4	3	2	4	25	
Ypsilanti.....	2	15	12	18	9	23	5	6	0	90	0	9	5	2	6	17	20	2	61	
INDIANA																				
Aurora.....	3	2	1	1	8	8	2	0	2	27										
Cannelton.....	2	1	10	21	20	13	22	4	0	93	1	1	4	5	8	13	15	5	52	
Greencastle.....	12	4	7	6	21	10	8	3	0	71										
Logansport.....	2	13	15	10	0	23	17	13	0	93	4	21	23	10	5	6	12	4	85	
Mishawaka.....	1	4	11	21	15	16	24	1	0	93	0	2	9	21	16	15	23	1	87	
New Harmony.....	4	0	3	18	26	17	3	16	0	87	0	0	0	0	0	0	1	0	1	
Notre Dame.....	0	2	6	13	0	16	29	4	12	82	0	1	2	4	1	11	14	2	35	
Richmond, [Austin].....	0	17	2	3	17	9	4	7	1	60	1	5	1	0	8	6	20	6	47	
Richmond, [Haines].....	3	3	23	19	10	17	17	1	0	93										
Richmond, [Moore].....	0	9	3	8	9	12	11	2	39	93										
South Bend.....	0	1	5	4	5	11	24	0	0	50										
ILLINOIS																				
Augusta.....	4	16	7	18	17	15	6	6	4	93	1	3	2	9	6	14	11	4	50	
Aurora.....	1	29	2	15	17	13	7	9	0	93	0	7	0	2	8	39	13	4	73	
Batavia, [Capon].....	6	20	5	16	21	10	13	2	0	93										
Batavia, [Mead].....	0	35	1	13	0	36	2	6	0	93	0	10	0	8	0	47	4	9	78	
Bethel.....	0	7	9	7	9	41	14	3	0	90										
Carbon Cliff.....	4	11	22	5	25	8	16	2	0	93										
Dixon.....	7	10	1	3	3	16	11	15	0	66										
Edgington.....	7	15	2	15	8	28	2	16	0	93	6	1	2	8	14	30	7	15	83	
Elgin.....	0	22	10	11	21	8	5	9	7	93	0	0	0	0	0	4	9	2	15	
Manchester.....	5	12	1	7	49	7	7	5	0	93	3	7	2	4	28	6	11	5	66	
Marengo.....	0	6	21	26	8	30	1	1	0	93	0	1	2	1	4	6	4	0	18	
Naperville.....	2	14	3	9	3	17	2	3	0	53										
Ottawa.....	2	26	0	22	2	23	3	11	1	90	1	1	0	3	6	14	7	4	36	
Pekin.....	5	11	9	14	22	7	3	10	3	84	0	1	0	4	13	11	18	6	53	
Peoria.....	9	15	6	8	23	8	24	0	0	93	0	0	0	1	3	2	5	1	12	
Riley.....	4	12	10	12	9	9	21	10	6	93	0	0	0	0	0	2	0	0	2	
Sandwich.....	1	22	6	27	11	12	8	6	0	93	0	0	0	0	0	0	66	0	66	
Tishkila.....	2	9	3	9	4	13	1	13	0	54										
Upper Alton.....	1	8	0	7	2	36	6	31	2	93	1	10	0	7	2	35	7	30	92	
West Salem.....	7	6	6	24	19	6	2	8	15	93	0	0	0	0	3	24	32	0	59	
West Urbana.....	9	12	3	26	11	25	1	6	0	93	2	0	0	0	0	12	2	7	23	
Wheaton.....	2	27	10	4	17	16	5	11	1	93	0	0	0	0	5	7	4	4	20	
Winnebago.....	5	19	5	20	20	11	7	6	0	93	0	0	0	0	2	0	35	4	41	
MISSOURI																				
Boonville.....	2	12	8	5	0	24	1	8	0	60										
Farmington.....	4	0	0	0	19	10	12	12	0	57										
Lexington.....	6	0	4	0	13	7	4	2	0	36										
Richmond.....	6	16	3	22	12	14	3	10	2	88										
St. Louis.....	13	2	20	20	18	4	10	6	0	93										
St. Louis, [Fendler].....	5	10	5	45	29	8	7	28	17	154	4	4	1	8	14	44	28	14	117	
WISCONSIN																				
Appleton.....	4	30	5	3	24	19	1	5	0	91	0	2	0	0	1	8	2	0	13	
Bay City.....	0	49	4	1	8	24	3	4	0	93	5	2	1	0	0	16	1	1	26	
Beloit.....	7	8	11	19	23	7	18	0	0	93	0	0	0	1	0	1	1	0	3	
Delafield.....	6	12	9	5	12	8	8	0	1	61	0	0	0	2	3	7	13	0	25	
Green Bay.....	34	1	3	0	19	4	4	5	23	93	10	0	0	0	16	3	0	2	31	
Kenosha.....	3	15	28	7	19	4	7	3	5	91										
Madison.....	1	2	2	20	4	32	4	27	1	93	0	1	0	0	1	3	0	0	5	
Manitowoc.....	13	14	6	21	21	4	6	8	0	93	0	1	0	1	3	10	12	4	31	
Milwaukee, [Larkin].....	3	33	1	17	7	14	8	8	0	91	0	2	0	6	0	28	14	7	63	

<sup>a</sup> It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

## No. 42.—WINDS—NUMBER OF OBSERVATIONS, MAY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
WISCONSIN—Continued.																			
Milwaukee, [Pomeroy]---	5	40	3	14	0	20	2	9	0	93	---	---	---	---	---	---	---	---	---
Milwaukee, [Winkler]---	0	37	14	10	3	15	5	9	0	93	---	---	---	---	---	---	---	---	---
New Danemora-----	0	8	5	9	3	17	13	5	3	63	5	0	0	0	0	1	3	0	4
Platteville-----	8	6	10	28	10	7	4	20	0	93	7	5	5	20	8	9	4	20	78
Wausau-----	4	1	6	15	11	15	29	5	7	93	2	3	4	4	2	9	16	1	38
IOWA—																			
Bellevue-----	9	8	12	18	17	14	6	7	0	91	---	---	---	---	---	---	---	---	---
Border Plains-----	4	2	2	46	9	5	2	21	2	93	0	0	0	3	4	12	4	0	25
Burlington-----	0	0	2	48	4	18	1	12	0	93	0	3	0	3	0	28	7	10	51
Dubuque-----	1	11	1	14	0	29	3	14	9	91	2	8	0	7	6	19	15	17	74
Fairfield-----	3	0	1	31	0	27	1	13	11	93	0	2	0	0	0	0	0	1	3
Fort Madison-----	1	18	0	24	2	33	1	14	0	93	2	5	1	10	8	20	15	3	64
Muscatine-----	6	11	19	0	21	12	12	4	0	93	0	1	0	2	0	10	0	4	26
Pleasant Plain-----	0	14	0	23	16	14	2	21	3	93	0	0	0	1	1	19	18	7	46
Poultney-----	1	3	7	13	5	5	8	9	10	61	0	0	0	2	1	2	7	3	15
Rossville-----	0	7	14	13	18	0	14	12	3	91	---	---	---	---	---	---	---	---	---
MINNESOTA—																			
Beaver Bay-----	7	38	9	0	5	14	1	2	17	93	0	6	6	4	2	11	19	7	61
Beaver River-----	5	31	12	8	13	6	9	9	0	93	1	2	3	0	3	5	7	2	23
Burlington-----	7	30	18	3	15	0	4	9	7	93	4	22	19	2	7	1	9	0	70
Chatfield-----	3	3	5	11	23	11	21	1	15	93	1	1	0	5	15	11	20	0	53
Forest City-----	6	11	11	13	13	5	11	6	17	93	---	---	---	---	---	---	---	---	---
Hazlewood-----	1	4	8	23	12	8	4	31	0	91	1	2	9	8	5	6	5	5	41
Princeton-----	10	16	11	8	0	7	20	9	3	93	6	5	3	2	6	8	22	9	61
NEBRASKA—																			
Bellevue-----	24	12	2	6	33	6	6	1	0	90	5	3	2	5	14	4	10	3	46
Brownville-----	2	15	0	23	1	26	2	18	0	93	1	13	6	19	2	9	1	10	61
Elkhorn-----	5	10	6	20	21	10	10	11	0	93	0	0	0	0	0	0	2	0	2
Nebraska City-----	10	3	5	16	19	12	6	0	13	93	---	---	---	---	---	---	---	---	---
Omaha-----	6	3	6	10	33	10	6	19	0	93	0	0	0	0	1	2	3	4	10
KANSAS—																			
Burlingame-----	24	7	8	26	10	7	4	3	4	93	---	---	---	---	---	---	---	---	---
Lawrence-----	23	0	3	1	56	0	2	5	0	93	---	---	---	---	---	---	---	---	---
Leavenworth C'y, [Berthoud]---	0	2	0	5	1	23	0	0	0	31	0	0	0	10	0	18	0	0	28
Manhattan-----	5	11	3	4	13	15	2	0	34	93	7	12	1	3	9	26	4	8	70
Manhattan, [Preston]-----	4	5	1	10	7	15	1	8	0	51	---	---	---	---	---	---	---	---	---
Monka (a)-----	2	8	0	5	0	21	4	7	8	61	0	2	2	0	6	6	0	7	37
Neosho Falls-----	2	17	10	17	8	12	0	0	21	93	---	---	---	---	---	---	---	---	---
MEXICO—																			
Cordova-----	0	9	1	0	0	5	3	0	4	31	---	---	---	---	---	---	---	---	---
Minatitlan-----	0	37	0	3	6	31	0	0	16	93	3	23	2	3	1	4	0	0	36
CALIFORNIA—																			
Sacramento-----	18	4	2	12	28	11	7	11	0	93	0	0	0	7	0	10	2	1	20
San Francisco-----	8	1	0	0	8	5	36	4	31	93	3	4	2	1	9	9	22	3	53
Union Rancho-----	2	1	0	10	24	4	0	39	4	84	0	3	0	8	10	8	3	11	43
WEST INDIES—																			
Nassau, Bahamas-----	0	6	7	2	0	3	0	3	5	26	---	---	---	---	---	---	---	---	---
St. George's, Bermuda-----	5	13	25	36	26	13	5	1	0	124	---	---	---	---	---	---	---	---	---
Turk's Island, Bahamas-----	0	1	15	7	1	1	0	0	3	31	---	---	---	---	---	---	---	---	---
CENTRAL AMERICA—																			
Guatemala-----	4	53	1	3	0	36	0	2	25	124	---	---	---	---	---	---	---	---	---
SOUTH AMERICA—																			
Cathar's Sophia, Surinam-----	2	32	7	23	6	6	3	7	0	86	0	36	17	11	0	0	0	5	75

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.



## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA.—																				
Red River Settlement	19	1	2	3	27	7	9	2	19	89	9	3	2	1	12	0	7	4	38	
Rigolet	4	28	0	0	1	0	1	23	3	60										
St. John's	2	4	2	13	1	24	11	33	0	90	1	0	0	2	0	3	2	20	28	
St. Martin	0	9	0	8	5	52	4	12	0	90										
Stanbridge	4	4	6	32	26	1	5	6	6	90										
Toronto	4	11	4	15	5	21	1	28	1	90										
Windsor	2	0	0	0	19	32	9	4	14	80										
Wolfville	0	0	0	0	3	28	12	3	0	46	0	0	0	0	1	14	14	2	31	
MAINE.—																				
Cornish	5	6	4	4	17	25	19	9	0	89	1	0	0	0	0	2	5	5	13	
Cornishville	6	6	0	4	14	15	21	24	0	90										
Dexter	3	10	5	3	10	29	4	26	0	90	0	0	0	0	0	1	1	3	5	
Freedom	3	5	1	5	11	33	24	8	0	90										
Gardiner	2	10	6	22	9	15	2	18	5	89	4	4	0	5	1	21	8	8	51	
Hartland	0	5	2	6	21	31	22	3	0	90										
Lisbon	6	3	2	2	33	8	12	24	0	90	6	3	1	4	19	6	11	15	65	
New Castle	1	7	1	21	19	20	6	15	0	90										
North Belgrade	10	7	9	12	28	4	2	18	0	90										
Norway	0	2	0	11	11	32	3	31	0	90										
Perry	3	4	2	8	21	37	0	15	0	90	3	2	0	1	6	14	0	6	32	
Portland	9	4	5	15	21	12	14	9	0	89	2	1	2	1	5	5	19	7	42	
Portland, [Adams]	12	4	23	8	10	19	7	5	2	90										
Steuben	1	19	0	1	2	47	4	16	0	90	0	9	0	0	0	19	9	7	44	
Topsham	2	3	0	3	17	23	15	27	0	90										
Warren	4	4	4	7	4	38	6	23	0	90										
NEW HAMPSHIRE.—																				
Mount Washington	1	0	2	3	7	17	18	41	0	89	0	11	8	4	0	0	0	1	24	
Shelburne	0	0	23	0	0	0	34	0	20	77	0	1	0	7	0	8	30	11	57	
Stratford	2	9	19	3	12	20	11	8	6	90	0	0	0	0	0	10	20	9	39	
Stratham	1	8	1	8	1	16	30	25	0	90										
VERMONT.—																				
Brandon	15	0	0	15	34	4	7	8	7	90	10	0	0	3	2	20	11	16	62	
Burlington	14	2	0	2	20	33	3	15	0	89										
Craftsbury	5	4	2	4	33	13	9	16	4	90	4	1	0	1	11	15	25	12	69	
Lunenburg	0	0	3	0	16	6	15	20	0	60										
Rupert											8	0	0	1	3	50	2	3	67	
St. Johnsbury	8	2	2	0	35	3	28	8	4	90	2	0	0	0	14	5	24	2	47	
MASSACHUSETTS.—																				
Amherst	3	3	1	24	8	14	1	31	1	86	1	2	0	2	9	9	8	11	42	
Brigewater	5	4	3	3	7	41	8	19	0	90	1	4	1	1	0	26	7	11	51	
Cambridge	3	2	7	4	13	25	7	12	15	88										
Florida	0	0	0	4	0	34	36	16	0	90	0	0	0	4	0	36	29	12	81	
Lawrence	0	9	1	11	3	34	1	31	0	90										
Mendon	0	16	0	0	5	50	1	18	0	90	0	18	1	1	5	46	1	6	78	
Nantucket	8	6	1	7	13	41	6	5	3	90										
New Bedford	1	9	1	11	0	44	2	20	0	88										
Richmond	1	3	0	4	1	42	1	38	0	90	3	2	0	5	1	32	7	17	67	
South Groton	2	11	1	5	8	35	0	27	0	90										
Westfield	7	6	3	17	7	20	5	25	0	90	0	0	0	0	0	1	0	0	1	
Worcester	1	10	2	4	3	37	2	30	0	89	0	1	0	1	2	15	1	9	29	
RHODE ISLAND.—																				
Providence	2	11	1	2	9	39	3	23	0	90										
CONNECTICUT.—																				
Columbia	1	13	0	0	0	41	5	20	10	90	1	11	0	0	0	31	4	10	57	
Middletown	5	1	1	8	15	20	4	14	22	90	0	0	0	0	0	7	16	7	30	
Pomfret	4	9	2	4	24	19	2	26	0	90	1	8	3	3	16	12	6	20	69	
Saybrook	3	2	7	15	9	24	9	16	5	90	1	1	0	0	0	11	11	5	29	
Wallingford	5	3	2	7	19	25	2	27	0	90	0	2	0	0	2	17	14	6	41	
NEW YORK.—																				
Adams Centre	12	3	0	4	34	20	11	2	4	90										
Baldwinsville	0	0	1	2	6	25	40	16	0	90	0	0	1	0	2	13	42	8	66	
Bellport	1	3	2	11	13	37	4	19	0	90	2	1	0	2	3	17	1	6	32	

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
New York—Continued.																			
Beverly.....	3	4	0	16	16	27	4	17	0	87	1	4	0	10	9	27	9	3	63
Buffalo.....	11	6	6	0	5	42	11	7	0	88									
Cazenovia.....	1	1	0	2	14	20	5	42	2	87	0	1	0	2	3	15	19	26	66
Morrisania.....	2	8	8	22	11	11	19	3	6	90	2	5	1	9	5	7	5	1	35
Nichols.....	7	2	1	17	24	4	1	34	0	90	10	3	0	5	11	11	6	36	82
Oswego.....	3	7	0	9	22	6	37	3	3	90									
Penn Yan.....	6	2	0	0	26	29	21	6	0	90									
Rochester, [Dewey].....	0	4	5	1	0	11	30	9	0	60	2	1	1	0	0	4	35	5	48
Rochester, [Mathews].....	8	10	0	3	6	24	11	23	4	89	2	1	0	0	0	0	11	9	29
Saratoga.....	0	6	0	4	1	30	3	9	0	53	1	7	0	4	2	28	4	6	52
Wampsville.....	0	1	5	5	16	7	55	1	0	90	0	1	4	6	11	10	41	0	73
New Jersey—																			
Cinnaminson.....	6	10	1	3	14	30	7	17	2	90									
Lambertville.....	5	8	0	5	23	22	3	18	0	84									
Moorestown.....	0	1	3	3	9	6	15	8	0	45	0	0	0	0	5	0	1	0	6
Newark.....	4	9	2	9	0	29	1	6	0	60									
New Brunswick.....	0	5	5	9	21	11	20	19	0	90									
Pennsylvania—																			
Bedford.....	7	0	0	2	14	2	27	21	0	73	4	1	4	4	4	0	37	13	67
Bellefonte.....	8	0	1	0	5	15	54	4	0	89	1	0	0	0	1	0	85	0	87
Bendersville.....	0	6	12	15	8	13	5	21	0	80									
Berwick.....	4	4	26	1	11	15	22	6	1	90									
Cannonsburg.....	1	5	12	1	0	27	31	13	0	90									
Carlisle.....	0	1	3	20	0	19	8	14	24	89	0	1	1	12	0	21	7	9	51
Chambersburg.....	3	0	6	5	10	18	26	11	11	90	4	2	1	1	10	29	18	8	73
Easton.....	5	7	0	27	1	12	1	36	1	90									
East Smithfield.....	7	2	2	8	5	17	21	25	1	88									
Fleming.....	1	1	8	11	1	22	25	21	0	90	1	2	3	2	0	3	33	23	67
Germantown.....	1	13	12	6	0	0	7	27	1	73									
Gettysburg.....	7	5	2	2	12	38	5	15	4	90	2	3	1	1	3	28	27	11	76
Harrisburg, [Heisely].....	2	0	5	2	11	23	25	20	0	88	0	0	0	0	6	15	17	8	46
Harrisburg, [Hickok].....	9	3	10	2	32	3	24	7	0	90	0	0	1	0	5	0	4	0	10
Lewisburg.....	14	13	0	4	15	13	10	4	0	73	2	0	0	0	4	10	7	4	27
Morrisville.....	1	10	3	6	19	30	4	8	9	90	1	7	1	2	4	32	16	7	70
Morrisville, [Moore].....	2	4	1	1	6	19	4	17	1	55									
Mount Joy.....	2	1	0	1	13	5	2	27	0	51	1	1	0	3	1	8	6	15	35
Norristown.....	0	2	0	9	8	19	28	6	0	78	0	5	2	4	4	19	23	3	60
North Whitehall.....	5	3	3	1	7	6	14	7	44	90	3	3	1	1	8	5	30	4	55
Philadelphia.....	1	6	2	3	3	48	2	25	0	90	0	0	0	0	0	17	2	0	28
Pittsburg, [Marine Hosp.].....	7	0	5	6	12	17	17	20	6	90	1	0	2	2	6	21	10	8	50
Pocopson.....	9	2	0	2	12	35	13	10	0	83	5	1	0	1	3	19	15	4	48
Shamokin.....	0	2	22	8	23	1	28	0	0	90	0	0	69	3	3	0	0	0	75
Somerset.....	2	3	1	4	2	18	18	20	22	90	0	1	1	3	2	15	41	10	73
West Haverford.....	2	3	5	0	1	35	2	10	2	60	0	3	1	0	0	4	26	11	45
Maryland—																			
Annapolis.....	8	13	1	5	36	17	2	2	6	90	5	1	0	0	0	35	0	1	42
Baltimore.....	10	0	0	7	15	9	2	1	2	46									
Bladensburg.....	3	5	1	5	4	23	2	11	0	54									
Chestertown.....	1	9	0	14	0	41	1	23	0	89	0	4	0	5	0	13	1	15	38
Leitersburg.....	7	0	1	4	26	21	13	15	3	90	6	0	1	0	1	20	27	14	69
Leonardtown.....	10	3	8	24	3	21	8	6	1	84	3	0	0	0	1	4	23	13	44
Sykesville.....	13	9	2	7	13	20	20	6	0	90	1	2	1	4	2	15	51	3	79
District of Columbia—																			
Washington.....	5	6	0	7	29	5	4	11	22	89									
Virginia—																			
Crichton's Store.....	11	10	2	9	18	29	7	1	3	90	0	0	0	0	0	30	3	0	33
Cross Creek.....											2	0	1	0	9	31	21	3	67
Kanawha.....	17	0	0	0	41	0	1	8	9	76	1	1	0	0	0	13	21	9	45
Lewinsville.....	5	3	2	25	14	13	10	18	0	90									
Lewisburg.....	0	0	0	9	30	38	11	1	0	89									
Montrouss.....	6	1	4	4	14	0	13	9	30	90	6	0	2	1	9	9	16	1	44



## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Mont View.....	3	2	2	10	30	29	12	2	0	90	2	0	1	8	14	26	4	0	55	
Mustapha.....	17	0	0	2	28	10	0	2	1	60	0	0	0	0	0	0	3	0	33	
Point Pleasant.....	3	0	54	0	10	0	23	0	0	90	0	0	30	0	0	0	3	0	33	
Poplar Grove.....	0	0	27	0	0	0	21	8	34	90	2	6	0	0	1	21	18	9	57	
Portsmouth.....	0	13	8	18	0	31	10	10	0	90	0	0	0	0	0	0	0	0	0	
Rougemont.....	9	5	6	5	35	4	13	1	6	84	3	0	0	0	8	4	39	1	55	
Smithfield.....	5	12	6	10	21	24	2	10	0	90	6	2	1	0	2	12	28	7	58	
Winchester.....	0	0	0	2	1	5	28	10	44	90	0	0	0	0	0	0	3	3	6	
NORTH CAROLINA—																				
Chapel Hill.....	6	7	4	0	9	8	11	4	0	49	2	2	0	1	2	9	7	6	29	
Davidson College.....	0	30	0	6	0	33	1	3	0	73	0	0	0	3	3	38	6	11	61	
Greensborough.....	0	5	2	6	16	38	1	22	0	90	0	0	0	0	0	0	0	0	0	
Murfreesborough.....	1	11	6	25	3	27	4	1	10	88	2	0	0	2	0	14	45	4	67	
Raleigh.....	6	1	0	7	32	7	7	1	2	63	0	0	0	0	0	0	0	0	0	
SOUTH CAROLINA—																				
Aiken.....	5	5	16	8	28	17	4	0	0	83	0	0	0	0	0	1	0	0	1	
All Saints.....	2	6	3	16	35	17	9	2	0	90	0	0	0	0	0	1	0	0	1	
Charleston.....	1	5	0	7	6	11	4	0	0	34	0	0	0	0	0	0	0	0	0	
Columbia, [Barton].....	3	7	10	18	20	9	7	3	13	90	2	0	7	6	2	3	38	0	58	
Columbia, [White].....	9	7	2	9	11	19	2	1	0	60	0	0	0	1	0	1	0	1	3	
St. John's.....	0	12	1	31	2	20	2	12	0	80	2	3	4	5	0	7	15	6	42	
GEORGIA—																				
Athens.....	9	9	3	2	0	0	15	22	24	84	0	1	2	1	0	0	12	3	19	
Atlanta.....	0	3	7	3	6	19	45	7	0	90	0	0	0	0	0	0	0	0	0	
Augusta.....	0	15	0	40	3	18	1	13	0	90	0	8	3	3	3	47	2	5	71	
Clarksville, [Stratford].....	4	3	2	2	2	16	38	22	0	89	0	0	0	0	0	0	0	0	0	
Clarksville, [Van Buren].....	1	7	20	6	14	23	13	3	3	90	0	0	0	0	0	0	0	0	0	
Covington.....	0	1	3	32	16	32	6	0	0	90	0	0	0	0	0	0	0	0	0	
Savannah.....	2	12	12	11	19	31	0	3	0	90	0	1	5	0	1	1	0	2	5	
Sparta.....	2	6	5	27	7	31	4	7	0	89	2	2	2	7	2	17	22	11	65	
Thomaston.....	14	11	7	17	10	14	7	10	0	90	0	0	0	0	0	0	0	0	0	
Whitemarsh Island.....	0	13	7	14	17	13	18	1	7	90	2	4	3	7	0	13	14	14	57	
FLORIDA—																				
Alligator.....	2	0	20	15	3	20	4	5	21	90	2	17	4	2	0	22	22	1	70	
Atsena.....	4	23	12	9	5	21	14	2	0	90	4	6	7	3	5	11	3	5	44	
Belair.....	0	0	17	23	1	0	2	0	11	54	6	10	10	0	1	3	11	7	48	
Gainesville.....	0	33	4	12	1	19	3	7	0	79	0	12	1	2	0	6	2	4	27	
Jacksonville.....	1	26	0	29	3	29	0	2	0	90	0	26	3	4	0	23	6	1	63	
Micanopy.....	1	17	12	23	7	10	7	3	4	84	3	2	0	1	0	3	1	4	14	
St. Augustine.....	0	32	8	37	1	4	0	8	0	90	0	25	5	24	0	5	0	7	66	
Salt Ponds.....	4	8	32	10	5	0	0	0	1	60	0	0	0	0	0	0	0	0	0	
Seville.....	0	4	3	0	2	0	1	0	8	18	0	0	0	0	0	0	0	0	0	
ALABAMA—																				
Cahawba.....	2	31	3	4	22	11	8	7	2	90	0	0	0	0	0	0	0	0	0	
Greene Springs.....	5	2	4	26	1	9	14	1	20	82	3	0	2	8	8	9	7	4	41	
Greensborough.....	17	4	3	23	7	13	4	15	0	86	4	0	1	6	4	15	11	5	46	
Livingston.....	9	3	2	5	21	10	3	2	0	55	0	0	0	0	0	0	0	0	0	
Montgomery.....	0	33	4	12	1	19	3	7	0	79	0	12	1	2	0	6	2	4	27	
Montgomery.....	21	12	4	15	7	6	3	6	11	85	4	0	5	2	2	11	17	9	50	
Selma.....	12	11	1	22	1	28	1	14	0	90	6	14	3	6	10	13	12	23	87	
Spring Hill.....	5	3	0	13	0	18	1	9	40	89	0	0	0	0	0	0	0	0	0	
Uniontown.....	0	1	1	10	7	15	8	10	34	86	0	0	0	0	0	0	0	0	0	
MISSISSIPPI—																				
Columbus.....	20	1	5	9	31	7	6	10	0	89	5	0	0	4	12	8	16	7	52	
Natchez.....	13	14	1	33	10	17	0	2	0	90	1	1	1	5	1	10	0	14	33	
Paulding.....	3	5	6	32	0	21	6	15	0	88	3	3	5	30	3	19	8	9	80	
LOUISIANA—																				
New Orleans.....	0	12	2	25	0	47	0	4	0	90	0	0	0	0	0	0	0	0	0	
Poydras College.....	8	5	0	5	44	5	9	0	13	89	0	0	0	0	0	0	0	0	0	
Tickfaw Station.....	11	6	5	14	23	16	8	7	0	90	0	0	0	0	0	0	0	0	0	
TEXAS—																				
Austin, [Palm].....	1	3	5	36	20	23	1	1	0	90	2	9	7	8	9	10	0	2	47	

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
TEXAS—Continued.																			
Austin, [Van Nostrand]..	13	5	4	7	59	2	0	0	0	90	7	2	1	5	29	1	0	1	46
Boston .....	15	5	15	3	30	5	13	4	0	90	—	—	—	—	—	—	—	—	—
Burkesville .....	1	1	3	4	5	13	3	2	10	42	—	—	—	—	—	—	—	—	—
Dallas .....	9	3	3	38	29	5	1	2	0	90	—	—	—	—	—	—	—	—	—
Gonzales .....	1	14	13	14	43	2	0	0	3	90	—	—	—	—	—	—	—	—	—
Jefferson .....	2	10	15	16	6	19	17	5	0	90	—	—	—	—	—	—	—	—	—
Kaufman .....	2	1	10	10	36	1	0	2	0	62	—	—	—	—	—	—	—	—	—
Larissa .....	6	2	3	11	53	3	6	2	0	86	10	0	1	0	30	1	6	0	48
New Braunfels .....	6	0	13	36	23	2	0	1	0	81	0	0	1	2	7	1	2	0	13
Northern tier of counties.	9	11	8	15	75	10	7	5	0	140	—	—	—	—	—	—	—	—	—
Preston .....	3	0	10	10	46	6	0	0	11	86	—	—	—	—	—	—	—	—	—
San Patricio .....	1	7	0	74	0	4	0	3	0	89	—	—	—	—	—	—	—	—	—
Sisterdale .....	2	2	9	36	34	5	0	2	0	90	—	—	—	—	—	—	—	—	—
Springfield .....	8	16	17	12	24	5	6	1	1	90	—	—	—	—	—	—	—	—	—
Tarrant .....	9	0	3	1	38	2	1	0	0	54	—	—	—	—	—	—	—	—	—
Texana .....	8	4	5	69	1	1	0	2	0	90	—	—	—	—	—	—	—	—	—
Union Hill .....	7	3	8	24	40	1	2	0	5	90	5	2	2	6	34	0	2	0	51
Washington .....	2	0	4	10	45	2	8	2	17	90	0	0	1	2	9	1	0	0	13
Webberville .....	4	6	8	5	61	0	0	0	5	89	—	—	—	—	—	—	—	—	—
Wheelock .....	13	0	9	10	49	2	3	1	0	87	—	—	—	—	—	—	—	—	—
ARKANSAS—																			
Arkadelphia .....	7	12	0	16	19	28	4	4	0	90	—	—	—	—	—	—	—	—	—
Brownville .....	2	8	3	4	18	35	7	1	2	89	—	—	—	—	—	—	—	—	—
Gainesville .....	5	2	10	17	11	4	13	1	27	90	—	—	—	—	—	—	—	—	—
Jacksonport .....	16	5	5	5	39	7	11	2	0	90	—	—	—	—	—	—	—	—	—
Perryville .....	15	5	3	3	47	1	2	2	7	85	—	—	—	—	—	—	—	—	—
Spring Hill .....	3	3	9	9	8	6	3	4	44	89	—	—	—	—	—	—	—	—	—
Waldron .....	18	2	9	6	37	2	8	8	0	90	—	—	—	—	—	—	—	—	—
Yellville .....	4	0	5	0	6	0	0	0	0	15	—	—	—	—	—	—	—	—	—
TENNESSEE—																			
Glenwood .....	4	21	5	15	20	6	6	3	10	90	2	6	0	1	8	12	41	10	80
La Grange .....	2	16	1	16	9	15	5	6	12	82	5	1	0	0	13	10	7	11	47
Memphis .....	11	5	3	7	11	8	12	14	22	90	—	—	—	—	—	—	—	—	—
Winchester .....	26	4	2	3	27	11	10	5	0	88	—	—	—	—	—	—	—	—	—
KENTUCKY—																			
Bardstown .....	8	19	0	4	5	22	18	13	0	89	10	5	2	0	0	6	30	13	66
Danville .....	7	9	1	1	11	39	8	14	0	90	—	—	—	—	—	—	—	—	—
Hardinsburg .....	9	8	3	5	7	34	9	15	0	90	—	—	—	—	—	—	—	—	—
Millersburg .....	6	5	9	7	5	11	18	5	24	90	0	1	0	0	0	13	33	14	61
Paducah .....	1	1	2	0	12	1	0	7	0	24	—	—	—	—	—	—	—	—	—
Paris .....	10	11	0	6	9	28	4	22	0	90	4	0	1	0	5	2	41	0	53
Springdale .....	0	15	5	8	6	23	5	2	26	90	—	—	—	—	—	—	—	—	—
OHIO—																			
Avon .....	2	14	3	6	8	26	8	21	0	88	3	1	0	0	1	9	26	30	70
Bellefontaine .....	0	10	3	14	2	24	8	17	0	78	1	3	0	4	0	33	11	20	72
Bethel .....	6	5	6	7	5	25	10	9	0	73	—	—	—	—	—	—	—	—	—
Bowling Green .....	5	5	1	9	8	15	5	16	25	89	3	2	1	1	2	4	21	12	46
Cincinnati, [Harper] .....	11	1	12	2	10	18	9	27	0	90	0	0	0	0	0	2	0	1	3
Cincinnati, [Phillips] .....	1	0	3	1	13	16	2	13	41	90	1	1	0	3	2	21	17	1	46
Cleveland .....	14	4	4	11	21	8	13	12	0	87	1	1	0	0	2	7	17	4	32
College Hill, [Hammit] .....	9	0	6	3	3	12	51	6	0	90	—	—	—	—	—	—	—	—	—
College Hill, [Wilson] .....	0	11	4	5	7	35	19	9	0	90	1	1	1	0	2	11	22	6	44
Dallasburg .....	28	3	0	1	2	15	27	13	0	89	—	—	—	—	—	—	—	—	—
Dudley .....	2	10	1	16	0	17	28	10	0	84	—	—	—	—	—	—	—	—	—
Freedom .....	14	3	15	0	3	28	14	13	0	90	2	0	0	0	5	18	41	9	75
Hillsborough .....	0	18	0	11	2	36	2	21	0	90	0	0	0	0	0	11	1	14	26
Hillsborough, [Gamble] .....	8	5	6	2	14	22	23	10	0	90	—	—	—	—	—	—	—	—	—
Hiram .....	8	8	3	5	6	31	14	12	1	88	0	2	0	0	1	7	19	13	42
Hocking Port .....	0	14	1	3	5	24	33	2	5	87	—	—	—	—	—	—	—	—	—
Hudson .....	7	10	5	7	9	17	13	16	0	84	—	—	—	—	—	—	—	—	—
Kelley's Island .....	2	12	0	16	12	12	6	19	3	90	—	—	—	—	—	—	—	—	—
Madison, [Atkins] .....	7	6	1	1	15	13	18	8	15	84	1	0	0	0	1	3	13	1	19



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NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Madison, [King] .....	10	5	2	3	17	18	5	1	3	65	1	0	3	0	2	5	0	0	11
Marion .....	13	0	2	5	28	9	12	8	13	90	—	—	—	—	—	—	—	—	—
Montville .....	17	7	0	19	13	19	0	13	2	90	2	1	0	2	0	12	8	10	35
Newark .....	13	14	1	6	29	15	4	8	0	90	—	—	—	—	—	—	—	—	—
New Lisbon .....	1	3	0	6	7	31	12	30	0	90	0	1	0	1	1	17	22	19	61
Northwood .....	1	14	1	6	3	24	6	21	0	76	0	0	2	0	0	13	7	19	41
Portsmouth .....	10	4	8	10	5	30	3	20	0	90	1	2	0	0	0	32	2	7	44
Rockport .....	13	14	3	1	15	15	28	11	0	100	—	—	—	—	—	—	—	—	—
Savannah .....	8	1	0	15	3	30	25	13	0	90	3	4	0	0	3	33	16	16	75
Sharonville .....	7	1	5	5	23	10	20	17	0	88	—	—	—	—	—	—	—	—	—
Troy .....	0	0	5	0	0	0	69	1	13	88	0	0	1	0	0	0	55	0	56
Urbana .....	0	3	2	12	10	9	15	6	26	83	1	1	1	0	7	13	34	5	62
Welchfield .....	12	5	3	12	10	29	10	9	0	90	0	0	0	0	0	1	0	1	2
Westerville .....	7	6	1	0	22	23	16	12	0	87	5	1	0	0	10	18	22	7	63
MICHIGAN—																			
Battle Creek .....	8	8	10	2	16	19	10	7	9	89	1	0	1	0	0	11	36	7	56
Detroit .....	2	0	3	14	5	32	31	3	0	90	0	0	1	5	5	38	39	2	90
Fort Gratiot .....	6	41	0	9	12	32	5	11	4	120	9	3	1	3	6	20	23	7	72
Grand Rapids .....	5	12	6	2	8	26	21	10	0	90	5	1	2	0	2	23	31	0	73
Lansing .....	3	3	8	9	5	12	19	9	0	68	—	—	—	—	—	—	—	—	—
Marquette .....	8	13	11	11	2	9	18	18	0	90	0	0	1	0	0	0	0	0	1
Monroe, [Whelpley] .....	0	14	1	15	0	26	1	22	0	79	0	6	0	25	0	28	1	18	78
New Buffalo .....	—	—	—	—	—	—	—	—	—	—	4	2	0	4	0	22	23	15	70
Ottawa Point (a) .....	9	19	11	16	20	21	6	18	0	120	6	32	17	10	4	1	0	0	70
Port Huron .....	37	0	0	1	39	5	1	2	0	85	1	0	0	0	1	0	2	1	5
St Mary's .....	5	5	2	3	13	13	16	17	14	88	—	—	—	—	—	—	—	—	—
Thunder Bay Island .....	26	6	1	19	23	14	8	12	11	120	4	1	1	1	9	4	6	16	42
Ypsilanti .....	4	13	5	6	10	28	9	13	1	89	6	3	2	1	3	16	21	8	60
INDIANA—																			
Aurora .....	2	3	1	2	5	9	3	3	2	30	—	—	—	—	—	—	—	—	—
Cannelton .....	6	1	7	9	27	5	23	12	0	90	3	1	0	2	6	28	13	8	61
Greencastle .....	21	3	8	7	21	7	3	16	0	86	—	—	—	—	—	—	—	—	—
Logansport .....	7	14	7	12	1	21	17	11	0	90	11	5	3	4	3	15	18	19	78
Logansport .....	1	19	5	14	0	25	8	18	0	90	—	—	—	—	—	—	—	—	—
Mishawaka .....	9	3	1	7	7	38	19	6	0	90	6	3	1	6	6	36	16	4	78
New Albany .....	5	14	4	3	2	23	11	8	14	84	—	—	—	—	—	—	—	—	—
New Harmony .....	8	3	0	17	13	13	6	13	0	73	—	—	—	—	—	—	—	—	—
Richmond, [Austin] .....	5	18	2	3	4	14	3	6	2	57	2	3	0	1	2	14	16	5	43
Richmond, [Haines] .....	0	3	17	10	8	15	25	8	4	90	—	—	—	—	—	—	—	—	—
Richmond, [Moore] .....	3	7	1	4	9	10	10	13	33	90	1	0	1	0	0	0	0	0	2
Rockville .....	13	7	3	6	15	6	9	8	23	90	—	—	—	—	—	—	—	—	—
Shelbyville .....	11	2	6	10	11	20	14	16	0	90	—	—	—	—	—	—	—	—	—
South Bend .....	0	0	5	6	11	7	38	0	0	67	—	—	—	—	—	—	—	—	—
ILLINOIS—																			
Augusta .....	3	8	8	11	7	19	7	19	8	90	1	1	1	3	3	9	7	15	40
Aurora .....	4	22	4	9	21	16	6	8	0	90	1	7	1	2	2	17	37	10	77
Batavia, [Capon] .....	7	7	3	13	8	13	25	14	0	90	—	—	—	—	—	—	—	—	—
Batavia, [Mead] .....	0	30	1	9	0	36	4	10	0	90	0	14	0	3	0	27	9	29	82
Carbon Cliff .....	2	9	13	3	24	9	21	9	0	90	—	—	—	—	—	—	—	—	—
Chicago, [Brooks] .....	5	33	7	11	0	30	3	1	0	90	—	—	—	—	—	—	—	—	—
Dixon .....	4	1	2	23	7	28	9	16	0	90	—	—	—	—	—	—	—	—	—
Edgington .....	7	16	0	11	10	18	0	23	0	90	6	6	2	8	2	30	0	33	87
Elgin .....	6	20	3	13	12	15	6	8	7	90	0	0	0	0	0	3	6	14	23
Manchester .....	15	8	2	9	33	8	7	8	0	90	12	6	1	7	23	6	6	6	67
Marengo .....	0	6	11	21	12	37	1	2	0	90	0	2	2	0	2	13	2	0	21
Naperville .....	2	15	4	21	8	26	6	8	0	90	—	—	—	—	—	—	—	—	—
Ottawa .....	3	17	1	12	3	30	0	13	2	81	2	1	0	0	0	12	4	13	32
Pekin .....	11	15	5	12	15	10	4	12	6	90	6	1	1	2	2	15	23	10	60
Peoria .....	3	16	15	10	12	2	17	15	0	90	0	2	0	0	0	0	5	2	9

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

## No. 43.—WINDS—NUMBER OF OBSERVATIONS, JUNE, 1859.

NAME OF STATION.	SURFACE CURRENT									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
ILLINOIS—Continued.																			
Riley	4	2	2	2	7	22	15	12	10	90	0	0	0	0	0	0	69	0	69
Sandwich	3	20	6	21	14	12	5	0	0	90	0	0	0	0	0	0	69	0	69
Tiskilwa	1	18	9	16	11	16	1	18	0	90									
Upper Alton	1	8	0	8	5	29	8	35	1	88	1	8	0	1	5	29	8	34	89
West Salem	9	9	0	8	20	4	0	9	25	90	1	1	0	0	0	10	45	5	63
West Urbana	7	17	0	27	8	18	5	8	0	90	1	1	0	0	3	7	7	5	24
Wheaton	3	22	4	11	12	21	1	10	2	88	3	1	0	0	0	4	7	6	21
Willow Creek	8	2	8	17	20	10	13	4	1	90									
Winnebago	6	10	4	17	24	12	8	9	0	90	4	0	0	0	0	2	21	22	49
MISSOURI																			
Augusta	19	12	16	9	15	6	2	10	1	90									
Bolivar	4	4	2	8	0	61	2	3	0	84									
Beonville	4	2	17	5	0	55	1	5	0	89									
Carrollton	13	5	7	4	11	33	10	7	0	90									
Cassville	3	0	0	4	25	9	0	3	33	83									
Farmington	17	0	0	3	28	18	11	13	0	90									
Greenfield	2	11	5	23	14	26	2	7	0	90									
Greenville	3	3	0	25	26	6	0	25	0	88									
Harrisonville	17	7	10	19	25	6	0	0	0	90									
Hermann	14	9	24	4	15	14	6	4	0	90									
Kirksville	3	4	7	23	36	14	2	1	0	90									
Lancaster	18	5	23	5	19	4	8	8	0	90									
Lexington	19	3	13	28	10	5	3	3	0	90									
Luray	9	10	5	25	10	8	1	19	2	90									
Paris	7	17	2	19	7	22	1	11	4	90									
Richmond	7	1	1	8	11	26	0	7	3	71									
St. Louis, [Engelmann]	4	15	13	16	16	2	7	16	0	89									
St. Louis, [Fendler]	14	21	7	26	38	16	2	23	29	176	8	5	0	3	7	25	41	24	113
Stockton	1	1	1	7	30	13	12	4	21	90									
Tuscumbia	0	0	4	2	16	33	17	0	18	90									
Warrenton	13	25	9	6	16	6	1	0	5	90									
Waynesville	11	4	1	0	4	39	17	14	0	90									
Wet An Glaize	0	0	0	4	10	32	26	18	0	90									
WISCONSIN—																			
Appleton	1	8	2	6	6	21	16	14	4	78	1	0	0	0	0	7	0	5	25
Bay City	3	27	0	1	17	30	4	5	0	87	0	1	0	0	1	22	5	4	33
Beloit	19	6	11	9	26	12	7	0	0	90									
Burlington	4	11	9	13	23	15	4	10	1	90									
Delafield	4	5	16	9	13	10	11	7	3	78	2	2	3	1	2	6	16	7	39
Green Bay	13	8	1	3	20	7	2	1	35	90	4	5	0	0	12	7	4	1	33
Janesville, [Kellogg]	7	6	11	4	8	24	16	7	0	83									
Kenosha	4	8	21	11	12	17	10	1	2	86									
Lake Mills	10	0	11	10	25	10	9	2	0	86									
Madison	8	1	0	6	33	27	3	12	0	90	0	0	1	0	1	0	5	2	0
Manitowoc	7	5	7	14	16	21	8	12	0	90									
Milwaukee, [Larkin]	5	17	7	10	8	24	7	9	2	89	2	3	1	0	0	8	27	19	60
Milwaukee, [Pomeroy]	5	21	0	35	0	19	3	7	0	90									
Milwaukee, [Winkler]	6	22	8	17	3	12	11	11	0	90									
New Danemora	1	0	0	2	2	23	10	15	8	61									
Otsego	6	4	5	0	13	27	4	22	0	90									
Platteville	5	5	18	18	11	5	6	22	0	90	1	0	2	2	2	27	6	25	65
Wausau	6	1	4	0	3	7	52	3	14	90	0	0	1	4	2	4	28	5	50
IOWA—																			
Bellevue	8	7	11	13	13	20	4	9	0	85									
Border Plains	3	1	5	31	14	2	0	24	1	90	0	0	0	0	0	4	6	12	22
Burlington	2	6	5	35	1	16	2	15	1	83	2	0	0	0	0	18	17	5	42
Dubuque	4	5	1	11	9	23	7	21	9	90	2	3	1	7	0	17	8	30	68
Fairfield	0	2	0	32	0	11	0	30	15	90	0	1	1	0	0	0	0	0	2
Fairfield, [McBeth]	0	11	30	21	0	3	8	10	4	87									
Fayette	1	0	22	23	9	1	32	2	0	90									
Forestville	0	1	2	13	19	20	2	29	0	86	0	0	2	13	19	17	2	23	76
Fort Madison	0	11	0	24	0	27	1	26	1	90	2	2	0	6	2	18	15	7	52



a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Montreal	8	13	0	4	9	28	8	16	7	93	5	8	0	3	7	25	7	14	69
Red River Settlement	8	4	12	0	12	8	6	15	24	89	1	5	2	0	7	5	3	8	33
St. John's	2	18	1	13	2	18	18	21	0	93	0	2	0	0	0	0	8	13	23
St. Martin	0	7	3	25	2	43	4	0	0	93									
Stanbridge	11	6	6	36	15	1	10	5	3	93									
Toronto	4	12	1	14	8	16	2	27	9	93									
Windsor	0	5	12	5	4	10	20	11	1	77									
MAINE—																			
Belfast	10	5	6	3	12	5	14	7	0	62									
Cornish	10	3	1	3	10	26	29	11	0	93	2	1	0	0	0	4	2	6	15
Cornishville	15	1	0	0	13	15	15	34	0	93	1	1	0	0	3	0	0	1	6
Dexter	1	9	5	1	0	23	13	31	4	93	0	1	0	0	3	2	0	2	0
Freedom	5	1	0	0	9	35	33	10	0	93									
Gardiner	5	13	1	14	1	23	4	23	8	92	3	2	0	4	3	16	7	19	54
Hartland	0	0	0	0	1	19	37	0	0	60									
Lisbon	13	1	1	1	38	6	7	26	0	93	7	1	0	2	20	0	16	11	57
Newcastle	0	1	1	8	7	53	6	17	0	93									
North Belgrade	12	7	11	3	28	4	11	17	0	93									
Norway	3	0	0	14	8	27	5	36	0	93									
Perry	11	3	1	3	9	28	12	22	4	93	3	1	0	0	2	5	13	16	40
Portland	14	1	5	5	18	16	14	15	0	88	3	0	0	0	2	7	20	10	42
Portland, [Adams]	5	2	14	6	28	15	9	12	2	93									
Steuben	1	18	0	2	0	51	0	10	5	93	0	15	1	2	0	22	0	9	57
Topsham	0	1	0	4	7	19	13	49	0	93									
Warren	5	12	1	15	14	17	3	26	0	93									
Vassalborough	0	5	0	4	39	0	45	0	0	93									
NEW HAMPSHIRE—																			
Mount Washington	0	1	2	6	2	9	21	48	0	89	0	1	9	6	0	0	1	2	19
Shelburne	0	0	10	0	0	0	50	0	12	72	0	0	0	0	0	2	14	24	40
Stratford	2	8	19	4	8	16	8	18	10	93	0	0	0	0	0	3	11	17	31
Stratham	3	6	1	19	10	8	28	18	0	93									
VERMONT—																			
Brandon	9	0	4	16	22	6	5	22	9	93	6	2	0	0	0	12	2	36	58
Burlington	13	3	0	0	18	15	0	44	0	93									
Craftsbury	2	7	1	8	30	13	14	17	1	93	10	2	0	1	0	6	19	20	58
Lunenburg	0	0	0	1	12	9	23	15	0	60									
Rupert											5	0	0	1	0	34	5	4	49
St. Johnsbury	13	1	1	1	25	0	32	12	6	91	5	0	1	0	6	0	30	1	45
MASSACHUSETTS—																			
Amherst	3	2	1	28	6	3	7	34	0	84	2	1	2	2	2	5	5	10	29
Cambridge	7	3	5	3	5	22	11	11	22	89									
Florida	0	0	0	0	0	27	57	9	0	93	2	0	0	0	0	23	46	11	82
Lawrence	1	11	0	23	0	23	0	34	0	92									
Mendon	0	21	0	0	0	48	2	22	0	93	0	11	0	1	0	42	2	20	76
Nantucket	6	16	7	11	3	29	6	11	4	93									
New Bedford	2	14	1	8	3	37	3	22	2	92	8	4	0	0	0	10	8	11	41
Richmond	0	0	0	9	2	32	2	48	0	93	0	3	0	3	0	14	7	15	42
South Groton	1	6	4	16	3	27	3	33	0	93									
Westfield	4	6	6	12	5	16	11	33	0	93	0	0	0	1	0	0	0	1	2
Williamstown	1	2	3	7	7	11	3	28	30	92									
Worcester	4	14	2	19	2	19	8	24	0	92	0	3	0	1	0	6	2	6	18
RHODE ISLAND—																			
Providence	6	9	4	4	18	20	5	26	0	92									
CONNECTICUT—																			
Columbia	2	9	2	2	6	20	0	19	24	93	2	5	0	2	5	19	7	16	56
Middletown	2	6	0	4	3	12	2	16	47	92	4	6	4	2	1	11	7	10	45
Pomfret	3	5	6	5	16	21	3	34	0	93	3	4	0	3	3	19	3	32	67
Saybrook	6	3	10	13	2	27	10	13	8	92	2	4	1	1	1	3	11	9	32
Wallingford	9	8	0	6	16	29	2	23	0	93	2	3	0	3	1	11	10	13	43
NEW YORK—																			
Baldwinsville	2	1	8	2	3	7	32	37	0	92	1	1	0	0	0	4	36	21	63
Bellport	12	8	1	20	8	30	3	9	2	93	1	2	0	9	9	16	2	0	39



## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Beverly.....	8	4	0	10	9	31	2	22	0	86	2	3	3	9	4	18	7	8	54
Cazenovia.....	6	4	1	0	12	10	16	37	7	93	5	1	0	0	3	6	20	29	64
Great Valley.....	30	2	0	1	17	3	9	16	15	93	—	—	—	—	—	—	—	—	—
Morrisania.....	3	6	14	18	11	13	14	14	0	93	1	1	5	1	3	0	2	1	14
Nichols.....	9	2	8	20	13	2	6	33	0	93	22	3	0	2	12	2	0	42	83
Ogdensburg.....	13	1	0	0	0	7	8	2	0	31	—	—	—	—	—	—	—	—	—
Oswego.....	6	18	6	12	10	5	27	2	7	93	—	—	—	—	—	—	—	—	—
Penn Yan.....	6	8	2	0	16	8	39	13	0	92	—	—	—	—	—	—	—	—	—
Rochester, [Dewey].....	1	10	3	2	2	12	28	19	2	79	0	1	0	0	0	9	37	22	69
Rochester, [Mathews].....	7	20	1	1	4	20	7	20	13	93	6	1	0	0	1	2	12	12	34
Saratoga.....	6	17	3	8	1	41	2	10	0	88	5	20	3	9	1	40	3	9	90
Wampsville.....	2	0	5	11	8	7	56	4	0	93	1	0	5	11	8	7	37	4	73
Wilson.....	2	7	10	3	6	22	15	10	2	77	0	0	0	0	0	2	0	0	2
NEW JERSEY—																			
Burlington.....	13	11	4	8	9	20	7	17	4	93	—	—	—	—	—	—	—	—	—
Cinnaminson.....	13	11	4	8	9	20	7	17	4	93	—	—	—	—	—	—	—	—	—
Lambertville.....	4	12	0	9	5	22	2	28	0	82	—	—	—	—	—	—	—	—	—
Newark.....	6	15	0	10	1	19	4	6	1	62	—	—	—	—	—	—	—	—	—
New Brunswick.....	5	4	7	19	7	13	20	17	1	93	—	—	—	—	—	—	—	—	—
PENNSYLVANIA—																			
Bedford.....	3	0	1	2	14	0	13	16	44	93	6	0	0	2	6	1	31	17	63
Bendersville.....	5	8	4	7	4	5	14	15	0	62	—	—	—	—	—	—	—	—	—
Berwick.....	8	2	36	5	3	7	29	3	0	93	0	0	0	0	3	3	0	1	7
Cannonsburg.....	1	3	20	1	0	18	37	11	2	93	—	—	—	—	—	—	—	—	—
Carlisle.....	0	3	0	15	1	18	6	10	31	84	0	0	0	12	1	16	8	9	46
Chambersburg.....	8	5	12	16	2	10	11	15	14	93	9	4	6	3	3	12	17	18	72
Easton.....	3	11	1	27	0	12	0	37	1	92	—	—	—	—	—	—	—	—	—
East Smithfield.....	9	5	8	9	14	14	16	18	0	93	—	—	—	—	—	—	—	—	—
Fleming.....	1	3	6	11	0	21	18	30	2	92	6	6	1	5	0	4	9	26	57
Gettysburg.....	11	20	3	4	4	23	9	19	0	93	10	7	3	1	4	6	20	26	77
Harrisburg, [Heisely].....	9	0	0	9	32	7	20	11	1	89	10	0	0	4	19	4	12	5	54
Harrisburg, [Hickok].....	14	4	15	5	14	11	22	7	0	92	0	0	0	0	0	1	0	1	1
Lewisburg.....	10	4	0	5	15	13	8	9	29	93	4	0	0	0	1	2	8	8	23
Morrisville, [Hance].....	5	14	6	8	12	28	3	6	11	93	3	7	2	4	3	30	6	7	62
Morrisville, [Moore].....	1	10	0	1	1	18	2	31	15	79	—	—	—	—	—	—	—	—	—
Mount Joy.....	2	0	0	5	9	3	0	35	0	54	1	2	1	2	1	1	10	24	42
Norristown.....	1	6	5	18	4	17	19	8	0	78	0	7	3	6	2	12	21	5	56
North Whitehall.....	1	6	1	0	5	7	3	7	63	93	1	3	3	0	0	6	21	8	42
Philadelphia.....	5	18	0	10	3	31	2	24	0	93	2	3	3	2	1	9	8	4	22
Pittsburg, [Marine Hosp.].....	9	4	11	9	10	5	19	21	5	93	0	3	1	1	3	11	13	11	43
Pocopson.....	16	5	3	7	8	26	14	4	0	83	8	8	2	3	0	9	9	7	46
Shamokin.....	1	0	29	3	25	5	29	1	0	93	2	1	71	3	2	3	1	1	84
Somersct.....	3	3	3	6	4	6	8	21	39	93	3	2	8	0	1	8	30	15	67
Worthington.....	9	4	15	7	5	5	12	16	20	93	9	5	7	1	0	5	14	27	68
MARYLAND—																			
Annapolis.....	6	22	8	15	16	14	3	5	4	93	4	4	1	0	0	22	0	10	41
Bladensburg.....	1	10	4	7	1	9	1	12	0	45	—	—	—	—	—	—	—	—	—
Chestertown.....	3	13	3	25	3	21	1	21	0	90	2	6	0	11	1	2	0	12	34
Frederick.....	6	15	1	2	5	7	22	14	17	89	0	0	1	4	1	4	27	12	49
Leitersburg.....	15	2	1	5	19	25	6	12	8	93	6	10	4	4	3	1	17	23	68
Leonardtown.....	8	4	15	18	7	15	14	9	1	91	8	1	1	0	1	2	9	20	42
Sykesville.....	21	10	4	5	12	14	20	7	0	93	12	3	8	5	4	6	43	4	85
DISTRICT OF COLUMBIA—																			
Washington.....	10	6	3	7	12	8	3	9	33	91	—	—	—	—	—	—	—	—	—
VIRGINIA—																			
Crichton's Store.....	22	21	9	0	4	17	5	5	10	93	1	0	1	0	0	13	3	0	18
Cross Creek.....	—	—	—	—	—	—	—	—	—	—	5	2	2	1	6	10	23	15	64
Fredericksburg.....	36	20	4	4	14	9	3	3	0	93	—	—	—	—	—	—	—	—	—
Kanawha.....	17	1	0	0	40	0	1	4	4	67	3	6	4	1	1	5	12	7	39
Lewinsville.....	4	15	12	12	10	13	5	22	0	93	1	0	0	1	0	0	0	0	2
Lewisburg.....	0	8	3	22	23	34	0	3	0	93	—	—	—	—	—	—	—	—	—
Montross.....	6	7	12	9	5	6	6	3	39	93	10	2	6	0	2	0	9	4	33





NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or varia- ble.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>TEXAS—Continued.</b>																			
Boston .....	3	3	17	9	48	3	10	0	0	93	---	---	---	---	---	---	---	---	---
Burkeville .....	1	5	11	21	12	5	10	8	0	93	---	---	---	---	---	---	---	---	---
Dallas .....	5	2	7	61	14	0	0	3	21	93	---	---	---	---	---	---	---	---	---
Gilmer .....	2	3	0	10	20	13	0	3	0	51	---	---	---	---	---	---	---	---	---
Kaufman .....	0	13	0	9	71	0	0	0	0	93	---	---	---	---	---	---	---	---	---
Larissa .....	0	0	13	16	48	7	4	1	0	89	3	1	8	4	23	6	4	1	50
New Braunfels.....	2	2	9	34	37	3	4	1	0	92	1	0	4	0	8	2	1	0	16
Northern tier of counties.	5	4	12	27	58	4	0	9	9	148	---	---	---	---	---	---	---	---	---
Port La Vaca .....	8	13	8	23	42	14	2	3	0	93	---	---	---	---	---	---	---	---	---
San Patricio .....	1	5	0	75	3	2	0	0	0	86	---	---	---	---	---	---	---	---	---
Sisterdale .....	6	4	6	33	28	8	3	5	0	93	2	0	0	0	7	0	5	0	14
Tarrant .....	9	1	16	3	56	1	1	0	6	93	---	---	---	---	---	---	---	---	---
Union Hill .....	1	5	1	1	69	4	7	1	4	93	8	1	1	4	38	2	6	3	63
Washington .....	11	2	3	4	58	0	0	0	13	91	2	0	0	1	3	1	0	0	7
Webberville .....	1	4	5	6	41	2	2	0	12	73	---	---	---	---	---	---	---	---	---
Wheelock .....	1	1	18	2	55	1	7	0	8	93	---	---	---	---	---	---	---	---	---
<b>ARKANSAS—</b>																			
Arkadelphia .....	0	19	8	17	22	24	1	2	0	93	---	---	---	---	---	---	---	---	---
Brownsville .....	0	6	7	15	9	44	2	1	0	84	---	---	---	---	---	---	---	---	---
Gainessville .....	2	7	0	26	6	2	0	26	24	93	---	---	---	---	---	---	---	---	---
Jacksonport .....	21	6	18	1	36	1	8	2	0	93	---	---	---	---	---	---	---	---	---
Perryville .....	21	4	8	10	38	3	3	2	4	93	---	---	---	---	---	---	---	---	---
Spring Hill .....	2	3	12	5	2	8	2	2	44	80	---	---	---	---	---	---	---	---	---
Waldron .....	2	4	40	4	18	7	3	14	1	93	---	---	---	---	---	---	---	---	---
<b>TENNESSEE—</b>																			
Glenwood .....	7	8	23	2	17	4	9	4	19	93	7	3	16	1	14	3	11	9	64
Memphis .....	10	3	5	2	0	4	2	22	45	93	---	---	---	---	---	---	---	---	---
Winchester .....	7	8	7	11	2														

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
Ohio—Continued.																				
Savannah .....	1	5	0	20	0	38	16	13	0	93	0	2	0	0	1	26	16	11	56	
Sharonville .....	12	19	1	0	13	7	16	25	0	93	0	0	3	2	1	0	24	0	30	
Troy .....	2	1	1	5	1	1	54	3	25	93	0	0	3	2	1	0	24	0	30	
Urbana .....	1	8	6	10	1	7	0	16	38	93	8	3	4	0	1	6	24	12	58	
Welchfield .....	14	5	2	19	7	16	16	14	0	93	0	0	0	1	0	2	0	1	4	
Westerville .....	24	1	4	3	15	9	15	13	1	85	9	0	2	1	4	3	15	8	42	
MICHIGAN—																				
Battle Creek .....	7	4	15	8	11	7	16	8	17	93	2	1	1	1	2	1	28	17	53	
Detroit .....	0	0	3	17	14	31	28	0	0	93	0	0	0	8	16	45	24	0	93	
Fort Gratiot .....	11	42	0	13	9	31	4	13	1	124	13	2	0	4	3	12	15	18	67	
Grand Rapids .....	13	9	0	2	7	12	27	14	0	93	7	4	0	2	1	5	46	5	70	
Lake George .....	2	5	0	15	4	3	7	28	28	92										
Lansing .....	4	3	3	5	0	9	18	5	34	81										
Marquette .....	12	1	7	21	15	10	16	11	0	93										
Monroe, [Bowlsby] .....	0	1	9	7	1	11	6	17	14	66	0	2	30	3	0	0	0	0	35	
Monroe, [Whelpley] .....	0	29	0	0	1	17	3	22	0	78	0	25	0	4	1	6	3	18	57	
Monroe Piers .....	3	16	0	31	4	27	6	26	1	122	7	3	0	0	0	5	13	21	49	
New Buffalo .....											4	1	0	0	0	14	23	23	65	
Otsego .....	4	2	5	4	4	26	10	9	28	92										
Ottawa Point (a) .....	6	28	14	11	26	17	4	17	0	123	0	17	14	5	7	4	0	2	49	
Thunder Bay Island .....	20	8	8	21	26	12	2	14	13	124	6	2	7	4	5	0	7	18	49	
Ypsilanti .....	6	0	10	13	2	21	11	17	2	91	3	6	4	3	1	10	16	7	50	
INDIANA—																				
Aurora .....	0	7	2	1	7	3	8	2	1	31										
Cannelton .....	3	4	15	13	4	10	25	18	1	93	0	3	7	2	1	6	12	17	54	
Greencastle .....	15	0	4	16	15	15	3	7	7	91										
Logansport .....	5	28	3	12	1	27	2	15	0	93										
Logansport .....	11	19	10	7	2	21	12	11	0	93	4	12	9	2	3	7	18	20	75	
Mishawaka .....	7	7	6	15	6	28	20	4	0	93	6	6	6	15	6	27	17	4	87	
New Albany .....	4	19	12	8	1	10	12	12	0	87										
New Harmony .....	6	2	8	14	10	14	16	13	0	83										
Richmond, [Haines] .....	3	13	22	6	3	6	18	13	9	93										
Richmond, [Moore] .....	0	2	4	1	2	7	4	9	10	39										
Shelbyville .....	18	7	9	14	6	8	18	13	0	93										
South Bend .....	0	0	7	4	2	2	35	8	35	93										
ILLINOIS—																				
Augusta .....	1	14	5	18	7	14	7	6	21	93	6	6	0	8	3	9	5	9	46	
Aurora .....	5	17	7	0	11	20	16	10	0	93	5	5	1	1	1	10	20	22	65	
Batavia .....	0	40	0	8	0	34	2	9	0	93	0	23	0	2	0	24	4	22	75	
Carbon Cliff .....	1	4	14	0	19	14	25	6	10	93										
Chicago .....	0	32	4	24	0	25	3	5	0	93										
Dixon .....	0	24	5	8	13	27	6	10	0	93										
Edgington .....	3	14	0	23	3	36	0	14	0	93	2	16	2	16	1	33	0	18	88	
Elgin .....	6	11	3	11	0	12	8	13	20	93	0	0	0	0	0	0	4	3	7	
Manchester .....	7	13	4	6	29	11	16	6	1	93	4	4	3	3	20	12	11	7	61	
Marengo .....	0	2	18	22	5	45	0	1	0	93	0	1	0	2	1	5	0	0	13	
Naperville .....	3	23	2	12	2	17	9	7	16	91	3	5	0	3	0	8	3	10	32	
Ottawa .....	3	18	0	9	2	29	3	8	16	88	5	0	0	0	2	9	6	8	30	
Pekin .....	9	14	7	0	10	6	5	8	25	93	4	1	5	1	3	7	15	7	43	
Peoria .....	2	23	12	8	11	6	20	11	0	93	0	0	0	1	2	1	4	0	8	
Riley .....	4	2	12	4	5	13	26	8	15	92										
Sandwich .....	19	15	4	17	4	14	14	6	0	93	0	18	1	0	0	2	42	6	69	
Tiskilwa .....	8	11	4	14	5	28	8	15	0	93										
Upper Alton .....	22	3	0	8	1	21	7	26	5	93	22	4	0	7	1	20	7	22	83	
West Salem .....	4	11	5	6	8	11	6	6	36	93	9	6	2	3	7	1	25	12	65	
West Urbana .....	5	24	2	15	0	31	3	13	0	93	1	1	0	1	0	7	1	2	16	
Wheaton .....	5	19	10	4	3	15	14	13	8	91	4	3	0	0	4	1	4	4	20	
Willow Creek .....	4	0	12	7	17	8	17	11	7	92										
Winnebago .....	8	6	4	21	10	25	13	6	0	93	4	0	1	0	1	1	27	5	45	

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.



## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MISSOURI—																			
Bolivar	1	0	7	18	3	28	1	0	0	58									
Boonville	0	18	14	15	5	25	11	5	0	93									
Carrollton	3	12	5	19	25	16	3	5	0	92									
Cassville	5	1	8	2	10	0	11	6	50	93									
Dundee	6	8	22	10	24	8	8	5	0	91									
Emerson	11	6	8	8	16	14	25	4	1	93									
Farmington	13	0	1	2	22	19	16	20	0	93									
Greenfield	1	8	8	39	12	21	3	1	0	93									
Harrisonville	5	13	16	22	28	8	0	1	0	93									
Hermann	14	18	32	1	6	7	12	3	0	93									
Hornersville	11	11	1	17	21	6	6	20	0	93									
Kirksville	1	2	4	22	39	17	3	5	0	93									
Lancaster	16	4	15	5	45	5	2	1	0	93									
Lexington	7	11	19	12	18	16	7	0	3	93									
Luray	18	9	6	18	7	26	0	4	5	93									
Paris	9	14	9	14	12	7	2	3	23	93									
Richmond	1	25	5	7	20	34	0	0	1	93									
St. Louis, [Engelmann]	5	11	20	8	17	5	13	14	0	93									
St. Louis, [Fendler]	6	17	1	26	8	19	7	31	28	143	7	6	3	8	5	17	9	20	75
Stockton	4	3	8	13	32	12	6	2	13	92									
Tuscumbia	2	1	3	5	16	25	8	1	31	93									
Waynesville	16	4	0	7	1	29	18	18	0	93									
Wet au Glaize	5	11	3	16	4	29	16	9	0	93									
WISCONSIN—																			
Appleton	11	17	2	5	11	33	2	6	3	90	1	0	0	0	0	3	1	1	6
Bay City	1	31	2	1	5	39	8	6	0	93	0	3	1	0	0	23	10	3	40
Beloit	14	8	5	9	32	12	3	10	0	93	6	0	1	2	3	1	3	13	29
Burlington	10	7	7	21	10	13	15	10	0	93									
Green Bay	15	0	1	0	21	1	6	4	45	93	2	1	0	0	9	7	5	0	24
Janesville	8	9	7	5	8	19	18	9	0	83									
Kenosha	3	14	13	22	15	10	11	0	1	89									
Lake Mills	13	3	4	5	31	14	20	3	0	93									
Madison	5	2	1	0	24	16	16	4	5	73	0	1	2	0	0	2	2	0	7
Manitowoc	3	10	3	11	11	20	15	20	0	93	1	1	1	1	4	1	12	11	32
Milwaukee, [Larkin]	5	9	13	11	3	7	25	12	8	93	3	5	1	0	5	7	22	12	55
Milwaukee, [Winkler]	3	20	7	17	3	10	18	15	0	93									
Otsego	7	14	1	5	3	41	8	14	0	93									
Platteville	4	1	9	38	7	10	7	17	0	93	2	0	3	11	7	16	0	15	54
Rocky Run	2	11	6	2	12	32	6	18	2	91									
Wausau	3	0	0	0	6	6	55	1	22	93	2	0	1	2	3	1	47	4	60
IOWA—																			
Bellevue	3	6	6	7	16	17	26	11	0	92									
Border Plains	10	6	0	39	17	7	2	6	6	93	0	0	0	1	4	3	22	8	38
Burlington	1	10	1	25	5	32	2	9	0	85	0	1	0	2	0	12	22	10	47
Dubuque	0	9	8	11	13	20	7	14	10	92	1	6	2	10	4	13	8	14	58
Fairfield	1	7	28	7	14	12	6	9	9	93									
Fairfield, [Shaffer]	0	9	0	23	2	13	1	13	32	93	0	0	1	1	0	0	0	1	3
Fayette Village	0	10	8	4	31	11	25	4	0	93									
Forestville	3	9	0	21	14	22	0	21	0	90	3	6	0	15	15	17	0	14	70
Fort Madison	2	13	0	15	0	33	0	18	6	93	8	4	2	6	3	12	19	7	61
Lyons City	7	15	6	8	12	19	12	5	8	92									
Muscataine	5	11	3	17	19	17	11	10	0	93	1	3	0	1	0	22	8	3	38
Pleasant Plain	0	13	4	13	17	24	0	19	2	92	0	0	0	0	4	15	12	1	32
Rossville	6	1	9	9	14	21	4	20	9	93									
MINNESOTA—																			
Beaver Bay, [Clark]	2	17	10	0	11	5	3	3	42	93	4	1	4	0	3	7	22	9	50
Beaver Bay, [Wieland]	0	14	8	4	10	4	7	8	0	55	0	0	0	0	0	0	3	0	3
Burlington	16	1	29	4	13	2	1	11	16	93	8	1	24	1	7	2	7	9	59
Chatfield	5	1	2	2	25	15	8	9	26	93	2	1	1	0	6	13	5	4	32
Forest City	10	1	5	13	19	9	4	2	30	93									
Hazlewood	1	3	2	29	20	11	3	16	0	85	0	0	3	5	0	1	5	0	14
Princeton	8	2	10	20	21	5	12	9	6	93	5	0	2	3	10	8	18	3	49

## No. 44.—WINDS—NUMBER OF OBSERVATIONS, JULY, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEBRASKA—																				
Bellevue .....	10	7	3	7	48	4	1	6	3	89	2	0	2	0	10	0	2	5	21	
Elkhorn .....	3	14	5	25	23	16	2	5	0	93	—	—	—	—	—	—	—	—	—	
Kanosha .....	1	7	12	41	5	3	4	20	0	93	—	—	—	—	—	—	—	—	—	
Nebraska City .....	3	3	7	6	43	14	1	3	13	93	—	—	—	—	—	—	—	—	—	
Omaha .....	7	1	0	27	38	1	1	10	8	93	2	0	0	0	1	1	0	5	9	
KANSAS—																				
Burlingame .....	9	6	1	47	1	6	0	2	20	93	—	—	—	—	—	—	—	—	—	
Fort Riley .....	4	16	4	13	39	16	0	1	0	93	—	—	—	—	—	—	—	—	—	
Lawrence .....	16	3	8	1	60	1	0	1	3	93	—	—	—	—	—	—	—	—	—	
Lecompton .....	0	11	0	23	0	36	0	14	0	90	—	—	—	—	—	—	—	—	—	
Manhattan .....	1	12	0	14	26	19	0	0	12	93	1	12	2	8	15	20	1	4	63	
Manhattan, [Preston] .....	4	6	2	34	28	12	0	5	0	91	—	—	—	—	—	—	—	—	—	
Moneka (a) .....	1	11	1	14	4	20	1	5	6	63	0	8	0	8	2	23	1	0	51	
Neosho Falls .....	3	9	2	19	8	22	0	2	28	93	—	—	—	—	—	—	—	—	—	
Spring Hill .....	0	11	10	13	16	16	0	5	12	92	—	—	—	—	—	—	—	—	—	
Wyandott City .....	2	13	9	31	14	12	1	7	4	93	—	—	—	—	—	—	—	—	—	
CALIFORNIA—																				
Auburn .....	0	0	7	0	3	64	0	2	3	79	—	—	—	—	—	—	—	—	—	
Orescent City .....	2	0	0	2	22	8	5	13	20	72	—	—	—	—	—	—	—	—	—	
Monterey .....	3	0	0	4	7	19	31	22	1	90	—	—	—	—	—	—	—	—	—	
Moquelumne Hill .....	0	0	0	0	0	92	1	0	0	93	—	—	—	—	—	—	—	—	—	
Sacramento .....	3	0	0	13	54	12	10	1	0	93	0	0	0	4	1	0	0	0	5	
San Francisco .....	0	0	0	0	9	10	52	0	22	93	0	0	0	0	3	14	28	0	45	
Santa Clara, [Gould] .....	0	0	0	5	0	3	0	57	28	93	—	—	—	—	—	—	—	—	—	
Union Rancho .....	0	0	0	1	74	5	2	0	3	93	6	0	0	17	5	0	0	0	28	
MEXICO—																				
Cordova .....	0	15	2	3	0	4	4	3	0	31	—	—	—	—	—	—	—	—	—	
WEST INDIES—																				
Nassau, Bahamas .....	0	1	5	12	2	1	0	0	0	21	—	—	—	—	—	—	—	—	—	
St. George's, Bermuda .....	12	3	4	14	14	29	42	6	0	124	—	—	—	—	—	—	—	—	—	
CENTRAL AMERICA—																				
Guatemala .....	9	86	1	1	1	7	0	6	12	123	—	—	—	—	—	—	—	—	—	
SOUTH AMERICA—																				
Catharina Sophia, Surinam .....	3	18	8	27	5	1	0	4	0	66	0	16	14	31	0	0	0	0	61	

<sup>a</sup> It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.



## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Montreal .....	4	15	2	4	7	30	10	15	8	95	3	10	1	4	5	22	9	11	65	
Red River Settlement .....	10	1	0	1	23	7	12	6	29	89	0	0	1	0	8	4	10	3	26	
St. John's .....	1	4	0	2	7	19	15	44	1	93	1	1	0	0	0	10	2	12	26	
St. Martin .....	1	12	1	21	4	40	5	9	0	93	—	—	—	—	—	—	—	—	—	
Stanbridge .....	5	7	5	39	19	4	5	3	6	93	—	—	—	—	—	—	—	—	—	
Toronto .....	0	15	4	18	1	13	1	36	5	93	—	—	—	—	—	—	—	—	—	
Windsor .....	9	15	10	7	0	12	19	12	4	83	—	—	—	—	—	—	—	—	—	
Wolfville .....	0	6	9	2	5	20	11	4	0	57	0	9	3	0	5	13	10	6	46	
MAINE—																				
Belfast .....	6	0	10	0	16	4	25	1	0	62	—	—	—	—	—	—	—	—	—	
Cornish .....	7	4	7	6	9	30	26	4	0	93	0	1	0	1	3	5	4	1	15	
Cornishville .....	6	4	0	3	16	14	26	24	0	93	—	—	—	—	—	—	—	—	—	
Dexter .....	2	11	9	2	11	25	12	20	1	93	0	0	0	0	0	0	0	1	1	
Gardiner .....	—	—	—	—	—	—	—	—	—	—	1	7	0	5	5	16	2	6	42	
Hartland, [Brown & Hall] .....	1	4	7	10	15	22	16	14	0	89	—	—	—	—	—	—	—	—	—	
Hartland, [Marshall & Strickland] .....	0	14	0	0	0	16	25	34	0	89	—	—	—	—	—	—	—	—	—	
Lisbon .....	2	5	0	4	50	5	5	22	0	93	5	2	0	2	16	1	9	5	40	
New Castle .....	12	9	0	15	29	14	9	5	0	93	—	—	—	—	—	—	—	—	—	
North Belgrade .....	10	5	5	17	30	7	10	9	0	93	—	—	—	—	—	—	—	—	—	
Norway .....	0	8	0	10	11	34	0	30	0	93	—	—	—	—	—	—	—	—	—	
Perry .....	0	0	0	0	8	49	7	28	0	92	0	1	0	0	0	16	14	14	45	
Portland .....	9	6	8	8	21	9	16	10	0	87	3	0	0	2	8	6	13	4	36	
Portland, [Adams] .....	14	9	11	20	25	2	7	2	0	90	—	—	—	—	—	—	—	—	—	
Steuben .....	1	21	1	5	0	42	2	13	8	93	0	9	0	1	1	18	2	8	39	
Topsham .....	1	2	0	10	24	16	16	24	0	93	—	—	—	—	—	—	—	—	—	
Vassalborough .....	11	0	6	0	50	0	26	0	0	93	—	—	—	—	—	—	—	—	—	
Warren .....	5	7	3	12	4	37	2	19	0	90	—	—	—	—	—	—	—	—	—	
NEW HAMPSHIRE—																				
Mount Washington .....	1	9	0	9	3	11	11	44	0	88	3	0	3	5	1	0	0	0	12	
Shelburne .....	0	0	21	0	0	0	40	0	16	77	0	0	1	7	0	4	16	18	46	
Stratford .....	0	18	15	1	3	12	19	7	18	93	0	1	0	0	0	3	19	1	24	
Stratham .....	5	2	1	23	11	20	22	9	0	93	—	—	—	—	—	—	—	—	—	
VERMONT—																				
Brandon .....	10	0	1	28	24	6	8	12	4	93	4	0	0	0	6	9	16	13	48	
Burlington .....	1	7	0	2	33	21	2	26	0	92	—	—	—	—	—	—	—	—	—	
Craftsbury .....	1	3	4	4	27	16	14	11	13	93	2	1	2	1	8	14	20	13	61	
Lunenburg .....	0	2	0	0	23	7	8	7	0	47	—	—	—	—	—	—	—	—	—	
Rupert .....	—	—	—	—	—	—	—	—	—	—	1	0	0	1	5	40	8	0	55	
St. Johnsbury .....	13	1	6	2	23	2	25	10	8	90	0	2	1	1	11	2	21	2	40	
MASSACHUSETTS—																				
Amherst .....	0	1	4	22	8	11	10	27	0	83	0	4	0	5	0	8	5	1	23	
Cambridge .....	6	8	11	5	4	18	12	5	17	86	—	—	—	—	—	—	—	—	—	
Florida .....	0	1	5	6	0	22	44	15	0	93	—	—	—	—	—	—	—	—	—	
Lawrence .....	0	14	2	16	0	37	0	24	0	93	—	—	—	—	—	—	—	—	—	
Mendon .....	0	19	3	3	2	40	0	26	0	93	0	10	2	3	3	31	0	23	72	
Nantucket .....	1	22	1	7	4	30	5	8	15	93	—	—	—	—	—	—	—	—	—	
New Bedford .....	6	9	5	9	5	34	5	19	1	93	1	1	0	0	0	4	4	2	12	
Richmond .....	1	12	0	3	0	46	0	31	0	93	0	1	1	6	1	16	10	13	48	
Westfield .....	7	5	11	13	9	11	16	21	0	93	—	—	—	—	—	—	—	—	—	
Williamstown .....	0	0	6	5	10	3	0	8	55	93	—	—	—	—	—	—	—	—	—	
Worcester .....	1	14	2	12	3	33	1	26	0	92	1	5	1	6	2	17	0	7	39	
RHODE ISLAND—																				
Providence .....	2	9	6	5	8	23	4	24	1	82	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Columbia .....	5	13	0	8	9	9	6	26	17	93	6	9	0	6	6	5	4	9	45	
Middletown .....	7	6	2	6	4	19	3	10	36	93	2	3	0	0	0	8	9	8	30	
Pomfret .....	9	10	4	5	18	21	2	22	0	91	4	6	2	2	11	14	4	9	52	
Saybrook .....	8	7	8	14	8	16	4	18	10	93	2	1	2	2	5	2	17	4	35	
Wallingford .....	20	10	1	17	17	12	3	13	0	93	1	4	1	4	1	9	14	6	40	
NEW YORK—																				
Baldwinsville .....	0	0	7	12	5	5	54	9	1	93	0	0	1	2	0	11	49	4	67	

## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Bellport	12	10	5	14	4	27	9	5	7	94	2	2	5	9	1	12	14	2	47
Beverly	6	9	0	15	5	30	0	21	5	86	5	5	1	10	4	17	3	6	51
Cazecovia	2	0	0	11	6	14	11	27	11	82	1	2	0	1	0	5	26	18	53
Great Valley	20	1	0	3	30	9	7	12	11	93									
Morrisania	9	7	17	19	4	14	20	2	1	93	4	0	0	3	2	1	4	1	15
Nichols	2	1	11	22	21	3	2	31	0	93	15	0	1	6	12	2	3	28	67
Ogdenburg	0	0	0	0	11	11	4	3	0	18	0	0	0	0	0	0	6	0	6
Oswego	3	10	12	17	11	5	26	8	1	93									
Penn Yan	4	0	0	3	41	25	12	7	0	93									
Rochester	7	8	1	4	8	23	22	19	1	93	5	2	0	3	5	9	11	16	51
Saratoga	0	2	0	8	1	31	3	3	0	48	0	1	0	7	0	32	0	4	47
Wampsville	0	0	10	13	12	8	47	3	0	93	0	2	4	10	9	7	33	3	68
Wilson	5	4	11	7	6	20	19	5	2	79									
NEW JERSEY—																			
Cinnaminson	5	22	5	12	5	10	7	22	5	93									
Lambertville	2	10	4	20	2	20	2	23	0	83									
Newark	3	16	1	11	11	18	0	7	0	62									
New Brunswick	4	9	18	11	10	4	18	15	4	93									
PENNSYLVANIA—																			
Bedford	0	0	0	2	13	2	8	1	49	75	3	0	0	0	11	7	17	5	43
Bendersville	0	4	13	11	5	20	16	1	0	70									
Berwick	4	0	43	3	3	8	26	2	1	90	0	0	4	0	4	3	5	0	16
Cannonsburg	0	4	31	1	0	10	46	1	0	93									
Carlisle	0	1	0	23	2	3	10	6	27	72	0	1	0	13	4	2	8	4	32
Chambersburg	4	15	5	16	11	6	20	4	12	93	4	9	2	2	6	18	15	8	64
Easton	6	9	0	26	5	5	1	35	5	92									
Fleming	1	0	5	24	0	21	14	28	0	93	0	0	2	0	1	4	21	21	55
Germantown	1	9	5	14	3	5	13	39	0	89									
Gettysburg	9	19	0	3	11	27	9	10	5	93	0	4	4	0	5	20	21	7	61
Harrisburg, [Heisel]	9	0	1	20	13	4	31	8	3	89	0	0	0	7	9	2	16	3	39
Harrisburg, [Hickok]	14	3	28	1	18	0	21	0	0	91	0	0	0	0	2	1	4	0	7
Lewisburg	4	12	3	10	18	13	3	4	26	93	1	0	1	2	4	5	7	7	27
Morrisville	1	11	9	8	0	18	7	4	26	93	1	9	1	6	2	16	15	2	52
Mount Joy	2	0	0	15	10	0	0	41	0	68	3	8	1	10	1	1	7	22	53
Norristown	0	4	12	11	13	12	26	3	0	81	1	2	4	5	2	18	14	0	49
North Whitehall	3	2	4	2	1	5	0	3	64	93	3	0	2	2	1	8	12	2	34
Philadelphia	2	19	8	16	7	21	6	14	0	93	2	7	3	4	10	8	4	6	44
Pittsburg, [Marine Hosp.]	12	1	7	11	10	13	14	19	6	93	4	2	1	1	8	15	11	1	43
Pocapon	8	10	6	1	6	28	13	8	0	80	4	7	2	2	3	10	11	4	43
Shamokin	0	2	13	6	47	1	24	0	0	93	0	3	56	3	1	2	2	1	68
Somerset	5	3	3	11	4	10	8	0	43	93	3	1	7	3	5	15	17	11	62
Worthington	12	3	17	12	5	17	8	1	17	92	5	5	2	5	4	15	18	7	61
MARYLAND—																			
Annapolis	9	18	4	15	22	14	2	4	5	93	1	0	0	0	0	22	0	1	30
Baltimore	16	8	6	12	20	6	6	10	2	86									
Bladensburg	6	12	4	6	4	10	1	5	0	48									
Frederick	3	20	4	3	9	16	9	5	24	93	0	0	0	3	7	5	25	3	47
Leitersburg	10	5	5	2	28	16	8	8	11	93	0	7	5	0	5	13	22	11	50
Leonardtown	6	18	12	15	3	20	8	2	2	86	1	5	1	0	1	2	15	8	33
Sykesville	18	7	11	9	13	8	20	7	0	93	1	6	5	5	4	8	36	3	68
DISTRICT OF COLUMBIA—																			
Washington	6	12	6	12	17	11	5	7	13	89									
VIRGINIA—																			
Crichton's Store	24	8	3	0	17	19	5	5	7	92	0	0	0	0	0	29	1	0	30
Fredericksburg	18	19	9	13	16	10	0	0	0	93									
Lewinsville	4	0	8	25	12	4	8	23	0	93									
Lewisburg	0	0	0	3	24	39	0	0	0	66									
Montross	3	12	11	5	4	5	9	0	38	87	9	4	6	4	4	2	3	3	35
Mont View	3	5	2	16	0	37	21	0	0	90	0	6	0	12	4	4	5	0	31
Mustapha	25	0	0	0	30	1	0	1	5	62									
Poplar Grove	0	4	31	1	0	0	19	2	36	03	0	0	0	3	7	15	17	5	53
Portsmouth	1	30	4	11	6	30	0	5	0	93									



NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Rougemon	14	11	6	0	16	7	18	3	15	90	7	2	1	1	4	6	21	3	45	
Smithfield	12	23	5	11	11	16	5	10	0	93	8	10	2	3	1	14	13	12	63	
NORTH CAROLINA—																				
Chapel Hill	11	16	8	6	6	25	13	8	0	93	2	12	4	0	5	32	5	3	63	
Murfreesborough	13	9	15	3	27	3	1	0	1	72	6	10	9	0	13	2	7	3	50	
Raleigh	7	7	1	2	11	4	7	3	51	93										
SOUTH CAROLINA—																				
Aiken	4	7	34	10	8	24	4	0	0	91										
All Saints	17	5	3	5	39	11	11	2	0	93	5	1	7	1	11	4	11	7	41	
Charleston	5	9	3	3	8	6	2	1	0	37										
Columbia, [White]	5	6	12	8	14	8	7	1	25	87	0	1	0	0	0	1	1	0	3	
St John's	3	24	2	18	1	18	3	14	0	83	3	3	0	0	2	2	6	11	27	
GEORGIA—																				
Athens	3	12	9	0	0	3	3	14	20	64	0	0	5	1	0	0	4	5	15	
Atlanta	0	0	30	22	22	12	2	0	0	93										
Augusta	4	26	3	23	5	11	9	1	91	91	2	10	0	19	4	14	8	10	67	
Clarksville, [Van Buren]	1	7	24	5	12	15	28	1	0	93										
Covington	0	22	6	26	2	16	15	6	0	93										
Savannah	3	34	3	14	20	15	1	2	0	92	1	1	0	1	1	0	1	0	5	
Sparta	5	19	7	25	4	13	6	7	0	86	3	10	3	13	4	14	4	11	62	
Thomaston	17	16	12	16	7	16	5	4	0	93	0	0	0	1	0	0	0	0	1	
Whitemarsh Island	4	16	5	16	12	10	6	3	21	93	2	6	3	6	3	6	15	16	57	
FLORIDA—																				
Alligator	2	3	5	16	12	13	7	0	34	93	11	2	4	2	10	3	12	4	48	
Atsena	0	10	10	26	5	13	19	6	4	93	0	7	12	24	3	7	16	6	75	
Belair	1	5	13	16	4	3	2	2	8	54	5	2	0	5	7	12	10	4	45	
Jacksonville	0	27	1	22	3	35	1	3	0	92	0	13	6	14	1	29	12	0	75	
Micanopy	3	8	8	39	7	7	5	6	8	91	0	5	0	0	1	4	1	3	14	
St Augustine	0	32	1	29	1	14	1	15	0	93	31	1	28	0	12	0	12	0	84	
Salt Ponds	3	0	10	19	19	8	1	0	2	62										
ALABAMA—																				
Cahawba	30	7	1	14	26	5	0	10	0	93										
Carlowville	0	8	20	24	11	16	11	3	0	93	1	6	15	17	6	6	3	1	55	
Greene Springs	10	4	32	9	3	3	6	5	0	72	4	1	5	4	2	1	3	4	24	
Greensborough	11	3	7																	

No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TEXAS—Continued.																				
Webberville.....	8	1	2	3	47	4	0	0	15	80	0	0	1	0	1	0	2	0	10	
Wheelock.....	12	7	8	2	53	1	0	0	1	93	0	0	0	0	0	0	0	0	0	
ARKANSAS—																				
Arkadelphia.....	2	45	9	17	3	15	0	2	0	93	0	0	0	0	0	0	0	0	0	
Brownsville.....	0	8	2	3	25	38	12	1	4	93	0	0	0	0	0	0	0	0	0	
Buck Horn.....	8	13	0	16	3	15	1	28	0	93	0	0	0	0	0	0	0	0	0	
Jacksonport.....	30	16	11	0	19	2	11	3	0	92	0	0	0	0	0	0	0	0	0	
Perryville.....	29	6	0	3	44	5	1	5	0	93	0	0	0	0	0	0	0	0	0	
Spring Hill.....	2	12	15	7	2	3	6	2	37	86	0	0	0	0	0	0	0	0	0	
Waldron.....	20	10	29	7	5	8	11	3	0	93	0	0	0	0	0	0	0	0	0	
TENNESSEE—																				
Glenwood.....	2	8	19	6	19	7	2	2	28	93	4	4	9	0	14	0	22	2	61	
Memphis.....	13	6	10	11	3	8	8	13	21	93	0	0	0	0	0	0	0	0	0	
Winchester.....	13	3	4	3	31	4	14	3	0	75	0	0	0	0	0	0	0	0	0	
KENTUCKY—																				
Bardstown.....	4	21	3	2	18	17	10	0	8	89	1	9	1	1	2	20	17	7	58	
Hardensburg.....	2	8	2	17	16	37	5	0	0	93	0	0	0	0	0	0	0	0	0	
Lexington.....	1	13	5	31	9	9	4	12	0	84	1	4	0	1	2	28	7	5	48	
Paris.....	4	25	1	19	2	24	3	14	0	92	4	5	1	1	6	0	21	5	49	
Springdale.....	0	16	1	5	4	21	2	1	43	93	0	0	0	0	0	0	0	0	0	
OHIO—																				
Avon.....	6	20	10	10	17	10	6	7	0	86	1	0	0	0	0	1	54	7	63	
Bellefontaine.....	0	17	10	22	6	24	2	8	0	89	0	13	1	4	0	16	4	17	55	
Bethel.....	1	13	7	1	2	24	7	1	0	56	0	0	0	0	0	0	0	0	0	
Bowling Green.....	6	14	1	5	6	7	2	4	46	91	4	3	2	0	0	7	12	7	35	
Cincinnati, [Harper].....	0	28	0	14	5	22	10	2	0	90	0	0	0	0	0	1	0	0	1	
Cincinnati, [Phillips].....	4	0	2	6	5	16	11	14	35	93	1	6	0	3	1	16	12	18	57	
Cleveland.....	19	9	3	19	25	4	1	4	2	86	6	1	1	0	1	3	10	4	26	
College Hill.....	9	7	12	7	23	7	13	15	0	93	3	1	3	5	19	1	16	3	51	
College Hill, [Hammett].....	5	10	0	6	5	25	22	20	0	93	0	0	0	0	0	0	0	0	0	
Dallasburg.....	7	15	5	7	10	18	22	9	0	93	0	0	0	0	0	0	0	0	0	
Elk Run.....	8	11	0	7	7	22	15	16	3	93	0	1	0	0	1	8	4	5	19	
Freedom.....	12	5	13	4	20	19	11	9	0	93	10	0	0	1	10	8	33	0	68	
Hillsborough.....	2	10	0	7	6	45	2	21	0	93	0	0	0	1	0	23	1	4	29	
Hillsborough.....	6	9	9	0	10	31	15	4	0	84	0	0	0	0	0	0	0	0	0	
Hocking Port.....	1	17	0	17	3	14	34	5	2	93	0	0	0	0	0	0	0	0	0	
Hudson.....	2	24	5	21	7	14	2	17	0	92	0	0	0	0	0	0	0	0	0	
Jackson, (Monroe Co.).....	7	5	1	1	6	2	0	0	29	51	0	0	0	0	0	0	0	0	0	
Kelley's Island.....	6	12	16	7	8	22	4	10	8	93	0	0	0	0	0	0	1	1	2	
Madison.....	12	2	2	2	8	8	12	9	37	92	3	0	0	0	2	1	6	1	13	
Madison, [King].....	9	8	1	8	7	5	2	12	13	65	5	1	0	0	2	3	4	10	25	
Montville.....	4	15	0	30	7	18	1	16	2	93	5	4	1	1	2	6	2	10	31	
Newark.....	13	18	4	5	19	21	6	7	0	93	0	0	0	0	0	0	0	0	0	
New Lisbon.....	10	2	7	10	4	27	13	20	0	93	2	1	1	5	1	21	13	10	54	
North Bend.....	2	4	11	8	13	11	10	2	32	93	0	0	0	0	0	0	0	0	0	
Northwood.....	2	17	5	26	3	16	1	17	1	88	4	9	1	1	1	17	5	10	48	
Portsmouth.....	7	16	5	4	7	27	3	24	0	93	0	11	0	0	0	34	0	11	56	
Rockport.....	12	10	16	0	8	8	16	23	0	93	0	0	0	0	0	0	0	0	0	
Savannah.....	6	14	0	18	3	38	9	5	0	93	5	2	0	0	1	27	15	14	64	
Sharonville.....	22	2	12	9	3	30	12	0	0	93	0	0	0	0	0	0	0	0	0	
Troy.....	0	0	12	0	5	5	44	0	27	93	2	0	6	1	5	0	19	0	41	
Urbana.....	2	3	0	7	12	5	2	1	37	69	0	3	0	1	1	13	18	2	40	
Welchfield.....	24	2	2	19	10	14	8	14	0	93	1	0	0	0	0	1	0	3	5	
Westerville.....	14	12	3	0	18	20	13	10	1	91	6	7	1	0	9	12	15	8	58	
MICHIGAN—																				
Battle Creek.....	5	10	13	6	8	8	10	4	29	93	0	1	2	1	0	11	25	4	46	
Detroit.....	2	2	12	34	7	17	18	1	0	93	0	0	0	9	22	32	27	3	93	
Fort Gratiot.....	4	33	0	11	10	25	7	8	0	98	3	0	1	4	3	11	12	12	55	
Grand Haven.....	1	4	4	3	4	8	6	9	0	39	1	1	1	1	0	0	8	13	25	
Grand Rapids.....	11	12	8	1	7	12	37	5	0	93	5	7	3	0	2	6	39	0	68	
Lake George.....	1	8	0	7	2	9	16	20	26	89	0	0	0	0	0	0	0	0	0	
Marquette.....	5	4	7	4	17	12	22	22	0	93	0	0	0	0	0	0	0	0	0	



## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MICHIGAN—Continued.																				
Monroe, [Bowlsby].....	1	5	6	17	1	24	0	13	20	93	0	0	6	2	0	0	5	0	13	
Monroe, [Whelpley].....	0	0	0	22	5	33	15	3	0	78	0	0	0	17	6	23	12	2	60	
Monroe Tiers, [Lane].....	3	18	10	28	7	27	6	25	0	124	0	4	0	0	2	12	13	15	46	
New Buffalo.....											0	0	6	0	1	14	32	0	62	
Ontonagon.....	14	7	2	1	8	7	21	2	0	62										
Ottawa Point (a).....	5	20	9	15	20	18	8	29	0	124	3	3	2	1	1	28	8	0	55	
Otsego.....	4	5	4	6	5	17	1	8	37	87										
Thunder Bay Island.....	26	14	5	25	15	10	5	15	9	124	9	2	0	4	2	5	4	17	43	
Ypsilanti.....	4	12	9	16	0	17	14	7	2	87	3	3	1	5	3	15	16	7	53	
INDIANA—																				
Aurora.....	3	12	3	1	2	7	2	1	0	31										
Cannelton.....	10	5	12	17	4	9	14	18	0	89	6	2	6	4	3	12	11	7	51	
Greencastle.....	31	6	4	12	13	8	2	0	11	87										
Logansport.....	2	21	2	15	0	30	4	18	1	93										
Logansport, [Bartlett].....	3	20	8	9	0	16	21	16	0	93	4	17	10	5	0	7	22	15	80	
Mishawaka.....	2	7	4	6	4	37	29	4	0	93	0	5	4	5	3	22	36	4	79	
New Albany.....	5	4	4	2	4	7	13	8	20	67	1	0	1	0	2	0	0	6	19	
New Harmony.....	16	0	3	14	4	7	14	18	0	76										
Richmond, [Austin].....	4	20	0	4	3	4	5	4	7	51	1	7	0	3	2	3	8	2	26	
Richmond, [Haines].....	2	9	28	16	2	20	6	7	3	93										
Shelbyville.....	21	9	18	14	8	9	8	6	0	93										
South Bend.....	0	0	2	6	1	5	56	5	18	93										
ILLINOIS—																				
Augusta.....	2	17	17	9	7	5	11	7	18	93	4	5	4	5	1	7	9	6	41	
Aurora.....	9	15	3	11	11	17	11	16	0	93	3	6	0	2	1	10	22	11	55	
Batavia.....	0	29	2	14	0	41	0	7	0	93	0	15	0	7	0	30	1	15	68	
Carbon Cliff.....	4	4	19	0	11	20	29	4	2	93										
Chicago.....	1	27	5	18	14	18	7	12	0	92										
Dixon.....	1	13	5	20	14	26	10	4	0	93										
Edgington.....	1	13	1	7	8	38	0	25	0	93	2	7	0	4	2	41	0	19	75	
Elgin.....	1	12	5	14	11	7	1	22	20	93	0	0	0	0	0	0	5	0	5	
Manchester.....	19	18	2	12	22	2	12	6	0	93	10	13	2	7	12	3	10	4	61	
Marengo.....	0	6	21	15	7	34	5	0	0	88	0	0	0	0	0	3	0	0	3	
Naperville.....	4	14	4	5	4	19	0	12	24	93	2	7	3	0	2	1	13	5	33	
Ottawa.....	0	17	7	11	4	11	6	13	1	71	0	4	0	2	1	3	0	4	14	
Pekin.....	13	14	8	12	11	9	5	12	9	93	8	1	8	1	3	10	17	5	51	
Peoria.....	2	30	23	1	4	1	31	1	0	93	0	0	1	0	1	0	3	1	8	
Riley.....	1	12	10	6	7	4	8	10	35	93										
Sandwich.....	6	20	10	14	9	7	6	21	0	93	0	4	0	0	0	10	20	13	47	
Tiskilwa.....	1	9	4	20	9	19	0	30	0	92										
Upper Alton.....	9	22	1	6	3	17	3	26	6	93	11	21	1	8	3	16	3	24	87	
West Salem.....	2	10	6	11	13	6	2	9	34	93										
West Urbana.....	9	20	5	26	1	10	6	15	0	92	2	1	0	0	1	2	0	2	8	
Wheaton.....	7	22	7	4	12	11	8	13	9	93	2	2	0	0	0	1	2	5	12	
Willow Creek.....	6	12	11	15	18	5	16	6	2	91										
Winnebago.....	5	6	3	15	18	11	18	17	0	93	5	2	4	0	0	6	11	7	35	
MISSOURI—																				
Augusta.....	17	11	22	9	11	8	6	7	2	93										
Bolivar.....	2	4	12	26	7	21	3	0	0	75										
Boonville.....	0	20	7	26	1	19	8	12	0	93										
Carrollton.....	1	7	9	8	8	25	20	15	0	93										
Cassville.....	6	3	6	10	6	2	5	10	45	93										
Dundee.....	6	12	9	9	24	5	20	8	0	93										
Emerson.....	10	6	12	8	15	3	6	10	2	72										
Farmington.....	19	2	1	1	22	19	16	13	0	93										
Greenfield.....	6	15	9	27	17	16	0	3	0	93										
Greenville.....	6	3	0	18	17	4	0	3	0	51										
Harrisonville.....	10	12	34	20	7	3	2	3	1	92										
Hermann.....	7	19	36	5	5	8	16	2	0	93										

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MISSOURI—Continued.																			
Honnerville	14	3	14	14	8	4	27	0	93										
Kirkville	3	15	17	34	13	1	1	9	0	93									
Lucas	21	4	23	3	36	1	5	0	0	93									
Lexington	18	12	19	12	5	11	3	1	90										
Luray	20	13	7	24	11	1	0	15	2	93									
Paris	3	23	6	21	11	3	1	6	19	93									
Richmond	11	9	0	4	36	3	1	4	2	70									
St. Louis, [Engelmann]	16	16	20	10	7	1	14	9	0	93									
St. Louis, [Fendler]	5	23	6	34	10	11	7	40	24	160	8	18	2	9	2	11	7	24	81
Stockton	0	4	23	7	43	7	12	3	14	93									
Trenton	28	5	1	8	24	9	8	5	0	86									
Tusculum	1	1	2	11	29	27	2	0	20	93									
Warrenton	2	23	18	16	6	7	11	10	0	93									
Waynesville	10	19	0	8	3	3	3	11	0	57									
Wet au Glaise	0	18	2	17	7	19	11	21	11	93									
WISCONSIN—																			
Appleton	8	22	0	0	31	29	0	3	0	93									
Bay City	1	31	1	1	9	43	3	4	0	93	0	5	0	1	0	11	2	0	19
Beloit	11	4	7	5	24	7	8	27	0	93	17	1	2	0	5	4	3	17	49
Burlington	11	15	4	9	28	7	8	11	0	93									
Green Bay	25	2	0	0	22	5	1	1	37	93	4	1	0	0	1	3	0	1	10
Janesville	7	8	9	5	4	13	16	7	3	72	0	0	0	0	0	3	7	5	15
Kenosha	0	7	22	20	18	5	12	4	2	90									
Lake Mills	7	5	2	7	28	18	14	12	0	93									
Manitowoc	3	8	3	11	18	17	14	19	0	93	1	1	0	0	0	3	12	4	21
Milwaukee, [Larkin]	4	10	14	13	5	8	24	6	6	90	2	2	1	1	4	1	18	7	36
Milwaukee, [Winkler]	7	15	11	19	4	12	10	15	0	93									
Otsego	1	9	7	12	4	27	13	20	0	93									
Platteville	10	1	6	17	12	3	14	30	0	93	3	0	2	1	6	11	21	21	65
Rocky Run	2	9	4	11	6	19	7	22	13	93									
Superior	12	22	18	19	12	17	20	4	0	124									
Wausau	11	2	1	1	10	14	23	9	22	93	11	9	3	11	2	5	9	8	47
IOWA—																			
Bellevue	11	11	11	10	9	10	26	11	0	88									
Border Plains	11	8	8	46	3	1	0	9	7	93	1	11	0	0	2	3	3	15	24
Burlington	0	21	2	25	0	10	0	24	1	84	11	6	1	1	11	7	28	9	55
Davenport	3	4	1	4	21	3	17	7	33	93									
Dubuque	4	3	3	10	10	10	5	11	35	91	3	3	3	3	2	9	19	12	54
Fairfield	0	10	1	18	0	11	0	19	39	93	0	1	0	1	0	0	11	1	8
Fayette Village	2	1	5	13	11	12	37	12	0	93									
Forestville	8	12	2	7	9	31	2	22	0	93	5	8	1	4	4	29	2	11	64
Fort Madison	1	19	0	17	0	24	2	22	8	93	3	3	0	6	0	9	21	13	55
Lyons City	9	15	6	6	21	7	17	7	5	93									
Muscataine	7	10	11	9	25	2	22	7	0	93	1	7	0	1	1	11	3	3	25
Pleasant Plain	2	15	6	16	15	12	0	17	10	93	1	0	0	0	1	8	13	4	27
Rossville	8	3	10	5	5	15	11	25	11	91									
MINNESOTA—																			
Beaver Bay, [Clark]	0	5	5	5	21	5	7	2	43	93	5	1	2	11	2	7	11	11	34
Beaver Bay, [Wieland]	5	13	2	1	7	10	9	11	35	93	3	1	0	0	0	11	1	5	5
Burlington	14	8	14	1	23	0	2	8	23	93	7	4	8	0	6	10	14	6	45
Chatfield	2	2	0	0	13	17	15	6	34	89	6	0	0	0	8	16	9	7	41
Forest City	4	6	8	2	15	3	8	12	35	93									
Hazlewood	1	0	5	2	19	17	10	31	0	85	1	0	3	0	4	0	5	7	20
Princeton	12	5	7	4	9	2	24	5	18	93	6	0	2	11	1	9	17	7	42
NEBRASKA—																			
Bellevue	18	12	14	11	27	0	4	1	11	93	8	7	2	11	10	11	2	0	32
Elkhorn	1	19	17	26	17	1	2	8	2	93									
Kanawha	0	0	12	55	1	0	1	24	0	93									
Nebraska City	5	7	4	7	31	2	0	4	33	93									
Omaha	10	2	3	20	23	2	1	12	20	93	0	0	0	1	0	0	0	2	3
KANSAS—																			
Burlingame	8	11	10	37	1	1	0	2	32	93									



## No. 45.—WINDS—NUMBER OF OBSERVATIONS, AUGUST, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North	Between north and east	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total	North	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
KANSAS—Continued.																			
Fort Riley .....	32	22	4	7	24	0	0	4	0	93									
Lecompton .....	0	0	0	39	0	14	0	40	0	93									
Manhattan .....	3	4	14	19	10	7	0	0	36	93	3	7	5	18	6	19	3	4	65
Manhattan, [Preston] .....	11	5	22	28	11	8	1	4	0	90									
Mon k (a) .....	0	11	0	10	2	14	0	11	14	62	0	9	0	3	0	14	2	7	35
Neosho Falls .....	4	8	9	20	2	8	0	1	41	93									
Spring Hill .....	9	25	21	10	8	9	0	9	2	93									
Wyandott City .....	2	28	7	28	0	4	2	10	3	84									
CALIFORNIA—																			
Auburn .....	0	0	0	4	36	52	1	0	0	93									
Crescent City .....	0	0	0	0	33	4	5	11	40	93									
Monterey .....	5	0	1	0	0	6	39	11	25	87									
Moquelumne Hill .....	0	21	16	6	4	24	18	2	2	93									
Sacramento .....	5	1	0	17	45	13	9	3	0	93	0	0	0	1	0	3	0	0	4
San Francisco .....	0	0	0	0	3	12	52	0	26	93	0	0	0	0	2	11	43	1	57
Santa Clara, [Gould] .....	0	0	0	14	0	0	0	43	36	93									
Union Rancho .....	2	1	0	2	64	1	2	12	6	90	0	0	0	14	11	1	0	0	26
MEXICO—																			
Cordova .....	0	14	2	2	0	0	1	6	0	31									
WEST INDIES—																			
Nassau, Bahamas .....	0	0	5	13	1	2	1	1	4	27									
St George's, Bermuda .....	1	2	4	13	28	69	5	2	0	124									
CENTRAL AMERICA—																			
Guatemala .....	14	51	1	1	1	29	1	8	17	123									
SOUTH AMERICA—																			
Catharina Sophia, Surinam .....	8	40	7	15	14	3	0	6	0	93	1	28	27	28	0	1	0	2	87

α It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
BRITISH AMERICA—																				
Fort Simpson .....	7	19	5	17	5	0	7	30	0	90	2	0	3	1	1	0	1	1	9	
Montreal .....	13	16	0	2	2	27	13	14	3	90	14	13	0	1	1	26	12	10	77	
Red River Settlement .....	14	0	2	■	47	4	5	8	7	90	9	1	0	3	22	3	3	7	48	
St. John's .....	7	3	0	5	5	15	13	42	■	90	2	5	1	2	5	11	11	0	57	
St. Martin .....	3	20	3	14	3	33	7	7	0	90	—	—	—	—	—	—	—	—	—	
Stanbridge .....	7	6	4	20	11	14	23	6	0	90	—	—	—	—	—	—	—	—	—	
Toronto .....	2	23	4	10	0	20	1	23	7	90	—	—	—	—	—	—	—	—	—	
Windsor .....	1	6	13	4	4	18	15	3	17	81	0	0	0	0	0	1	0	0	1	
Wolfville .....	1	5	18	2	0	16	19	7	16	84	0	1	0	1	2	9	15	4	32	
MAINE—																				
Belfast .....	14	11	7	1	12	14	24	7	0	90	11	10	4	1	5	11	19	■	70	
Cornish .....	11	11	2	1	8	31	18	8	0	90	0	0	0	0	0	1	■	2	9	
Cornishville .....	10	11	3	2	11	9	22	22	0	90	—	—	—	—	—	—	—	—	—	
Dexter .....	1	16	7	3	6	14	18	20	5	90	—	—	—	—	—	—	—	—	—	
Gardiner .....	1	19	0	11	1	29	1	20	8	90	■	6	0	1	3	15	3	15	43	
Hartland .....	0	14	0	0	0	16	25	34	0	89	—	—	—	—	—	—	—	—	—	
Limington .....	7	17	0	3	2	28	13	20	0	90	—	—	—	—	—	—	—	—	—	
Lisbon .....	15	8	0	4	2	7	20	15	0	90	10	8	0	1	12	2	18	6	57	
New Castle .....	0	13	0	3	7	41	12	14	0	9	—	—	—	—	—	—	—	—	—	
North Belgrade .....	4	22	4	6	13	12	7	25	0	90	—	—	—	—	—	—	—	—	—	
Norway .....	3	10	0	14	2	26	1	34	0	90	—	—	—	—	—	—	—	—	—	
Perry .....	2	19	0	0	0	21	7	28	0	77	2	4	0	0	0	11	5	9	31	
Portland, [Adams] .....	12	7	0	10	37	5	9	10	0	90	—	—	—	—	—	—	—	—	—	
Portland, [Willis] .....	7	15	3	4	5	11	9	13	0	87	1	0	0	0	1	6	10	8	26	
Steuben .....	■	23	0	0	1	37	3	23	2	89	0	3	0	0	0	20	4	11	38	
Topsham .....	2	16	0	0	1	22	29	20	0	90	—	—	—	—	—	—	—	—	—	
Vassalborough .....	14	1	10	■	17	0	48	0	0	90	—	—	—	—	—	—	—	—	—	
Warr. n. ....	9	11	2	1	4	27	12	24	0	90	—	—	—	—	—	—	—	—	—	
NEW HAMPSHIRE—																				
Claremont, [Chase] .....	7	7	16	11	9	10	19	10	0	89	5	1	7	4	6	3	24	11	61	
Mount Washington .....	0	■	0	0	0	4	12	29	1	46	—	—	—	—	—	—	—	—	—	
Shelburne .....	0	0	19	0	0	0	33	■	14	66	0	0	8	1	0	7	6	19	41	
Stratford .....	0	14	11	4	2	15	15	3	26	90	0	0	0	0	0	7	18	0	25	
Stratham .....	4	9	0	9	1	22	32	13	0	90	—	—	—	—	—	—	—	—	—	
VERMONT—																				
Brandon .....	7	0	0	19	19	7	7	21	10	90	5	0	0	0	3	■	13	24	51	
Burlington .....	10	2	0	2	26	20	10	20	0	90	1	1	0	0	■	4	32	12	56	
Craftsbury .....	2	10	1	4	28	19	7	16	3	90	1	1	0	0	6	4	32	12	56	
Lunenburg .....	1	4	13	1	31	14	18	8	0	90	0	0	10	1	0	6	0	0	21	
Rupert .....	—	—	—	—	—	—	—	—	—	—	3	2	0	4	■	4	10	2	69	
St. Johnsbury .....	0	0	3	2	11	0	31	12	2	61	0	0	0	0	2	0	16	3	22	
MASSACHUSETTS—																				
Amherst .....	5	5	3	20	2	3	5	34	0	77	1	3	1	3	0	6	5	■	28	
Cambridge .....	1	15	8	5	5	22	7	8	15	86	—	—	—	—	—	—	—	—	—	
Florida .....	3	7	3	2	0	18	37	20	0	90	—	—	—	—	—	—	—	—	—	
Lawrence .....	0	29	0	0	0	34	0	36	0	90	—	—	—	—	—	—	—	—	—	
Mendon .....	0	21	7	0	3	40	8	11	0	90	■	23	5	0	3	24	8	8	71	
Nantucket .....	11	12	2	1	1	21	6	18	15	90	—	—	—	—	—	—	—	—	—	
New Bedford .....	2	15	0	7	1	31	3	31	0	90	7	1	0	0	0	6	8	5	27	
Springfield .....	12	8	0	0	13	5	28	14	0	78	—	—	—	—	—	—	—	—	—	
Westfield .....	10	9	2	15	1	14	17	22	0	90	0	0	0	0	0	1	0	2	3	
Williamstown .....	6	0	2	9	14	5	9	15	30	90	—	—	—	—	—	—	—	—	—	
Worcester .....	1	24	1	13	0	24	1	26	0	90	■	6	■	1	0	13	0	11	31	
RHODE ISLAND—																				
Providence .....	4	18	0	0	1	31	2	33	0	89	—	—	—	—	—	—	—	—	—	
CONNECTICUT—																				
Columbia .....	1	21	0	■	9	9	4	31	15	90	0	17	0	0	8	11	3	10	49	
Middletown .....	6	8	1	1	3	12	7	7	45	90	0	0	0	0	0	1	20	5	26	
Pomfret .....	5	17	3	3	5	23	4	30	0	90	1	14	0	1	3	15	3	24	61	
Saybrook .....	5	8	11	7	5	23	2	22	6	89	3	2	1	0	2	3	12	7	30	
Wallingford .....	21	9	0	5	10	23	1	21	0	90	■	5	0	0	0	3	21	3	32	



NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
<b>NEW YORK —</b>																			
Baldwinsville.....	4	1	7	11	3	12	31	21	0	90	2	0	2	7	0	11	34	18	74
Bellport.....	10	14	5	4	8	28	5	12	4	90	3	4	5	1	7	7	6	2	30
Beverly.....	16	12	0	11	1	22	0	16	0	78	2	7	2	4	2	23	4	6	50
Cazenovia.....	2	0	0	11	11	11	12	40	2	89	1	0	0	9	4	7	20	35	76
Great Valley.....	14	0	0	2	29	11	10	14	10	90	—	—	—	—	—	—	—	—	—
Morrisania.....	0	16	3	9	15	15	19	13	0	90	1	6	14	5	4	3	1	0	34
Nichols.....	14	1	7	24	20	1	6	17	0	90	18	1	0	12	15	2	8	18	74
Ogdensburg.....	12	19	1	0	1	19	19	6	0	77	0	1	0	0	0	1	11	0	13
Oswego.....	5	13	10	15	9	7	22	6	1	88	—	—	—	—	—	—	—	—	—
Penn Yan.....	1	16	0	0	17	38	6	12	0	90	—	—	—	—	—	—	—	—	—
Rochester.....	2	15	3	7	6	14	16	24	3	90	2	8	2	2	2	11	9	20	56
Saratoga.....	3	16	0	2	4	35	6	3	9	69	2	18	0	1	3	37	5	2	68
Wampsville.....	0	0	15	3	6	11	51	4	0	90	0	1	14	2	6	11	40	3	77
<b>NEW JERSEY —</b>																			
Cinnaminson.....	12	16	4	4	6	14	9	20	5	90	—	—	—	—	—	—	—	—	—
Lambertville.....	8	10	6	4	3	16	4	24	0	75	—	—	—	—	—	—	—	—	—
Newark.....	4	21	0	5	0	21	2	7	0	60	—	—	—	—	—	—	—	—	—
New Brunswick.....	6	19	4	3	16	10	16	16	1	91	—	—	—	—	—	—	—	—	—
<b>PENNSYLVANIA —</b>																			
Bedford.....	3	0	2	5	5	0	12	1	62	90	15	0	5	7	7	0	24	6	64
Berwick.....	4	0	25	0	3	3	18	3	2	58	1	0	3	0	0	0	3	0	7
Camdenburg.....	0	6	28	1	0	4	48	1	2	90	—	—	—	—	—	—	—	—	—
Carlisle.....	1	6	0	16	1	12	11	8	31	86	0	0	0	10	1	18	11	2	42
Chambersburg.....	5	1	15	8	7	11	25	1	17	90	3	7	1	4	8	13	33	5	74
Easton.....	4	17	0	20	0	5	5	34	2	87	—	—	—	—	—	—	—	—	—
Fleming.....	0	2	15	8	0	20	18	26	1	90	1	3	4	5	1	7	28	18	67
Germantown.....	3	6	3	9	6	8	16	35	0	86	—	—	—	—	—	—	—	—	—
Gettysburg.....	10	16	1	8	9	24	8	12	2	90	3	4	0	2	7	14	31	9	70
Harrisburg, [Heiely].....	7	3	7	11	10	8	23	15	5	89	2	0	0	2	3	4	15	5	31
Harrisburg, [Hickok].....	12	2	14	7	15	6	26	5	3	90	0	0	2	0	1	0	2	0	5
Lewisburg.....	17	9	3	3	6														

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
VIRGINIA—Continued.																			
Poplar Grove.....	0	0	27	0	0	2	33	3	25	90	2	6	2	2	1	19	18	8	58
Portsmouth.....	0	12	20	16	0	24	7	6	0	85	—	—	—	—	—	—	—	—	—
Rougemoat.....	7	18	3	2	7	3	21	6	6	73	0	1	1	1	0	2	28	3	36
Smithfield.....	7	14	11	5	15	11	10	7	0	80	2	5	3	0	6	8	8	19	51
NORTH CAROLINA—																			
Chapel Hill.....	15	15	3	2	9	11	30	5	0	90	6	8	0	0	5	14	18	3	54
Murfreesborough.....	7	15	2	4	8	11	4	7	2	58	3	7	2	0	0	0	13	5	36
Raleigh.....	4	3	0	0	10	7	13	1	52	90	—	—	—	—	—	—	—	—	—
SOUTH CAROLINA—																			
Aiken.....	1	19	17	3	4	21	7	1	0	73	—	—	—	—	—	—	—	—	—
All Saints.....	19	4	8	1	42	5	9	1	0	89	1	0	2	0	3	3	10	1	20
Charleston.....	11	4	3	2	5	1	4	3	0	33	—	—	—	—	—	—	—	—	—
St John's.....	1	12	3	28	3	10	4	24	0	85	1	2	0	0	0	5	12	0	25
GEORGIA—																			
Athens.....	4	15	0	2	1	4	4	30	25	85	1	0	2	2	0	3	5	0	19
Atlanta.....	0	0	21	1	5	13	46	4	0	91	—	—	—	—	—	—	—	—	—
Augusta.....	2	26	3	5	3	20	29	2	0	90	3	6	5	2	1	23	4	3	47
Clarksville.....	4	12	9	0	7	21	30	7	0	90	—	—	—	—	—	—	—	—	—
Covington.....	1	1	10	4	0	21	6	34	0	92	—	—	—	—	—	—	—	—	—
Savannah.....	5	14	5	16	9	19	3	18	0	89	0	0	0	0	0	1	2	0	3
Sparta.....	5	21	7	8	3	22	8	15	0	89	1	8	1	3	5	16	7	10	51
Thomaston.....	14	27	5	4	7	3	7	13	0	80	—	—	—	—	—	—	—	—	—
Whitemarsh Island.....	6	13	2	16	9	7	14	8	14	89	2	8	0	5	2	6	8	10	41
FLORIDA—																			
Alligator.....	0	11	11	9	0	26	5	0	19	90	1	7	4	0	9	17	4	0	42
Atsena.....	1	31	4	5	2	17	18	0	3	90	1	15	4	5	2	14	9	10	61
Jacksonville.....	3	27	1	17	0	26	0	16	0	90	0	16	1	5	1	32	6	1	62
Micanopy.....	6	21	5	22	4	10	3	11	7	89	2	5	0	0	0	2	2	3	14
St. Augustine.....	4	27	3	26	2	19	0	15	0	90	2	25	2	18	2	17	0	13	79
Salt Ponds.....	3	15	20	11	7	3	1	0	0	60	—	—	—	—	—	—	—	—	—
Warrington.....	0	29	6	13	3	32	0	7	0	90	0	11	3	4	1	7	0	3	29
ALABAMA—																			
Cahawba.....	0	16	0	0	1	8	9	56	0	90	—	—	—	—	—	—	—	—	—
Carlowlville.....	9	10	28	10	14	4	11	4	0	90	4	0	10	0	0	0	0	0	14
Greene Springs.....	7	2	16	10	1	1	16	4	0	57	2	0	0	0	0	3	3	2	10
Greensborough.....	6	2	4	22	5	12	8	29	0	88	1	2	2	11	2	6	12	0	42
Livingston.....	8	8	14	10	14	7	3	18	7	89	—	—	—	—	—	—	—	—	—
Montgomery.....	14	19	3	1	2	0	4	37	4	90	—	—	—	—	—	—	—	—	—
Selma.....	19	10	8	4	6	10	5	27	1	90	10	3	9	11	5	6	5	7	56
MISSISSIPPI—																			
Columbus.....	24	3	14	6	7	6	11	19	0	90	7	0	2	2	7	3	23	13	57
Natchez.....	17	23	3	8	6	20	4	9	0	90	0	4	2	3	0	14	1	16	40
Paulding.....	4	19	17	8	0	12	3	18	0	81	4	12	7	6	0	18	7	18	72
Westville.....	2	5	3	11	4	15	10	2	29	81	2	9	5	3	0	4	2	14	39
LOUISIANA—																			
New Orleans.....	0	19	0	38	0	24	0	9	0	90	—	—	—	—	—	—	—	—	—
Poydras College.....	24	0	0	5	39	3	0	12	7	90	—	—	—	—	—	—	—	—	—
Tickfaw Station.....	11	0	9	8	13	16	19	14	0	90	—	—	—	—	—	—	—	—	—
TEXAS—																			
Austin, [Palm].....	0	0	9	15	20	10	3	9	0	66	1	0	1	5	18	5	2	4	36
Austin, [Van Nostrand].....	25	0	8	3	37	3	6	3	5	90	5	1	2	3	20	2	1	1	35
Boston.....	5	9	11	9	40	6	5	5	0	90	—	—	—	—	—	—	—	—	—
Burkeville.....	10	11	7	7	2	10	4	6	33	90	—	—	—	—	—	—	—	—	—
Columbus.....	41	1	9	12	24	0	2	0	1	90	—	—	—	—	—	—	—	—	—
Gilmer.....	7	0	0	2	24	10	0	5	35	83	—	—	—	—	—	—	—	—	—
Gonzales.....	19	3	21	15	25	2	4	0	0	89	—	—	—	—	—	—	—	—	—
Greenville.....	11	3	15	18	20	1	21	1	0	90	—	—	—	—	—	—	—	—	—
Larissa.....	6	5	7	14	33	7	1	7	1	81	4	0	1	2	17	0	9	4	43
New Braunfels.....	18	8	5	28	18	0	9	4	0	90	1	0	5	3	5	1	0	0	15
Preston.....	14	0	14	8	24	5	4	0	21	90	—	—	—	—	—	—	—	—	—
San Patricio.....	16	1	0	72	1	0	0	0	0	90	—	—	—	—	—	—	—	—	—
Sisterdale.....	0	10	6	33	15	5	1	11	0	90	0	0	0	1	2	0	0	0	3



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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TEXAS—Continued.																				
Tarrant.....	14	1	16	3	42	6	8	4	1	90										
Union Hill.....	15	1	2	9	48	3	11	0	1	90	8	0	0	1	39	2	9	0	59	
Washington.....	15	0	3	4	32	0	1	4	31	90										
Webberville.....	10	1	6	2	29	0	4	8	24	84	1	0	1	1	13	0	7	0	23	
Wheelock.....	26	1	6	0	50	0	4	0	0	87										
ARKANSAS—																				
Arkadelphia.....	10	30	7	18	8	11	0	8	0	90										
Brownsville.....	0	2	0	1	22	57	7	1	0	90										
Buck Horn.....	7	6	9	15	4	14	8	27	0	90										
Jacksonport.....	25	10	9	2	23	7	6	8	0	90										
Perryville.....	12	11	9	7	37	2	3	8	0	81										
Spring Hill.....	0	12	9	9	1	3	0	11	43	88										
Waldron.....	9	0	26	0	12	19	10	14	0	90										
TENNESSEE—																				
Glenwood.....	2	11	10	16	9	8	12	7	15	90	0	4	2	0	3	13	40	15	77	
Memphis.....	23	2	5	7	8	6	7	8	24	90										
Winchester.....	21	0	3	4	25	3	23	10	0	89										
KENTUCKY—																				
Bardstown.....	2	12	3	14	10	15	7	14	10	87	0	1	0	1	1	30	7	12	52	
Danville.....	8	16	5	6	11	20	6	12	0	90	0	3	1	2	8	23	15	14	60	
Hardensburg.....	5	15	2	15	15	21	6	11	0	90										
Lexington.....	3	13	5	2	16	18	6	10	0	73	1	0	1	0	4	37	5	1	49	
Paducah.....	10	6	0	0	8	0	0	5	0	29										
Paris.....	5	24	0	5	3	26	6	17	0	86	0	3	2	3	3	7	24	6	48	
Springdale.....	3	16	5	2	1	17	6	2	38	90										
OHIO—																				
Avon.....	4	15	7	9	12	19	8	15	0	89	1	7	0	1	1	5	36	10	61	
Bellefontaine.....	0	17	2	13	0	37	6	10	0	85	0	29	0	12	0	8	2	9	60	
Bethel.....	5	13	5	8	3	15	10	2	0	62										
Bowling Green.....	1	6	5	2	7	14	4	11	37	87	1	3	0	1	0	8	24	5	42	
Cincinnati, [Harper].....	17	7	16	3	5	16	15	6	0	85	0	0	0	0	0	2	0	0	8	
Cincinnati, [Phillips].....	1	2	1	1	13	17	1	11	43	90	1	3	1	0	1	20	23	7	56	
Cleveland.....	14	13	0	22	17	5	7	4	0	82	1	3	1	0	0	3	15	3	26	
College Hill, [Wilson].....	12	13	4	13	9	15	14	10	0	90	7	5	8	7	4	14	18	9	66	
College Hill, [Hammit].....	7	7	0	4	2	22	27	21	0	90										
Dallasburg.....	7	8	4	3	6	17	27	18	0	90										
Elk Run.....	12	10	15	6	7	16	7	13	4	90	0	0	0	1	1	14	11	7	34	
Freedom.....	12	0	4	9	19	17	14	15	0	90	6	0	0	0	3	9	51	8	77	
Hillsborough.....	0	15	0	17	0	32	2	24	0	90	0	0	0	0	0	7	1	3	11	
Hillsborough.....	2	13	2	4	2	10	14	10	0	57										
Hocking Port.....	1	21	0	12	3	24	19	6	3	89										
Hudson.....	8	14	11	7	4	19	7	18	0	86										
Iberia.....	0	18	1	3	4	8	4	10	0	46	0	3	0	0	0	1	0	4	8	
Kelley's Island.....	7	9	9	13	7	14	12	12	7	90										
Madison, [King].....	4	3	1	6	11	17	4	12	15	73	6	4	1	7	7	12	8	14	59	
Montville.....	8	7	0	23	11	18	0	22	1	90	0	3	0	1	2	0	6	8	29	
Newark.....	10	20	1	2	19	29	5	4	0	90										
New Lisbon.....	12	8	8	8	7	23	8	20	0	90	6	4	6	8	7	19	5	13	68	
North Bend.....	5	9	10	17	9	2	3	1	32	88										
Northwood.....	1	5	2	12	0	14	10	20	0	64	1	0	0	0	0	9	12	7	29	
Portsmouth.....	9	14	8	8	2	39	8	7	0	90	0	2	0	0	0	47	3	16	68	
Rockport.....	12	7	20	3	2	17	19	10	0	90										
Savannah.....	7	3	1	6	0	30	17	26	0	90	6	1	0	1	0	25	12	23	68	
Sharonville.....	18	4	11	0	6	13	34	4	0	90										
Troy.....	3	0	0	3	4	1	74	0	5	90	1	0	0	0	1	0	46	0	48	
Urbana.....	1	5	5	15	5	9	11	6	33	90	1	5	0	2	6	14	30	12	70	
Welchfield.....	13	6	0	21	5	20	7	18	0	90	0	0	1	0	0	0	0	1	2	
Westerville.....	16	4	6	3	11	18	16	14	0	88	8	3	0	0	4	15	17	8	55	
MICHIGAN—																				
Battle Creek.....	0	11	9	11	13	10	13	8	15	90	0	6	2	0	1	11	28	13	61	
Corunna.....	2	7	7	5	6	4	13	2	1	47	2	2	1	2	5	8	9	0	26	
Detroit.....	4	9	17	14	11	15	17	3	0	90	3	2	18	19	6	16	17	1	82	

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NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MICHIGAN—Continued.																				
Grand Haven.....	3	13	12	18	4	12	13	15	0	90	2	5	2	2	0	6	12	17	46	
Grand Rapids.....	7	8	13	11	13	18	24	5	0	90	5	5	3	0	8	11	58	2	87	
Lake George.....	8	11	5	15	0	11	2	21	24	90	—	—	—	—	—	—	—	—	—	
Marquette.....	6	10	2	6	19	13	10	23	1	90	5	11	1	11	1	21	3	36	—	
Monroe.....	1	5	5	12	2	31	5	7	22	90	—	—	—	—	—	—	—	—	—	
Monroe, [Lane].....	4	12	11	19	4	36	7	28	1	120	—	—	—	—	—	—	—	—	—	
Monroe, [Whelpley].....	8	9	11	11	0	25	12	14	0	90	4	11	7	4	0	12	9	10	55	
New Buffalo.....	—	—	—	—	—	—	—	—	—	—	1	11	1	1	2	22	24	12	67	
Ontonagon.....	2	9	1	11	26	11	15	11	11	59	—	—	—	—	—	—	—	—	—	
Ottawa Point (a).....	5	24	8	15	14	21	9	24	0	120	4	3	2	1	11	26	16	5	63	
Otsego.....	2	9	5	9	8	14	12	11	23	88	—	—	—	—	—	—	—	—	—	
Thunder Bay Island.....	19	8	14	27	19	5	10	15	3	120	11	5	3	8	7	5	12	31	82	
Ypsilanti.....	11	11	11	5	3	19	16	11	11	82	1	11	1	2	0	17	11	8	44	
INDIANA—																				
Aurora.....	1	2	0	0	3	11	13	4	1	30	—	—	—	—	—	—	—	—	—	
Cannelton.....	5	2	8	18	12	7	20	18	0	90	0	11	3	5	5	14	15	10	54	
Greencastle.....	13	12	8	8	13	21	3	11	0	89	—	—	—	—	—	—	—	—	—	
Logansport.....	1	16	6	12	1	22	15	17	0	90	3	14	4	2	1	6	14	19	63	
Logansport, [Bartlett].....	1	16	2	17	0	34	4	16	0	90	—	—	—	—	—	—	—	—	—	
Michigan City.....	30	16	3	12	19	12	9	17	2	120	1	3	0	1	11	9	23	34	71	
Mishawaka.....	1	3	3	26	5	15	26	11	0	90	0	11	3	25	5	14	26	8	84	
New Albany.....	5	1	16	0	3	12	20	7	17	81	1	0	1	0	1	10	11	7	16	
New Harmony.....	3	2	2	12	10	10	12	16	11	67	—	—	—	—	—	—	—	—	—	
Richmond.....	8	11	0	4	3	13	0	6	3	48	3	2	0	2	1	12	11	4	35	
Richmond, [Haines].....	2	17	21	9	0	17	6	10	8	90	—	—	—	—	—	—	—	—	—	
Shelbyville.....	22	5	7	8	17	8	13	10	0	90	—	—	—	—	—	—	—	—	—	
South Bend.....	11	1	4	3	4	4	45	0	26	87	—	—	—	—	—	—	—	—	—	
ILLINOIS—																				
Augusta.....	1	14	8	14	9	12	9	13	10	90	11	6	3	3	8	7	11	8	46	
Aurora.....	10	16	7	9	16	13	10	9	11	90	2	3	0	1	1	23	15	7	52	
Batavia.....	0	34	1	10	0	31	1	13	0	90	0	12	11	11	11	32	7	10	63	
Bloomington.....	13	5	15	7	12	15	9	12	1	89	—	—	—	—	—	—	—	—	—	
Carbon Cliff.....	7	3	19	7	14	5	32	3	0	90	—	—	—	—	—	—	—	—	—	
Chicago.....	0	26	4	18	6	21	4	11	0	90	—	—	—	—	—	—	—	—	—	
Dixon.....	11	8	2	25	4	12	26	7	0	90	—	—	—	—	—	—	—	—	—	
Edgington.....	6	3	5	14	4	30	1	27	11	90	7	3	5	3	3	38	4	20	83	
Elgin.....	7	14	4	13	8	21	4	11	8	90	0	0	0	0	0	1	1	0	2	
Manchester.....	19	8	4	5	29	8	16	1	0	90	19	7	2	2	17	9	15	1	72	
Marengo.....	3	11	6	10	8	20	16	3	0	77	1	1	0	11	2	3	0	0	7	
Naperville.....	3	16	2	4	1	12	2	5	5	50	7	11	11	0	3	4	7	3	30	
Ottawa.....	0	24	11	11	3	20	1	14	3	74	0	3	0	1	0	10	5	7	26	
Pekin.....	15	9	10	11	15	8	11	15	8	90	3	3	0	0	5	18	24	8	61	
Peoria.....	11	24	11	7	9	5	19	6	0	90	1	11	0	1	2	1	2	0	7	
Riley.....	3	8	1	9	9	8	5	14	16	73	—	—	—	—	—	—	—	—	—	
Sandwich.....	11	20	5	24	5	13	5	12	0	90	0	1	11	0	0	11	47	5	59	
Tiskilwa.....	1	20	0	17	0	29	3	20	0	90	—	—	—	—	—	—	—	—	—	
Upper Alton.....	2	4	0	1	0	39	17	26	1	90	2	5	0	1	0	38	17	26	89	
West Salem.....	7	5	1	9	14	6	8	7	33	90	0	0	0	0	0	14	40	1	55	
West Urbana.....	10	14	5	11	4	21	3	22	0	90	—	—	—	—	—	—	—	—	—	
Wheaton.....	11	19	9	3	15	5	10	13	1	86	0	1	0	1	0	3	4	2	11	
Willow Creek.....	6	12	14	8	20	10	4	12	11	86	—	—	—	—	—	—	—	—	—	
Winnebago.....	7	11	10	15	15	13	6	13	0	90	1	0	0	11	1	10	12	3	27	
Woodstock.....	0	16	5	12	6	18	4	23	0	84	5	11	0	11	4	11	21	2	43	
MISSOURI—																				
Augusta.....	11	24	19	9	7	2	2	16	0	90	—	—	—	—	—	—	—	—	—	
Bethany.....	7	0	2	10	21	13	10	11	6	75	—	—	—	—	—	—	—	—	—	
Bolivar.....	1	15	7	17	10	20	3	7	2	82	—	—	—	—	—	—	—	—	—	
Boonville.....	1	16	1	36	2	11	1	22	0	90	—	—	—	—	—	—	—	—	—	
Carrollton.....	17	0	0	7	15	25	21	5	0	90	—	—	—	—	—	—	—	—	—	

a It is uncertain whether, in recording the motion of the clouds at this place the direction toward which they moved was noted, or that from which they came.



## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
MISSOURI—Continued.																				
Cassville.....	8	0	1	7	16	2	2	11	43	90										
Emerson.....	5	0	4	9	8	20	12	14	0	72										
Farmington.....	13	5	4	5	26	16	9	12	0	90										
Greenfield.....	10	7	2	16	23	17	5	10	0	90										
Greenville.....	6	0	0	24	0	6	0	0	0	90										
Harrisonville.....	15	3	10	23	18	6	2	13	0	90										
Hermann.....	22	6	22	3	6	13	11	7	0	90										
Hornersville.....	15	4	1	7	18	10	5	30	0	90										
Kirksville.....	8	12	5	27	9	16	1	12	0	90										
Lancaster.....	22	2	15	3	26	7	11	4	0	90										
L. xington.....	14	8	9	10	21	4	12	12	0	90										
Luray.....	10	6	3	19	20	11	2	19	0	90										
Paris.....	5	15	2	17	3	20	2	16	10	90										
St. Louis.....	8	7	9	16	12	4	19	15	0	90										
St. Louis, [Fendler].....	2	10	9	28	6	12	13	38	19	137	2	5	1	3	5	41	21	19	97	
Stockton.....	0	9	10	5	10	11	8	7	17	77	7	1	4	0	10	3	11	4	40	
Tuscumbia.....	0	0	2	11	26	34	3	1	13	90										
Warrenton.....	4	14	8	7	7	11	18	21	0	90										
Waynesville.....	10	14	0	1	4	22	14	25	0	90										
Wet au Glaize.....	9	0	0	21	19	17	3	21	0	90										
WISCONSIN—																				
Appleton.....	7	20	9	12	14	14	10	12	0	90	3	10	3	5	4	15	3	6	49	
Bay City.....	1	18	0	0	21	36	4	10	0	90	1	2	0	1	0	10	2	2	18	
B. loit.....	14	1	11	11	16	13	5	19	0	90	0	0	0	0	0	2	0	2	4	
Burlington.....	14	17	5	15	5	15	6	13	0	90										
Green Bay.....	21	5	0	0	11	9	4	8	32	90	8	1	0	0	1	6	3	2	21	
Jaunesville.....	11	14	7	16	7	16	7	10	2	90	0	6	1	1	1	12	12	5	38	
Kenosha.....	8	8	19	10	21	6	11	5	1	89										
Lake Mills.....	2	5	4	12	31	11	10	15	0	90										
Manitowoc.....	9	7	6	14	14	11	10	19	0	90	0	0	0	0	0	2	11	1	14	
Milwaukee [Larkin].....	4	11	6	11	3	10	14	13	13	85	3	8	1	2	2	10	15	3	44	
Milwaukee, [Winkler].....	4	18	5	21	4	8	10	20	0	90										
Ots'go.....	1	20	0	11	10	24	8	16	0	90										
Platteville.....	10	4	8	25	6	11	6	20	0	90	5	4	1	6	2	12	14	16	60	
Rocky Run.....	1	11	2	17	1	13	11	22	4	82										
Superior.....	10	35	17	15	6	10	15	10	0	118										
Wausau.....	19	1	1	13	18	1	2	14	21	90	4	1	0	4	13	14	20	22	78	
IOWA—																				
Bellevue.....	7	1	12	6	10	12	28	10	0	86										
Border Plains.....	5	2	0	43	6	3	2	28	1	10	2	0	0	0	3	8	4	6	23	
Burlington.....	0	6	6	22	0	15	0	39	0	88	0	0	0	1	0	11	47	3	62	
Davenport.....	11	1	4	5	16	6	10	9	28	90										
Dubuque.....	9	1	4	4	21	13	5	15	16	88	5	0	0	3	3	15	16	13	55	
Fairfield.....	0	3	0	20	0	18	0	23	26	90	0	0	0	0	0	0	0	2	2	
Fayette Village.....	1	2	19	10	10	12	16	20	0	90										
Forestville.....	9	7	4	20	11	8	8	19	3	89										
Fort Madison.....	4	11	1	26	1	19	4	22	2	90	7	0	0	5	4	20	16	5	57	
Lyon's City.....	15	3	0	3	15	11	19	7	8	90										
Muscatine.....	10	5	7	6	8	7	27	16	0	90	0	0	0	0	0	6	11	3	20	
Pleasant Plain.....	2	4	9	16	8	14	8	23	6	90	0	0	0	1	0	19	5	5	30	
Rossville.....	9	7	4	20	11	8	8	19	3	89										
MINNESOTA—																				
Beaver Bay, [Clark].....	4	19	9	1	3	9	10	8	27	90	3	1	2	0	5	15	20	7	53	
Burlington.....	4	8	16	5	3	2	16	17	19	90	5	4	16	1	4	1	26	10	67	
Chatfield.....	6	0	2	7	28	5	16	5	21	90	7	1	0	1	8	11	12	2	42	
Forest City.....	5	4	2	17	14	2	7	4	35	90										
Hazlewood.....	0	1	4	6	27	6	4	28	0	76	0	1	6	0	4	1	4	1	17	
Princeton.....	8	3	9	7	15	2	20	13	13	90	2	1	4	2	8	5	16	10	48	
NEBRASKA—																				
Bellevue.....	26	13	0	0	28	7	6	3	4	87	7	4	0	0	6	9	1	1	28	
Elkhorn.....	7	12	2	24	13	13	2	14	3	90	0	0	0	0	0	3	0	1	4	

## No. 46.—WINDS—NUMBER OF OBSERVATIONS, SEPTEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEBRASKA—Continued.																				
Kanosh.....	0	8	4	36	3	0	0	45	0	90	—	—	—	—	—	—	—	—	—	
Nebraska City.....	10	4	1	10	28	11	10	6	15	90	—	—	—	—	—	—	—	—	—	
Omaha.....	12	1	0	30	13	5	8	15	11	90	—	—	—	—	—	—	—	—	—	
KANSAS—																				
Burlingame.....	23	0	4	30	6	0	1	11	20	90	—	—	—	—	—	—	—	—	—	
Fort Riley.....	10	1	17	12	21	14	2	13	0	90	—	—	—	—	—	—	—	—	—	
Leavenworth City.....	0	10	1	26	1	49	0	3	0	90	1	11	0	12	0	36	0	3	80	
Lecompton.....	0	1	0	19	1	24	0	42	0	87	—	—	—	—	—	—	—	—	—	
Manhattan.....	9	7	7	11	29	2	0	2	23	90	6	3	3	4	29	15	1	12	73	
Moneka (a).....	1	9	0	9	2	16	0	10	13	60	0	4	0	1	0	18	0	6	29	
Neosho Falls.....	5	16	0	24	11	6	2	7	19	90	—	—	—	—	—	—	—	—	—	
Spring Hill.....	10	6	5	26	2	14	5	18	4	90	—	—	—	—	—	—	—	—	—	
Wyandott City.....	1	16	5	18	9	17	4	16	4	90	—	—	—	—	—	—	—	—	—	
CALIFORNIA—																				
Auburn.....	0	0	3	17	23	43	4	0	0	90	—	—	—	—	—	—	—	—	—	
Crescent City.....	2	0	0	0	33	1	4	18	32	90	—	—	—	—	—	—	—	—	—	
Monterey.....	14	0	0	0	2	12	22	11	31	90	—	—	—	—	—	—	—	—	—	
Moquelumne Hill.....	0	31	20	0	0	34	5	0	0	90	—	—	—	—	—	—	—	—	—	
Sacramento.....	22	0	4	12	22	16	9	5	0	90	0	0	0	0	0	19	6	2	27	
San Francisco.....	2	1	0	0	4	10	38	3	32	90	3	0	0	0	4	13	28	1	49	
Santa Clara, [Frambes].....	0	7	1	18	2	12	2	38	10	90	—	—	—	—	—	—	—	—	—	
Santa Clara, [Gould].....	0	0	0	19	0	0	0	43	28	90	—	—	—	—	—	—	—	—	—	
Union Rauche.....	4	1	0	2	46	1	0	22	14	90	4	0	0	1	27	5	1	0	38	
MEXICO—																				
Cordova.....	0	21	1	0	0	4	2	2	0	30	—	—	—	—	—	—	—	—	—	
WEST INDIES—																				
St George's, Bermuda.....	5	14	4	11	24	41	19	5	0	120	—	—	—	—	—	—	—	—	—	
CENTRAL AMERICA—																				
Guatemala.....	8	77	2	2	0	18	0	2	10	119	—	—	—	—	—	—	—	—	—	
SOUTH AMERICA—																				
Catharina Sophia, Surinam.....	3	21	9	21	2	0	0	1	0	57	0	10	23	17	2	0	0	0	52	

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.



## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Fort Rae.....	7	10	2	8	5	0	6	1	49	89	---	---	---	---	---	---	---	---	---
Fort Simpson.....	8	23	1	20	0	1	9	31	0	93	---	---	---	---	---	---	---	---	---
Montreal.....	4	5	0	2	2	16	28	31	5	93	3	2	0	2	2	19	26	20	74
Red River Settlement.....	14	0	6	2	28	4	22	5	5	88	6	0	1	0	3	2	20	6	38
St. John's.....	21	3	0	4	12	19	11	23	0	93	10	4	0	0	3	5	3	11	36
St. Martin.....	0	6	1	6	2	35	9	34	0	93	---	---	---	---	---	---	---	---	---
Stanbridge.....	4	3	3	5	14	13	43	6	2	93	---	---	---	---	---	---	---	---	---
Toronto.....	6	5	3	5	1	22	6	42	3	93	---	---	---	---	---	---	---	---	---
Windsor.....	2	5	1	7	2	29	19	10	9	84	---	---	---	---	---	---	---	---	---
Wolfville.....	3	2	5	0	1	17	42	11	4	85	4	1	2	0	1	12	47	4	71
MAINE—																			
Belfast.....	22	5	4	2	2	5	32	20	0	93	16	1	0	1	4	6	25	23	76
Cornishville, [Guptill].....	13	3	2	3	1	16	19	36	0	93	0	0	0	0	0	2	0	0	2
Cornish, [West].....	6	7	5	0	1	31	27	16	0	93	0	0	0	0	0	2	1	2	5
Dexter.....	5	8	1	1	6	17	14	38	3	93	---	---	---	---	---	---	---	---	---
Gardiner.....	9	5	0	6	10	12	5	30	16	93	7	0	0	1	5	3	4	17	37
Hartland.....	5	6	1	3	0	12	20	43	0	90	---	---	---	---	---	---	---	---	---
Lisbon.....	7	3	0	2	16	4	7	54	0	93	5	2	1	1	8	2	9	32	60
Limington.....	3	4	2	0	2	18	27	37	0	93	---	---	---	---	---	---	---	---	---
New Castle.....	2	4	0	1	3	44	7	32	0	93	---	---	---	---	---	---	---	---	---
Norway.....	5	3	0	8	2	20	2	53	0	93	---	---	---	---	---	---	---	---	---
Perry.....	17	3	2	1	2	26	7	35	0	93	8	2	0	0	1	12	8	10	41
Portland.....	8	12	3	1	13	6	21	28	0	92	1	0	0	0	2	1	18	8	31
Portland, [Adams].....	20	0	4	4	17	10	19	19	0	93	---	---	---	---	---	---	---	---	---
Steuben.....	1	13	1	4	2	27	10	33	2	93	1	0	0	1	0	23	16	18	64
Topsham.....	3	4	0	1	2	22	16	45	0	93	---	---	---	---	---	---	---	---	---
Vassalborough.....	14	0	7	11	13	8	40	0	0	93	---	---	---	---	---	---	---	---	---
Warren.....	10	5	2	5	0	23	6	42	0	93	---	---	---	---	---	---	---	---	---
NEW HAMPSHIRE—																			
Claremont.....	4	2	1	11	6	9	27	33	0	93	11	0	0	3	1	7	13	23	58
Shelburne.....	0	0	3	0	0	0	49	0	10	62	0	0	0	2	0	4	28	16	50
Stratford.....	1	8	3	0	5	11	30	14	23	93	0	0	1	0	0	0	21	3	25
Stratham.....	3	5	0	11	1	9	25	38	0	93	---	---	---	---	---	---	---	---	---
VERMONT—																			
Brandon.....	3	0	4	12	12	10	6	39	7	93	2	1	0	0	1	1	4	43	54
Burlington.....	10	2	0	0	7	29	7	38	0	93	---	---	---	---	---	---	---	---	---
Craftsbury.....	0	7	0	1	21	12	21	30	1	93	2	1	0	0	2	3	26	23	57
Lunenburg.....	1	2	2	1	4	22	44	17	0	93	0	1	1	0	3	6	27	1	39
Rupert.....	---	---	---	---	---	---	---	---	---	---	7	0	0	0	0	23	18	16	64
St. Johnsbury.....	12	1	0	1	18	0	30	29	2	93	1	0	0	0	4	1	8	11	26
MASSACHUSETTS—																			
Amherst.....	1	3	1	18	2	13	9	37	0	84	0	0	0	1	1	5	12	14	33
Bridgewater.....	3	7	0	1	3	20	16	43	0	93	3	11	1	1	2	17	12	24	71
Cambridge.....	2	12	4	1	0	22	5	17	17	90	---	---	---	---	---	---	---	---	---
Florida.....	0	3	0	0	0	14	13	63	0	93	---	---	---	---	---	---	---	---	---
Lawrence.....	0	9	0	3	0	30	1	50	0	93	---	---	---	---	---	---	---	---	---
Mendon.....	0	8	1	3	3	29	18	31	0	93	0	8	0	4	0	24	12	25	73
Nantucket.....	4	0	0	2	3	23	5	40	7	93	---	---	---	---	---	---	---	---	---
New Bedford.....	4	7	0	2	1	28	8	43	0	93	0	3	1	0	0	13	4	13	34
Westfield.....	4	5	3	11	4	22	26	18	0	93	---	---	---	---	---	---	---	---	---
Williamstown.....	4	0	1	4	8	4	22	32	17	92	---	---	---	---	---	---	---	---	---
Worcester.....	1	9	0	1	1	27	5	48	0	92	0	2	0	0	1	12	0	12	27
RHODE ISLAND—																			
Providence.....	4	8	0	0	2	30	7	42	0	93	---	---	---	---	---	---	---	---	---
CONNECTICUT—																			
Columbia.....	2	4	3	0	0	14	13	47	10	93	2	5	6	4	0	9	3	22	51
Middletown.....	4	1	0	0	1	21	5	31	29	93	1	1	0	0	0	6	15	16	39
Pomfret.....	4	5	0	1	3	25	0	53	0	91	2	6	0	0	1	15	4	34	62
Saybrook.....	5	8	3	1	10	18	9	33	1	87	0	1	0	0	0	5	18	8	32
Wallingford.....	11	6	0	1	4	34	5	32	0	93	0	0	1	0	0	11	14	9	35
NEW YORK—																			
Baldwinsville.....	0	6	0	0	0	19	55	13	0	93	0	4	0	0	0	6	57	10	77

No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1859.

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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
NEW YORK—Continued.																			
Bellport .....	7	11	0	4	1	17	20	31	2	93	2	2	1	1	1	7	12	15	41
Beverly .....	5	5	0	2	4	36	0	32	0	84	5	2	0	1	3	21	11	5	52
Cazenovia .....	5	2	0	0	7	25	11	41	2	93	4	1	0	0	1	12	16	39	73
Charlotte .....	10	18	0	3	11	26	16	40	0	124	8	7	0	0	1	9	24	32	81
Fort Niagara .....	22	14	0	1	17	8	47	15	0	124	—	—	—	—	—	—	—	—	—
Great Valley .....	27	0	2	2	26	3	11	17	5	93	—	—	—	—	—	—	—	—	—
Hopewell .....	6	8	1	4	8	25	13	25	0	90	0	0	0	0	1	4	4	0	9
Morrisania .....	4	0	6	0	5	36	25	8	0	93	2	2	0	1	4	3	5	1	18
Nichols .....	15	1	8	10	23	2	11	28	0	93	14	1	0	0	0	8	9	35	76
Ogdensburg .....	0	4	0	2	1	35	18	17	0	77	0	0	0	0	0	0	5	0	5
Oswego .....	4	8	2	5	16	8	43	0	0	92	—	—	—	—	—	—	—	—	—
Penn Yan .....	0	10	0	0	14	23	29	17	0	93	—	—	—	—	—	—	—	—	—
Rochester .....	6	0	0	2	2	29	8	40	0	93	3	7	0	1	0	8	5	31	55
Sackett's Harbor .....	3	12	4	3	17	27	10	46	2	124	0	0	0	0	1	0	2	2	5
Wampsville .....	0	1	2	1	6	6	77	0	0	93	0	0	3	1	4	7	61	1	77
NEW JERSEY—																			
Cinnaminson .....	0	3	0	3	3	27	5	38	5	93	—	—	—	—	—	—	—	—	—
Lambertville .....	4	7	0	3	1	24	3	41	0	83	—	—	—	—	—	—	—	—	—
Newark .....	7	9	0	0	0	21	2	23	0	62	—	—	—	—	—	—	—	—	—
New Brunswick .....	2	6	1	0	5	15	27	36	1	93	—	—	—	—	—	—	—	—	—
Woodstown .....	0	7	1	5	1	18	31	29	0	92	8	4	1	1	1	9	22	16	62
PENNSYLVANIA—																			
Altoona .....	0	0	33	45	13	1	0	0	0	92	0	0	29	30	10	1	0	0	70
Bedford .....	3	0	0	7	0	4	10	20	22	66	3	0	0	4	0	2	15	27	51
Berwick .....	2	1	16	2	5	9	39	0	1	84	0	0	0	0	1	0	2	0	3
Cannonsburg .....	0	0	13	0	0	0	44	27	0	93	0	0	0	0	0	0	1	0	1
Carlisle .....	0	1	1	7	0	5	7	16	19	56	0	0	0	4	0	2	3	12	21
Chambersburg .....	9	0	1	2	0	9	50	15	7	93	4	0	0	2	4	9	27	18	64
Easton .....	5	10	0	10	5	0	11	41	0	90	—	—	—	—	—	—	—	—	—
Fleming .....	0	2	3	10	0	6	25	21	0	67	0	1	1	0	0	2	17	16	37
Germantown .....	0	2	1	1	5	13	14	55	0	91	—	—	—	—	—	—	—	—	—
Gettysburg .....	5	5	1	3	4	14	21	12	28	93	8	3	0	0	0	12	17	13	53
Harrisburg, [Heisely] .....	9	3	2	3	5	12	24	32	2	92	4	0	0	2	0	2	10	16	34
Harrisburg, [Hickok] .....	17	2	1	5	18	8	37	3	2	93	0	0	0	0	1	0	6	0	7
Lewisburg .....	7	9	1	5	17	15	13	11	15	93	0	1	0	0	0	0	7	9	17
Morrisville .....	5	9	2	1	4	30	9	17	16	93	1	7	0	1	0	20	11	14	54
Mount Joy .....	3	3	0	10	0	0	3	32	0	57	5	2	0	1	0	2	3	14	27
Nazareth .....	2	8	0	1	5	13	0	21	21	80	0	3	0	0	1	4	4	25	37
Norristown .....	0	0	9	5	0	11	42	11	0	78	0	0	1	2	0	12	26	7	48
North Whitehall .....	7	0	0	1	0	8	7	23	41	93	7	0	0	0	5	9	10	23	54
Philadelphia .....	3	7	0	3	5	24	12	39	0	93	0	1	0	0	1	5	3	10	20
Pittsburg, [Marine Hos.] .....	10	1	6	8	8	10	16	31	3	93	1	0	2	3	1	9	19	8	43
Pocopson .....	11	9	1	1	6	21	26	12	0	87	5	3	0	0	1	5	8	5	27
Sewickleyville .....	7	0	1	12	1	6	1	34	31	93	0	1	0	2	0	3	9	19	34
Shamokin .....	0	2	30	1	17	5	38	0	0	93	0	0	0	0	0	1	68	2	71
Somerset .....	2	0	0	4	4	4	24	23	32	93	2	0	0	0	1	0	37	17	63
Tarentum .....	4	1	0	0	0	14	25	0	39	92	2	0	0	0	2	4	33	19	00
West Haverford .....	4	6	0	0	0	23	4	21	4	62	4	4	0	0	0	5	15	12	40
Worthington .....	15	0	19	3	1	3	8	24	20	93	4	1	1	0	1	7	30	23	70
MARYLAND—																			
Annapolis .....	6	7	3	2	12	28	6	24	5	93	0	0	0	0	0	13	0	2	15
Bladensburg .....	4	1	0	2	0	8	3	19	0	37	—	—	—	—	—	—	—	—	—
Chestertown .....	0	7	0	8	0	0	5	1	56	1	1	3	0	0	0	4	1	4	13
Frederick .....	6	5	0	1	0	6	14	17	34	92	1	0	0	3	6	21	9	0	40
Leitersburg .....	0	0	2	1	0	26	22	20	7	93	13	0	0	0	1	8	17	22	61
Sykesville .....	3	2	3	12	9	13	31	20	0	93	0	0	2	7	3	0	44	4	66
DISTRICT OF COLUMBIA—																			
Washington .....	5	0	1	0	18	5	10	33	15	90	0	0	0	0	0	0	1	0	1
VIRGINIA—																			
Crichton's Store .....	18	5	2	4	8	21	7	17	10	92	0	0	0	0	0	6	0	0	6
Cross Creek .....	—	—	—	—	—	—	—	—	—	—	2	0	0	0	0	3	28	18	51
Fork Union .....	28	8	1	0	23	18	0	15	0	93	—	—	—	—	—	—	—	—	—



No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA—Continued.																				
Fredericksburg	49	12	3	9	0	4	0	14	0	91	0	0	0	0	4	22	14	10	56	
Lewisburg	20	10	0	5	13	28	5	11	1	93	0	0	0	0	4	22	14	10	56	
Montross	1	4	8	8	11	16	13	7	22	90	3	0	4	2	2	1	3	1	16	
Mont View	15	13	2	4	2	13	36	8	0	93	4	8	1	3	2	3	2	0	23	
Mustapha	14	0	0	0	31	0	0	0	8	62	—	—	—	—	—	—	—	—	—	
Poplar Grove	0	2	15	1	0	3	25	26	21	93	1	0	0	0	0	5	16	18	40	
Portsmouth	7	15	6	11	4	8	10	32	0	93	—	—	—	—	—	—	—	—	—	
Rougemont	24	10	1	1	0	1	28	4	5	83	0	0	0	0	3	0	26	2	31	
Smithfield	17	6	5	4	12	15	5	21	0	85	3	1	0	1	3	16	13	0	37	
Winchester	0	0	0	6	0	4	20	16	46	92	0	0	0	0	0	0	7	1	8	
NORTH CAROLINA—																				
Chapel Hill	13	7	4	5	10	11	24	19	0	93	3	2	0	0	5	17	11	2	40	
Davidson College	0	27	1	0	0	34	1	0	13	85	2	1	0	0	0	22	6	4	35	
Murfreesborough	2	10	3	11	1	11	5	17	26	86	2	2	0	0	0	0	29	3	39	
Raleigh	20	10	0	0	1	3	10	11	38	93	—	—	—	—	—	—	—	—	—	
SOUTH CAROLINA—																				
Aiken	5	9	13	-1	1	12	0	0	0	41	—	—	—	—	—	—	—	—	—	
All Saints	35	5	10	3	20	2	13	4	0	92	3	1	0	2	1	0	12	1	20	
Charleston	17	5	0	1	3	0	1	3	11	41	—	—	—	—	—	—	—	—	—	
St John's	7	22	4	11	4	0	1	29	0	87	0	0	2	3	0	4	10	1	20	
GEORGIA—																				
Atlanta	0	0	21	14	0	2	29	27	0	93	—	—	—	—	—	—	—	—	—	
Augusta	11	30	6	3	5	16	3	19	0	93	0	2	0	3	0	17	0	2	24	
Clarksville	11	12	10	2	2	11	27	18	0	93	—	—	—	—	—	—	—	—	—	
Covington	1	36	5	6	2	6	7	30	0	93	—	—	—	—	—	—	—	—	—	
Savannah	17	28	8	0	1	14	5	11	0	93	0	0	0	0	1	2	1	0	4	
Sparta	2	42	4	7	4	13	2	16	0	90	1	1	1	1	1	6	14	4	29	
Thomaston	31	28	7	3	1	7	5	10	0	92	0	0	0	1	0	1	2	1	5	
Whitemarsh Island	16	30	1	6	0	8	4	11	17	93	1	5	1	1	0	12	1	10	31	
FLORIDA—																				
Alligator	1	37	14	0	3	3	5	2	28	93	1	14	14	3	7	5	1	1	46	
Atsena	23	46	6	0	0	3	5	9	1	93	12	24	5	1	0	4	0	7	53	
Gainesville	14	29	11	3	1	8	0	20	0	86	1	1	0	0	0	3	3	0	8	
Jacksonville	0	45	1	5	0	9	0	34	0	93	0	28	0	8	0	16	3	0	55	
Micanopy	18	31	4	9	0	4	1	13	12	92	0	1	3	1	0	1	8	6	20	
St Augustine	4	61	2	7	0	7	2	10	0	93	3	56	1	8	0	6	0	5	77	
Salt Pon's	17	20	14	5	2	1	0	3	0	62	—	—	—	—	—	—	—	—	—	
Warrington	3	40	0	19	0	17	0	14	0	93	0	8	0	3	0	3	0	1	15	
ALABAMA—																				
Cahawba	24	14	2	3	1	5	2	43	0	93	—	—	—	—	—	—	—	—	—	
Carlowlle	4	16	30	19	3	9	6	6	0	93	3	10	9	2	1	3	4	3	35	
Greene Springs	11	4	6	14	0	4	6	3	21	69	3	0	0	0	2	1	3	2	11	
Greensborough	22	8	4	14	3	5	6	31	0	93	1	0	0	3	1	2	12	3	22	
Livingston	30	6	8	1	16	2	1	18	10	92	—	—	—	—	—	—	—	—	—	
Montgomery	28	26	6	8	0	0	0	20	5	93	—	—	—	—	—	—	—	—	—	
Orville	46	3	3	13	22	2	0	4	0	93	6	2	5	2	6	6	3	8	38	
MISSISSIPPI—																				
Columbus	35	12	7	6	8	2	7	16	0	93	5	0	0	1	6	5	8	2	29	
Hernando	5	23	0	12	1	30	0	21	0	93	1	6	0	0	1	26	8	4	41	
Natchez	34	36	4	8	3	4	1	3	0	93	2	2	0	7	0	11	6	8	36	
Westville	3	3	3	12	15	13	6	3	0	67	0	4	0	6	0	8	2	2	22	
LOUISIANA—																				
New Orleans	0	22	1	63	0	6	0	1	0	93	—	—	—	—	—	—	—	—	—	
Poydras College	17	3	6	4	54	5	1	3	0	93	—	—	—	—	—	—	—	—	—	
Tickfaw Station	28	26	11	4	9	3	4	8	0	93	—	—	—	—	—	—	—	—	—	
TEXAS—																				
Austin, [Palm]	23	4	10	11	8	12	9	16	0	93	4	3	0	4	5	15	4	3	38	
Austin, [Van Nostrand]	35	6	5	1	17	3	22	3	1	93	2	2	2	2	8	5	2	0	21	
Bonham	13	0	13	8	24	9	3	2	21	93	3	3	7	1	0	0	1	1	16	
Boston	30	13	8	11	14	3	7	7	0	93	—	—	—	—	—	—	—	—	—	
Burkeville	11	14	14	8	1	0	1	6	38	93	—	—	—	—	—	—	—	—	—	
Dallas	9	2	8	44	9	8	3	9	1	92	—	—	—	—	—	—	—	—	—	

## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TEXAS—																				
Gilmer	18	4	0	8	13	0	0	2	0	45										
Gonzales	28	16	29	8	10	0	0	0	0	93										
Greenville	12	7	12	23	17	0	22	0	0	93										
Lariss	17	13	9	12	15	6	0	3	3	81	2	1	3	4	5	6	8	5	34	
New Braunfels	29	5	17	23	12	0	6	1	0	93	0	0	1	0	0	2	1	0	4	
Preston	18	2	6	8	40	8	3	0	8	93										
Sisterdale	14	20	14	12	9	6	1	17	0	93	0	1	0	0	0	0	0	0	1	
Tarrant	28	1	17	6	31	0	1	3	2	89										
Union Hill	46	4	6	5	24	1	1	0	6	93	17	0	2	5	21	0	6	0	51	
Washington	38	1	2	7	15	0	1	1	28	93										
Webberville	30	14	1	4	20	2	1	3	14	89	1	0	0	1	0	2	1	0	5	
Wheelock	53	2	8	1	28	0	0	0	0	92										
ARKANSAS—																				
Arkadelphia	4	48	3	14	1	16	3	4	0	93										
Bentonville	7	0	1	1	9	4	1	3	0	26										
Brownsville	3	13	0	0	4	24	14	28	7	93										
Buckhorn	22	9	0	3	5	31	4	19	0	93										
Jacksonport	33	10	13	6	22	3	0	3	0	90										
Perryville	15	20	9	10	18	7	1	8	5	93										
Spring Hill	6	9	6	4	4	2	0	3	59	93										
Waldron	14	0	12	3	6	15	9	34	0	93										
Yellville	7	0	1	7	18	3	2	12	43	93										
TENNESSEE—																				
Glenwood	10	14	6	16	8	10	3	12	14	93	7	1	0	0	2	11	17	5	43	
Memphis	41	4	2	8	13	3	1	1	20	93										
Pomona	43	3	0	0	2	11	27	7	0	93										
Winchester	53	1	1	3	12	3	11	6	1	91										
KENTUCKY—																				
Bardstown	3	3	1	8	1	15	7	22	32	92	1	3	0	1	0	6	6	10	27	
Danville	5	16	0	7	10	25	3	18	0	84	3	1	0	0	0	8	11	13	36	
Hardensburg	12	8	1	13	17	23	1	18	0	93										
Lexington	5	1	7	14	22	9	16	14	0	88	3	0	1	0	1	16	12	4	37	
Paducah	10	2	0	3	6	0	2	16	0	39										
Paris	8	7	0	2	3	33	7	30	0	90	1	0	0	0	3	4	26	3	37	
Springdale	4	6	3	4	4	14	12	18	28	93										
OHIO—																				
Avon	6	6	2	9	12	21	18	19	0	93	3	1	0	1	0	3	32	24	64	
Bellefontaine	0	7	3	21	4	17	5	36	0	93	1	14	1	22	2	5	0	8	53	
Bethel	3	2	1	1	6	10	12	3	0	38										
Bowling Green	2	3	2	1	14	20	5	12	28	87	3	0	0	0	2	8	21	11	47	
Brecksville	8	17	22	7	16	0	7	0	16	93	1	3	1	1	5	6	13	5	35	
Cincinnati, [Harper]	8	5	7	0	15	9	19	21	0	84										
Cincinnati, [Phillips]	13	1	0	0	5	16	1	28	29	93	0	0	0	0	0	17	1	21	39	
Cleveland	8	6	1	17	21	12	18	10	0	93	6	3	0	0	0	4	15	9	37	
College Hill, [Wilson]	15	3	0	12	13	12	11	27	0	93	4	2	0	5	4	0	17	9	41	
College Hill, [Hammett]	11	7	0	13	3	17	9	33	0	93										
Dallasburg	30	18	5	0	4	4	10	22	0	93										
Dudley	11	9	4	4	2	20	22	5	13	90										
Elk Run	7	6	4	9	12	19	14	16	6	93	0	3	0	0	0	10	7	0	31	
Freedom	16	16	15	19	10	5	7	5	0	93	2	3	0	0	6	14	33	16	74	
Hillsborough	1	9	0	16	1	27	0	39	0	93	0	0	0	0	0	4	0	0	4	
Hillsborough, [Gamble]	2	2	1	0	3	0	23	2	0	39										
Hocking Port	5	9	1	2	6	28	22	16	1	90										
Hudson	8	6	5	7	10	25	21	10	1	93										
Iberia	4	10	0	8	10	19	8	31	0	90	1	5	0	0	0	0	1	2	9	
Jackson, (Monroe county)	4	3	5	3	10	0	0	0	41	66										
Kelley's Island	4	4	2	10	15	14	17	21	6	93										
Madison, [Atkins]	8	1	2	3	15	6	9	19	11	74	3	1	1	0	1	0	9	3	18	
Madison, [King]	3	6	1	4	5	10	14	24	21	88	3	7	1	2	3	9	16	26	67	
Montville	6	8	0	13	14	29	0	23	0	93	2	2	0	0	0	4	2	12	22	
Mount Pleasant	1	2	1	12	3	15	1	34	3	72										
Mount Union	0	2	0	0	0	13	2	22	19	58	0	0	0	0	0	2	5	9	16	



NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Newark	8	8	0	6	11	39	5	16	0	93									
New Lisbon	1	3	0	10	6	26	13	34	0	93	1	3	0	7	6	14	9	21	61
North Bend	0	1	2	7	8	7	22	4	42	93									
Portsmouth	6	2	6	8	2	28	16	25	0	93	0	3	0	0	0	9	1	22	35
Ripley	0	0	0	8	0	0	1	13	30	52	0	1	0	0	0	0	2	2	5
Rockport	5	0	7	1	11	21	41	7	0	93									
Savannah	2	6	0	12	0	28	10	35	0	93	3	7	0	0	0	20	10	27	67
Sharonville	19	5	0	4	0	2	49	3	0	82									
Troy	5	0	3	0	5	0	77	0	3	93	5	0	0	0	0	2	32	0	39
Urbana	3	3	0	12	3	10	9	14	39	93	4	2	0	1	1	9	26	11	54
Welchfield	11	0	0	18	9	25	15	15	0	93	1	0	0	0	0	1	1	0	3
Westerville	23	2	1	2	15	17	12	18	0	90	1	1	0	0	4	5	14	7	32
MICHIGAN—																			
Battle Creek	8	6	7	3	12	13	25	5	14	93	2	6	2	0	1	6	29	4	50
Detroit	0	0	2	16	9	41	23	2	0	93	0	0	1	4	16	40	27	5	93
Grand Haven	2	17	12	10	9	25	8	10	5	93	1	5	1	0	1	4	8	13	33
Grand Rapids	7	8	9	0	25	14	22	8	0	93	1	3	6	0	3	1	47	11	72
Marquette	1	15	4	3	2	16	8	43	0	92	0	3	0	0	1	3	16	10	33
Monroe	0	20	3	11	0	14	8	37	0	93	0	17	2	8	0	7	7	29	70
Monroe, [Bowlsby]	7	1	0	3	1	29	28	15	9	93									
Monroe Piers	2	7	1	16	13	50	13	21	1	124	3	0	4	4	1	3	10	14	39
New Buffalo											1	1	0	1	0	8	24	31	66
Ontonagon	15	9	0	0	2	13	14	5	0	58									
Otsego	4	9	0	8	7	21	10	11	22	92									
Ottawa Point	3	11	3	5	13	28	20	41	0	124	2	5	1	3	5	16	22	8	62
Thunder Bay Island	36	9	4	9	14	8	9	33	2	124	27	6	0	3	1	2	6	40	85
Ypsilanti	5	7	3	2	5	21	22	16	7	89	1	3	1	0	2	3	20	7	37
INDIANA—																			
Aurora	1	0	0	0	7	8	8	7	0	31									
Cannelton	9	0	8	18	16	8	11	23	0	93	2	1	0	7	6	2	7	10	35
Greencastle	11	7	1	6	12	21	7	25	0	90									
Logansport	4	14	3	13	0	21	13	25	0	93	2	9	4	3	2	7	14	22	63
Michigan City																			





## No. 47.—WINDS—NUMBER OF OBSERVATIONS, OCTOBER, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MINNESOTA—																			
Beaver Bay, [Clark] .....	7	9	7	2	13	5	11	10	29	93	9	4	3	2	1	6	11	14	50
Beaver Bay, [Wieland] .....	10	12	3	3	0	11	3	13	38	93	0	0	0	0	1	0	2	0	3
Burlington .....	21	11	4	3	7	7	12	19	9	93	8	4	6	0	2	3	27	12	62
Chatfield .....	5	0	3	7	17	5	18	17	21	93	3	1	1	0	1	5	11	7	29
Forest City .....	6	3	1	2	16	7	6	7	45	93									
Hazlewood .....	3	0	0	1	27	3	5	36	0	75	3	0	0	0	1	0	0	1	5
Princeton .....	3	3	9	6	8	10	23	16	15	93	4	0	0	0	0	7	16	13	40
NEBRASKA—																			
Bellevue .....	25	5	8	4	34	3	9	4	1	93	4	1	4	0	4	0	4	2	19
Brownville .....	0	4	0	0	0	50	1	38	0	93	0	2	0	0	18	2	14	0	36
Elkhorn .....	11	10	1	16	15	16	5	19	0	93	0	0	0	0	0	0	1	0	1
Kanosha .....	1	7	6	17	1	2	4	55	0	93									
Nebraska City .....	26	1	3	5	21	11	2	5	19	93									
Omaha .....	4	6	1	11	11	25	5	30	0	93									
KANSAS—																			
Burlingame .....	19	2	2	20	3	6	0	13	23	93									
Denver City .....	5	7	3	3	10	2	5	5	53	93	0	1	0	0	0	0	0	0	1
Fort Riley .....	21	16	2	7	7	19	4	17	0	93									
Lecompton .....	0	3	0	34	0	15	0	41	0	93									
Manhattan .....	7	6	5	10	18	4	0	0	25	75	2	3	3	5	9	21	6	1	50
Neosho Falls .....	13	5	1	5	11	9	1	4	44	93									
Spring Hill .....	1	18	3	25	0	19	0	24	2	92									
Wyandott City .....	7	22	4	6	4	35	1	14	0	93									
CALIFORNIA—																			
Auburn .....	0	0	0	14	5	54	0	20	0	93									
Crescent City .....	3	0	0	0	20	0	1	27	42	93									
Monterey .....	16	0	0	0	3	16	10	16	32	93									
Moquelumne Hill .....	0	12	44	2	0	32	2	0	1	93									
Sacramento .....	33	6	8	11	16	7	2	10	0	93	0	0	0	2	1	9	5	1	18
San Francisco .....	6	1	0	0	3	4	35	2	42	93	1	1	1	1	9	3	18	0	34
Santa Clara, [Frambes] .....	1	14	2	10	3	9	3	33	18	93									
Santa Clara, [Gould] .....	0	0	0	5	0	0	0	30	58	93									
Union Rancho .....	0	1	0	0	24	5	0	33	27	90	0	0	0	0	10	7	7	8	32
MEXICO—																			
Cordova .....	1	13	4	1	0	3	4	5	0	31									
WEST INDIES—																			
St George's, Bermuda .....	17	20	14	7	16	18	13	19	0	124									
Turk's Island .....	0	0	0	3	17	9	0	0	2	31									
CENTRAL AMERICA—																			
Guatemala .....	5	72	7	0	0	19	0	2	18	123									
SOUTH AMERICA—																			
Cathar's Sophia, Surinam .....	4	39	14	26	9	0	0	1	0	93	0	24	28	24	0	1	0	0	77

## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.								MOTION OF CLOUDS.										
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Fort Rae.....	7	6	11	6	0	0	0	12	46	88									
Fort Simpson.....	2	0	2	32	2	0	2	45	5	90									
Montreal.....	2	20	5	3	5	18	7	16	14	90	2	21	6	3	0	20	7	17	82
Red River Settlement.....	12	4	7	10	11	4	8	9	20	85	5	1	0	4	1	7	7	4	29
St. John's.....	31	4	2	6	5	12	13	17	0	90	4	14	0	3	0	2	5	4	32
St. Martin.....	1	34	3	13	3	23	4	9	0	90									
Stanbridge.....	2	9	5	14	21	9	28	2	0	90									
Toronto.....	1	17	6	11	2	24	5	21	3	90									
Windsor.....	12	4	1	3	3	19	10	18	16	86									
Wolfville.....	7	8	7	4	7	13	16	29	0	82	6	5	1	0	5	6	13	30	66
MAINE—																			
Bangor.....	1	5	0	17	4	24	3	36	0	90									
Belfast.....	25	6	3	4	7	19	19	7	0	90	20	0	3	0	0	4	30	8	71
Cornish.....	6	3	12	4	7	33	19	6	0	90	0	0	0	0	0	1	1	2	4
Cornishville.....	6	2	1	6	15	17	21	22	0	90									
Dexter.....	5	21	3	6	10	12	10	23	0	90	0	2	2	0	0	0	0	2	6
Gardiner.....	2	15	2	10	1	18	5	22	13	88	0	1	0	2	0	15	2	22	42
Limington.....	5	4	0	6	11	24	27	13	0	90									
Lisbon.....	7	11	6	4	27	1	6	28	0	90	4	4	4	2	20	0	11	15	60
Norway.....	1	7	0	15	4	18	2	43	0	90									
Perry.....	9	8	0	9	7	23	3	31	0	90	6	1	0	0	1	5	5	15	33
Portland.....	11	9	12	7	7	14	14	14	1	89	0	0	0	0	2	6	17	10	35
Portland, [Adams].....	21	9	1	11	27	10	3	8	0	90									
Steuben.....	3	22	0	5	0	36	0	15	9	90	1	7	0	0	0	28	0	9	45
Topsham.....	18	8	0	2	9	19	8	26	0	90									
Vassalborough.....	8	9	4	1	5	18	24	14	0	83	1	3	1	0	1	14	18	15	53
Warren.....	6	9	1	3	10	22	5	34	0	90									
NEW HAMPSHIRE—																			
Claremont.....	10	0	4	18	15	8	13	22	0	90	4	0	0	1	9	4	19	14	51
Shelburne.....	0	1	15	0	0	3	34	0	5	58	0	0	0	3	0	4	18	14	39
Stratford.....	0	12	12	1	10	8	17	10	29	99	0	0	0	0	0	6	11	4	21
Stratham.....	7	5	0	4	4	15	35	23	0	93									
VERMONT—																			
Brandon.....	13	0	1	13	29	14	12	11	5	89	2	0	0	0	1	7	8	29	47
Burlington.....	7	2	1	2	0	31	1	39	0	88									
Craftsbury.....	2	5	0	3	38	12	9	16	5	90	1	0	1	0	0	5	24	11	46
Lunenburg.....	2	3	6	4	0	16	12	7	1	89	0	0	2	0	1	3	22	2	30
Rupert.....											0	0	0	2	5	39	14	2	62
St. Johnsbury.....	16	0	0	0	30	0	12	20	3	81	2	0	0	0	7	2	0	1	21
MASSACHUSETTS—																			
Amherst.....	3	0	1	31	3	6	11	33	0	83	4	1	0	6	3	2	0	14	36
Bridgewater.....	5	9	2	4	9	25	18	18	0	90	5	6	1	4	0	13	17	12	64
Cambridge.....	11	4	2	3	12	15	5	10	23	85									
Florida.....	0	0	0	11	3	8	44	27	0	93									
Lawrence.....	1	9	2	8	0	28	0	42	0	90									
Mendon.....	0	14	0	0	4	27	14	31	0	90	0	14	0	0	2	22	11	21	70
Nantucket.....	8	6	1	17	8	12	5	23	10	90									
New Bedford.....	0	9	2	13	4	25	3	31	3	90	0	3	1	0	2	3	7	9	25
Richmond.....	0	10	0	9	0	28	0	43	0	90	0	8	0	7	3	27	0	19	64
Westfield.....	6	2	2	21	2	16	19	22	0	90	0	0	0	0	0	4	0	0	4
Williamstown.....	4	1	7	12	11	7	16	10	19	87									
Worcester.....	11	4	0	10	6	25	8	21	4	89	0	1	0	1	3	6	1	5	17
RHODE ISLAND—																			
Providence.....	2	5	6	3	16	20	6	29	3	90									
CONNECTICUT—																			
Columbia.....	1	4	0	10	0	14	1	43	17	90	1	2	0	10	0	11	1	27	52
Middletown.....	2	1	0	7	4	12	3	19	41	89	0	0	0	1	1	0	7	12	27
Pomfret.....	1	8	0	5	18	21	2	35	0	90	0	3	0	5	12	15	6	26	67
Saybrook.....	7	8	11	4	5	11	2	20	1	69	2	0	1	2	4	5	8	7	29
Wallingford.....	9	8	0	7	7	25	6	28	0	90	2	1	0	1	0	11	16	4	35
NEW YORK—																			
Baldwinsville.....	0	2	5	7	19	10	38	9	0	90	0	0	0	3	0	0	67	4	74



No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Gale or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—Continued.																				
Bellport	9	4	0	16	5	15	9	26	6	90	1	4	0	13	3	5	4	16	46	
Beverly	2	6	0	9	10	32	1	11	0	71	1	2	1	8	8	13	11	5	49	
Cazenovia	1	0	1	6	26	17	17	22	0	90	0	0	0	0	7	9	33	21	70	
Charlotte	2	10	7	11	26	33	9	22	0	120	1	0	4	5	1	28	30	15	84	
Fort Niagara	20	11	1	0	15	31	28	14	0	120										
Great Valley	11	1	3	0	43	1	18	11	2	90										
Morrisania	9	9	6	14	10	19	20	3	0	90	0	3	7	3	6	1	15	0	35	
Nichols	5	0	4	16	35	1	12	17	0	90	6	0	0	5	24	1	15	26	77	
Ogdensburg	1	14	5	4	9	21	3	12	0	69										
(Sweg)	5	3	6	19	18	6	24	9	0	90										
Penn Yan	0	3	0	0	32	26	19	10	0	90										
Rochester, [Dewey]	1	9	2	8	5	31	21	13	0	90	1	0	0	2	4	10	17	5	39	
Sackett's Harbor	3	24	3	11	30	20	8	18	3	120	0	0	0	0	0	4	6	1	11	
Wampsville	0	0	11	9	19	7	44	0	0	90	0	0	9	6	11	7	43	2	78	
Wilson	4	11	7	10	4	27	13	12	2	90	0	1	0	0	0	2	6	1	10	
NEW JERSEY—																				
Cinnaminson	10	16	1	6	5	15	6	29	2	90										
Lambertville	6	8	4	11	5	17	6	27	0	84										
Newark	3	15	2	6	1	11	5	17	0	60										
New Brunswick	0	8	14	8	5	10	22	23	0	90										
Woodstown	5	10	0	1	5	12	38	19	0	90	3	6	0	1	6	8	19	7	50	
PENNSYLVANIA—																				
Altoona	3	17	60	10	0	0	0	0	0	90	6	9	43	8	1	0	0	0	67	
Bedford	0	0	0	0	15	1	20	14	40	90	0	0	3	2	13	7	7	20	52	
Berwick	5	2	30	1	10	5	32	5	0	90	0	0	0	0	1	0	0	0		
Cannonsburg	0	0	26	3	0	15	46	0	0	90										
Chambersburg	7	2	13	5	3	4	54	1	1	90	1	0	4	3	12	3	27	2	52	
Easton	7	18	0	15	6	8	4	31	0	89										
Fleming	1	0	12	16	0	10	24	26	1	90	2	0	0	7	0	4	20	16	49	
Germantown	0	0	4	3	13	14	14	39	0	87										
Gettysburg	3	11	1	5	8	29	6	20	7	90	2	0	1	3	5	13	22	6	52	
Harrisburg, [Heisely]	5	4	19	11	4	9	16	19	1	88	2	0	4	2	1	4	8	10	31	
Harrisburg, [Hickok]	4	4	23	6	16	2	26	8	0	89	0	0	0	0	3	0	4	0	7	
Lewisburg	4	10	1	3	11	16	15	6	24	90	1	0	0	0	0	3	4	6	14	
Morrisville	2	5	14	9	3	19	9	21	8	90	0	2	9	1	1	16	18	14	61	
Mount Joy	0	2	0	8	1	2	0	29	49	82	1	0	0	0	0	2	0	9	12	
Nazareth	3	9	1	3	1	10	0	6	23	65	0	0	0	2	0	8	6	5	21	
Norristown	0	2	13	11	1	6	43	0	0	78	0	1	9	3	0	2	28	1	44	
North Whitehall	0	0	5	1	4	0	8	17	55	90	0	0	5	1	4	1	6	11	28	
Philadelphia	1	24	0	5	4	19	15	22	0	90	0	3	0	0	0	7	7	1	18	
Pittsburg, [Marine Hosp.]	5	0	5	21	6	15	10	22	3	90	2	0	0	5	1	13	12	2	35	
Pocopson	7	9	5	2	11	11	25	7	13	90	2	0	0	2	1	6	16	4	31	
Sewicklyville	3	1	2	23	0	1	6	18	36	90	1	0	0	1	0	2	3	20	27	
Shamokin	5	6	10	1	27	1	40	0	0	90	0	0	0	1	3	5	63	1	73	
Somerset	1	0	4	11	13	12	28	4	17	90	0	0	0	2	3	8	31	3	47	
Tarentum	3	4	2	4	2	19	8	13	35	90	1	0	0	0	5	6	30	4	46	
West Haverford	4	8	4	5	0	10	9	12	8	60	2	1	0	3	0	3	7	14	30	
Worthington	1	1	27	3	0	10	19	13	16	90	0	0	0	0	0	14	40	3	57	
MARYLAND—																				
Annapolis	5	19	4	2	15	15	5	14	11	90	0	0	0	0	0	10	0	1	11	
Bladensburg	0	11	1	2	0	11	1	14	0	40										
Chesterdown	3	10	0	18	1	23	4	29	1	89	1	0	0	5	1	4	1	6	18	
Frederick	1	18	1	1	8	7	19	8	27	90	0	0	0	1	7	2	18	0	28	
Leitersburg	3	2	5	6	20	18	21	11	4	90	2	0	0	10	11	8	21	8	60	
Sykesville	6	11	4	6	8	18	32	5	0	90	0	3	9	5	1	5	42	0	65	
DISTRICT OF COLUMBIA—																				
Washington	3	19	2	3	18	8	6	18	13	90										
VIRGINIA—																				
Crichton's Store	16	12	5	0	16	21	6	4	4	84	0	0	0	0	0	1	1	0	2	
Cross Creek											0	0	0	3	3	11	34	0	51	
Fork Union	22	10	3	0	34	10	8	3	0	90										
Fredericksburg	49	8	3	12	2	10	2	4	0	90										

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or Variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
VIRGINIA—Continued.																			
Lewisburg .....	40	7	2	2	13	10	2	7	7	90	0	0	7	1	0	14	8	2	32
Mont View .....	5	7	0	11	2	17	47	1	0	90	0	4	3	9	3	2	5	0	26
Mustapha .....	18	0	0	0	26	5	0	0	7	60									
Poplar Grove .....	0	5	15	6	0	3	33	11	17	90	0	0	0	3	1	5	19	7	35
Portsmouth .....	1	15	5	12	4	25	6	22	0	90									
Rougemont .....	8	17	4	1	12	8	9	2	1	62	0	7	0	0	2	3	4	1	17
Smithfield .....	15	11	3	6	15	19	7	10	0	86	1	7	0	0	1	9	14	8	40
Winchester .....	0	0	0	4	10	9	11	4	52	90	0	0	0	2	0	1	1	1	5
Wheeling .....	0	3	5	4	6	22	2	5	0	47	0	2	0	1	0	0	1	1	5
NORTH CAROLINA—																			
Chapel Hill .....	15	20	4	0	8	8	28	7	0	90	0	8	1	0	2	16	8	2	37
Davidson College .....	1	32	0	1	2	27	10	3	8	84	0	10	0	1	2	23	1	3	40
Murfreesborough .....	1	14	3	14	0	8	9	11	20	80									
Raleigh .....	6	4	2	0	8	7	13	4	46	90									
SOUTH CAROLINA—																			
Aiken .....	0	17	20	0	2	22	6	0	0	67									
All Saints .....	17	3	14	6	13	12	17	8	0	90	8	1	1	2	2	24	14	0	52
Charleston .....	9	7	4	4	1	7	2	5	14	53									
Columbia .....																			
St. John's .....	5	19	3	16	7	10	2	20	0	82	0	8	2	2	1	1	0	1	8
GEORGIA—																			
Atlanta .....	2	2	20	6	18	5	12	25	0	90									
Augusta .....	17	13	0	3	3	17	25	12	0	90	2	3	1	1	0	17	3	0	27
Clarksville, [Van Buren] .....	6	4	13	7	9	24	21	6	0	90	4	12	7	4	1	0	5	5	38
Covington .....	0	30	0	6	3	20	12	19	0	90									
Sparta .....	1	27	7	6	5	19	12	11	0	88	1	2	1	0	2	11	8	7	32
Thomaston .....	16	23	5	4	10	12	6	14	0	90	0	1	0	1	2	0	0	0	4</



## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
TEXAS—Continued.																			
Burkeville .....	6	5	6	1	1	10	9	14	38	90	0	0	0	1	0	17	5	3	26
Cross Roads (a) .....	10	4	8	16	14	29	5	8	1	90	0	0	1	4	4	1	11	1	11
Dallas .....	3	0	0	10	45	16	10	6	0	90	—	—	—	—	—	—	—	—	—
Gilmer .....	3	1	1	4	31	10	3	7	29	89	—	—	—	—	—	—	—	—	—
Gonzales .....	20	1	1	1	54	5	7	1	0	90	—	—	—	—	—	—	—	—	—
Larissa .....	0	0	3	15	28	21	2	11	4	84	1	0	2	1	10	16	4	5	39
New Braunfels .....	11	0	6	33	27	7	2	4	0	90	0	0	1	0	4	4	0	0	9
Preston .....	7	0	2	9	46	11	3	1	8	87	—	—	—	—	—	—	—	—	—
San Patricio .....	16	0	0	59	11	1	0	3	0	90	—	—	—	—	—	—	—	—	—
Sisterdale .....	13	9	4	16	25	11	5	7	0	99	0	0	0	0	0	5	0	0	5
Tarrant .....	16	0	7	9	44	8	0	6	0	90	—	—	—	—	—	—	—	—	—
Union Hill .....	12	0	4	0	59	13	1	1	0	99	6	0	0	1	41	1	2	0	51
Washington .....	5	0	1	0	53	0	1	8	21	89	0	0	0	0	16	0	0	0	16
Webberville .....	8	1	1	3	50	9	2	5	5	84	1	1	0	0	0	0	0	1	3
Wheelock .....	15	0	2	0	68	0	4	0	1	90	—	—	—	—	—	—	—	—	—
ARKANSAS—																			
Arkadelphia .....	0	15	0	5	11	43	1	15	0	90	—	—	—	—	—	—	—	—	—
Bentonville .....	9	2	1	3	19	14	2	2	1	53	—	—	—	—	—	—	—	—	—
Brownsville .....	6	4	1	11	21	34	9	4	0	90	—	—	—	—	—	—	—	—	—
Buckhorn .....	3	2	3	13	25	28	4	12	0	90	—	—	—	—	—	—	—	—	—
Jacksonport .....	7	1	20	11	29	2	6	14	0	90	—	—	—	—	—	—	—	—	—
Perryville .....	11	5	3	5	37	8	5	9	6	89	—	—	—	—	—	—	—	—	—
Spring Hill .....	5	1	10	7	16	8	1	4	36	88	—	—	—	—	—	—	—	—	—
Waldron .....	3	1	0	13	20	32	7	14	0	90	—	—	—	—	—	—	—	—	—
Yellville .....	11	2	3	3	12	26	4	4	25	90	—	—	—	—	—	—	—	—	—
TENNESSEE—																			
Glenwood .....	2	8	8	20	25	4	5	6	12	90	0	0	2	3	3	21	11	8	48
Memphis .....	4	1	2	14	30	3	8	5	23	90	—	—	—	—	—	—	—	—	—
Pomona .....	17	0	0	1	5	19	43	5	0	90	1	0	1	0	0	0	0	0	2
Winchester .....	14	1	4	6	37	5	18	3	2	90	—	—	—	—	—	—	—	—	—
KENTUCKY—																			
Bardstown .....	2	8	0	24	9	8	7	8	24	90	0	1	0	2	2	18	10	3	36
Danville .....	0	5	9	4	24	26	15	7	0	90	0	1	1	0	3	21	11	5	42
Hardensburg .....	5	6	4	11	16	35	4	9	0	90	—	—	—	—	—	—	—	—	—
Lexington .....	3	6	15	15	24	7	12	3	3	88	0	1	1	1	8	13	8	0	32
Paducah .....	4	5	2	3	17	2	3	4	0	40	—	—	—	—	—	—	—	—	—
Paris .....	2	7	4	19	13	26	14	2	0	87	11	0	2	0	5	2	27	0	36
Springdale .....	1	5	10	0	17	21	8	9	19	99	—	—	—	—	—	—	—	—	—
OHIO—																			
Avon .....	2	9	1	9	23	26	5	15	0	90	0	2	0	1	2	18	22	13	58
Bellefontaine .....	1	10	5	19	1	27	9	17	0	89	0	18	6	7	0	7	0	15	53
Bethel .....	0	0	0	2	29	32	13	0	0	76	—	—	—	—	—	—	—	—	—
Bowling Green .....	1	13	3	4	4	31	7	8	14	88	0	1	1	1	1	8	23	6	41
Brecksville .....	31	16	12	12	1	2	4	4	8	90	1	0	4	0	6	4	8	12	35
Cincinnati, [Harper] .....	2	6	22	10	9	19	16	4	0	88	0	0	0	0	0	1	1	1	3
Cincinnati, [Phillips] .....	5	7	0	0	10	12	3	16	42	90	0	5	0	0	0	23	13	2	43
Cleveland .....	5	4	4	21	24	8	18	4	0	88	2	0	0	0	1	3	15	2	23
College Hill, [Hammett] .....	1	0	4	17	11	32	23	2	0	90	—	—	—	—	—	—	—	—	—
College Hill, [Wilson] .....	1	11	9	7	19	26	9	8	0	90	1	6	8	3	9	13	11	3	54
Dallasburg .....	14	13	11	18	4	14	8	8	0	90	—	—	—	—	—	—	—	—	—
Elk Run .....	2	8	9	10	12	35	9	1	0	86	1	0	0	1	0	16	10	2	30
Freedom .....	7	2	9	3	17	24	25	3	0	90	14	0	0	0	0	8	37	2	61
Hillsborough .....	0	11	0	30	3	31	3	11	1	90	0	0	0	0	0	4	0	1	5
Hocking Port .....	0	2	0	2	12	60	8	4	0	88	—	—	—	—	—	—	—	—	—
Hudson .....	5	2	12	13	14	15	23	3	0	87	—	—	—	—	—	—	—	—	—
Iberia .....	4	9	2	14	14	16	2	15	0	76	0	0	0	0	0	1	0	0	1
Kelley's Island .....	0	6	11	10	17	15	17	8	6	90	—	—	—	—	—	—	—	—	—
Madison, [Atkins] .....	0	1	1	3	8	2	11	4	12	42	0	0	0	1	0	0	3	1	5
Madison, [King] .....	1	6	0	17	19	22	9	3	8	85	1	4	1	20	16	21	10	5	78

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.

## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued.																				
Montville	1	6	0	25	15	28	2	13	0	90	0	1	0	2	1	14	2	5	25	
Mount Pleasant	0	1	4	5	2	6	3	40	6	67	0	1	0	0	0	2	3	5	11	
Mount Union	0	7	2	7	0	12	1	15	15	59	0	1	0	0	0	2	3	5	11	
Newark	8	16	4	1	20	31	4	6	0	90	0	0	2	11	4	27	11	8	63	
New Lisbon	2	1	8	15	8	30	17	9	0	90	1	3	2	0	0	1	4	0	11	
North Bend	2	1	10	10	11	12	26	0	18	90	0	1	2	10	4	11	32	9	69	
Northwood	0	2	11	9	8	23	20	10	7	90	0	1	2	10	4	11	32	9	69	
Portsmouth	11	1	12	13	6	32	8	6	0	89	0	1	0	3	1	24	2	15	46	
Ripley	0	0	1	19	0	0	0	10	23	53	0	0	0	0	0	0	0	0	0	
Rockport	3	0	7	0	21	23	32	0	0	90	0	0	0	0	0	0	0	0	0	
Savannah	0	4	1	16	3	41	8	17	0	90	1	2	0	3	0	34	5	22	67	
Sharonville	7	0	3	0	36	2	27	1	0	76	0	0	1	3	1	14	28	0	56	
Urbana	1	1	3	11	18	19	6	8	23	90	0	0	1	3	1	14	28	0	56	
Welchfield	4	3	0	30	7	26	11	9	0	90	0	0	0	0	0	0	0	1	1	
Westerville	11	3	0	2	31	18	16	7	0	88	4	1	0	1	10	8	19	4	47	
Zanesville	2	0	0	4	25	21	13	20	0	85	0	0	0	0	0	0	0	0	0	
MICHIGAN—																				
Battle Creek	4	7	11	10	17	0	26	4	5	90	2	2	0	1	0	14	44	4	67	
Detroit	0	0	8	19	2	26	30	5	0	90	0	1	6	15	10	19	30	9	90	
Grand Haven	1	14	10	11	8	20	0	19	0	89	0	0	0	0	0	0	0	0	0	
Grand Rapids	10	8	12	3	23	12	13	9	0	90	3	3	0	0	0	10	54	8	87	
Marquette	4	12	7	11	7	11	11	27	0	90	0	0	0	1	1	2	19	2	25	
Monroe	9	16	13	15	0	14	9	14	0	90	9	14	11	9	0	2	7	11	63	
Monroe, [Bowlby]	4	2	10	6	12	22	15	12	7	90	0	0	0	0	0	0	0	0	0	
Monroe Piers	5	19	6	17	11	40	7	15	0	120	1	0	1	2	1	6	15	4	30	
New Buffalo	0	0	0	0	0	0	0	0	0	0	2	3	4	5	1	11	34	14	74	
Ontonagon	9	3	0	0	1	18	20	8	0	59	0	0	0	0	0	0	0	0	0	
Otsego	0	8	4	20	3	27	10	9	7	90	0	0	0	0	0	0	0	0	0	
Ottawa Point	14	8	8	9	16	30	13	22	0	120	2	8	3	1	2	19	20	5	60	
Thunder Bay Island	14	10	9	16	25	13	3	23	2	120	3	5	3	5	2	4	10	45	77	
Ypsilanti	4	7	11	0	3	33	12	0	8	99	3	2	4	0	0	12	19	2	42	
INDIANA—																				
Aurora	0	1	4	0	0	6	0	1	0	30	0	0	0	0	0	0	0	0	0	
Cannelton	4	2	12	28	20	6	9	9	0	90	0	0	4	1	8	10	7	2	32	
Greencastle	4	3	0	15	0	17	1	16	0	65	0	0	0	0	0	0	0	0	0	
Logansport	5	9	13	10	0	27	9	17	0	90	3	10	2	3	1	13	12	10	54	
Michigan City	61	14	0	0	17	20	0	8	0	120	0	0	0	0	0	0	0	0	0	
New Harmony	1	1	4	10	16	18	5	19	0	74	0	0	0	0	0	0	0	0	0	
Patoka	3	5	2	0	7	2	29	5	37	90	0	0	0	0	0	0	0	0	0	
Richmond, [Haines]	1	2	18	12	14	19	13	8	3	90	0	0	0	0	0	0	0	0	0	
Shelbyville	5	6	12	8	15	11	23	10	0	90	0	0	0	0	0	0	0	0	0	
South Bend	0	2	5	3	2	19	25	2	0	58	0	0	0	0	0	0	0	0	0	
ILLINOIS—																				
Augusta	0	18	12	5	13	24	10	8	0	90	0	0	4	1	3	9	9	0	40	
Aurora	7	12	3	14	18	10	14	12	0	90	0	0	0	0	3	13	29	8	53	
Batavia	0	23	0	5	0	36	5	21	0	90	0	16	1	3	0	21	8	24	73	
Bloomington	14	7	4	8	18	19	12	4	4	90	0	0	0	0	0	0	0	0	0	
Bruce	6	11	16	3	22	13	7	12	0	90	1	0	0	0	0	0	18	2	21	
Chicago	0	20	1	6	0	37	7	19	0	90	0	0	0	0	0	0	0	0	0	
Dixon	7	10	14	15	9	13	11	11	0	90	0	0	0	0	0	0	0	0	0	
Edgington	1	17	3	18	0	20	4	27	0	90	0	10	4	19	0	26	1	23	83	
Elgin	7	11	5	11	12	12	10	14	8	90	0	0	0	0	0	5	10	3	18	
Galena	0	1	0	3	0	13	0	8	0	30	0	0	0	0	0	0	0	0	0	
Lebanon	13	7	6	7	13	16	2	14	0	78	0	1	0	0	0	0	0	0	1	
Manchester	17	7	14	10	21	7	9	5	0	90	14	3	8	3	16	3	5	4	56	
Marengo	2	9	4	19	17	19	19	1	0	90	0	0	0	0	0	0	0	0	0	
Ottawa	2	23	3	11	8	27	3	9	0	86	0	2	1	0	0	7	6	4	20	
Pekin	12	13	6	5	26	12	2	13	1	90	4	10	1	2	4	15	18	4	58	
Peoria	12	17	0	5	19	7	18	6	0	90	0	0	0	0	0	0	0	0	0	
Riley	5	10	3	7	8	14	8	11	6	72	0	0	0	0	0	0	0	0	0	
Sandwich	6	18	10	7	17	8	12	12	0	90	1	0	0	0	0	5	64	5	75	
Tiskilwa	3	10	2	22	7	24	6	16	0	90	0	0	0	0	0	0	0	0	0	



## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
ILLINOIS—Continued.																			
West Salem	4	5	6	14	26	4	2	15	14	90	0	0	0	1	0	11	30	1	43
West Urbana	4	14	2	17	8	22	13	10	0	90									
Wheaton	9	11	10	5	13	15	10	15	1	89	1	0	0	0	0	1	4	1	7
Willow Creek	7	7	15	11	18	6	19	5	0	88									
Winnebago	8	13	4	11	16	10	16	12	0	90	0	0	0	0	0	12	7	4	23
MISSOURI—																			
Bethany	6	4	5	14	13	26	3	19	0	90									
Bolivar	3	1	1	7	3	41	3	6	11	76									
Booneville	0	23	6	11	3	27	3	11	0	84									
Carrollton	24	12	0	6	10	16	9	13	0	90									
Cassville	15	0	0	0	46	11	5	5	8	90	0	10	4	0	2	8	2	0	26
Dundee	6	9	16	10	18	10	13	8	0	90									
Emerson	10	10	15	16	20	10	5	3	0	89									
Greenfield	6	3	12	10	9	45	1	4	0	90									
Greenville	66	0	0	18	6	0	0	0	0	90									
Harrisonville	12	13	13	10	21	9	3	9	0	90									
Hermann	11	9	17	5	12	7	24	5	0	90									
Hornersville	3	1	1	6	39	14	5	20	0	89									
Kirksville	1	12	7	19	9	22	1	19	0	90									
Lancaster	4	2	13	3	21	4	35	8	0	90									
Lexington	23	8	8	7	22	4	9	11	0	90									
Paris	10	14	7	11	13	19	1	13	2	90									
Rhineland	1	7	12	6	4	12	6	20	0	68	0	0	1	1	0	4	3	4	13
Richmond	17	3	10	9	13	23	1	10	0	86									
St. Louis, [Engelmann]	8	4	13	20	14	4	14	13	0	90									
St. Louis, [Fendler]	12	17	10	31	21	12	13	23	8	147	3	3	1	4	1	20	19	10	61
Stockton	4	2	13	7	14	15	16	6	13	90	0	1	1	2	8	10	11	3	36
Warrenton	6	9	2	11	6	26	8	22	0	90									
Wet au Glaize	0	1	1	19	11	35	16	7	0	90									
WISCONSIN—																			
Appleton	6	19	0	6	5	35	4	15	0	90	0	2	0	0	0	1	0	0	3
Bay City	6	24	5	6	8	27	10	4	■	90	0	10	1	0	8	6	1	0	26
Beloit	22	3	3	5	15	19	11	12	0	90	0	0	0	0	0	1	0	0	1
Burlington	8	9	3	13	16	10	14	17	0	90									
Delafield	8	8	8	6	18	11	16	13	2	90	1	3	2	0	6	2	17	1	32
Green Bay	13	2	0	5	15	8	20	4	23	90	5	3	1	1	7	5	6	0	28
Janesville	4	6	2	7	6	11	3	9	0	48	0	2	0	0	0	5	10	7	24
Kenosha	2	4	11	13	9	15	23	7	2	86									
Lake Mills	8	7	4	5	18	26	14	8	0	90									
Manitowoc	6	5	2	11	12	11	15	28	0	90	1	1	0	2	0	12	9	8	33
Milwaukee, [Larkin]	2	10	7	11	4	24	11	10	11	90	3	5	0	6	0	16	14	5	49
Milwaukee, [Winkler]	■	■	6	9	5	18	10	27	0	90									
Otsego	4	18	0	11	7	24	9	17	0	90									
Pardeeville	7	12	5	12	16	12	11	14	0	89									
Platteville	5	9	8	21	12	5	21	9	0	90	2	6	8	7	4	7	32	9	75
Rocky Run	6	15	3	9	2	27	19	5	4	90	0	1	1	0	11	7	6	3	18
Superior	4	5	22	13	1	19	12	12	2	90	3	■	8	3	1	6	6	17	46
Superior City, [Stuntz]	6	12	22	12	8	25	31	4	0	120									
Wausau	8	4	11	15	13	12	4	13	10	90	2	1	1	8	5	17	8	2	44
IOWA—																			
Bellevue	10	8	9	9	15	8	14	15	0	88									
Burlington	0	11	5	17	0	23	2	24	1	83	0	1	0	1	1	5	23	9	40
Davenport	14	7	6	8	18	12	20	4	1	90									
Dubuque	19	4	3	5	27	4	1	15	12	90	1	1	1	8	1	8	17	16	53
Fairfield, [McBeth]	9	2	13	7	30	6	17	6	0	90									
Fairfield, [Shaffer]	0	4	0	11	1	24	1	28	21	90	0	2	0	0	0	0	0	0	2
Fayette Village	0	6	14	14	16	8	22	10	0	90									
Forestville	1	8	0	19	10	9	1	38	0	86	2	8	0	14	8	8	2	35	77
Fort Madison	3	15	1	16	11	29	1	24	1	90	5	1	2	8	0	10	12	17	55
Franklin	10	1	13	11	18	4	7	11	15	90									
Lyon's City	20	5	9	1	25	3	12	3	12	90									
Muscatine	0	14	3	17	12	19	13	12	0	90	0	0	0	0	0	14	8	0	16

## No. 48.—WINDS—NUMBER OF OBSERVATIONS, NOVEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.								
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
IOWA—Continued.																			
Pleasant Plain .....	4	12	13	13	7	23	4	13	1	90	1	0	0	0	2	16	4	7	30
Rossville .....	7	10	■	7	9	16	17	6	2	83									
MINNESOTA—																			
Beaver Bay, [Clark] .....	3	14	15	0	3	8	22	10	15	90	0	15	3	0	0	3	18	14	53
Beaver Bay, [Wieland] .....	2	22	6	0	4	7	7	17	25	90	0	1	0	0	0	0	2	1	4
Burlington .....	11	6	27	1	7	9	8	18	3	90	3	2	16	1	2	4	27	22	77
Chatfield .....	4	1	7	10	19	3	15	16	15	90	1	0	2	2	4	13	4	6	32
Forest City .....	3	0	6	7	10	1	18	2	31	78									
Hazlewood .....	1	0	2	22	16	1	5	43	0	90	0	0	7	2	0	0	4	8	21
Princeton .....	2	7	16	11	8	7	15	12	12	90	3	4	9	0	6	6	11	5	44
DACOTA—																			
Greenwood .....	5	15	3	22	3	10	0	27	5	90									
NEBRASKA—																			
Bellevue .....	33	12	8	1	28	4	1	3	0	90	9	5	5	0	8	5	1	2	35
Deer Creek .....	1	1	9	5	0	14	41	3	7	81									
Elkhorn .....	7	12	5	22	5	12	4	21	2	90									
Kanasha .....	0	2	10	25	1	2	1	49	0	90									
Nebraska City .....	13	3	3	7	14	8	3	15	24	90									
Omaha .....	14	12	5	7	14	11	6	15	6	90									
KANSAS—																			
Burlingame .....	15	2	5	14	11	10	3	12	18	90									
Denver City .....	0	0	5	2	12	5	0	16	50	90									
Fort Riley .....	16	32	2	5	18	9	3	5	0	90									
Lecompton .....	0	1	0	22	0	22	0	44	0	89									
Manhattan, [Goodnow] .....	13	10	6	11	17	15	0	8	10	90	16	3	6	0	3	16	9	24	77
Manhattan, [Preston] .....	14	4	22	5	16	8	12	9	0	90									
Neosho Falls .....	8	1	5	5	12	11	2	8	38	90									
Spring Hill .....	2	15	13	17	4	20	3	16	0	90									
Wyandott City .....	4	17	11	2	5	39	6	5	1	90									
CALIFORNIA—																			
Auburn .....	0	0	44	7	34	0	2	0	3	90									
Crescent City .....	5	3	0	0	36	5	7	13	21	90									
Monterey .....	1	0	0	0	5	32	11	5	36	90									
Moquelumne Hill .....	0	1	7	72	1	6	0	0	3	90									
Sacramento .....	22	4	6	26	12	6	5	9	0	90	0	0	0	19	1	14	7	1	42
San Francisco .....	9	3	2	1	23	11	11	3	27	90	4	2	3	1	16	21	11	14	69
Santa Clara .....	0	18	0	38	6	9	0	15	4	90									
Santa Clara .....	1	0	0	31	4	2	1	18	33	90									
Union Rancho .....	0	0	0	0	51	1	4	23	11	90	0	0	3	3	34	21	12	3	76
MEXICO—																			
Cordova .....	0	15	0	4	0	7	2	2	0	39									
WEST INDIES—																			
St. George's, Bermuda .....	19	17	21	13	12	19	13	6	0	120									
Turk's Island, Bahamas .....	0	1	8	17	3	0	0	0	1	30									
CENTRAL AMERICA—																			
Guatemala .....	2	99	1	2	0	4	2	0	9	119									
SOUTH AMERICA—																			
Catharina Sophia, Surinam .....	2	27	16	30	8	1	0	0	0	84	0	13	28	36	0	0	0	0	77



## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Fort Rae .....	13	2	15	6	6	0	6	0	39	87									
Fort Simpson .....	22	0	2	37	4	2	1	11	0	79									
Montreal .....	13	17	1	2	6	18	11	20	5	93	13	13	1	2	6	14	10	12	71
Red River Settlement .....	26	1	2	2	16	6	8	6	20	87	2	0	0	0	0	1	0	6	9
St. John's .....	16	14	2	8	10	18	6	19	0	93	5	13	1	1	2	2	6	1	31
St. Martin .....	0	36	0	16	3	24	9	5	0	93									
Stanbridge .....	8	7	2	19	16	7	25	6	3	93									
Toronto .....	6	23	0	0	0	28	9	22	5	93									
Windsor .....	10	12	7	3	6	14	13	17	6	88	0	0	0	0	0	1	0	0	1
Wolfville .....	6	7	9	2	2	13	35	9	9	92	3	1	4	0	0	13	35	7	63
MAINE—																			
Bangor .....	1	19	0	34	5	3	0	34	0	93									
Belfast .....	38	11	3	0	5	4	22	10	0	93	17	0	1	0	0	1	9	2	30
Cornish .....	25	6	4	0	5	19	23	11	0	93	0	0	0	0	0	1	2	0	3
Cornishville .....	15	14	0	4	3	6	13	38	0	93									
Dexter .....	8	26	6	1	3	4	3	39	3	93	0	0	0	0	0	1	0	1	2
Gardiner .....	9	25	1	7	0	16	2	20	12	92	0	0	0	0	0	11	1	3	15
Limington .....	18	24	0	0	0	8	22	21	0	93									
Lisbon .....	27	3	1	2	8	3	10	39	0	93	21	4	1	1	2	0	7	9	44
North Belgrade .....	15	24	1	4	11	4	1	29	4	93									
Norway .....	4	26	0	7	0	6	2	48	0	93									
Perry .....	6	18	2	5	1	10	6	45	0	93	2	8	1	1	0	4	4	11	31
Portland, [Adams] .....	28	15	5	5	17	6	6	7	3	92									
Portland, [Willis] .....	22	22	1	0	2	11	21	14	0	93	1	0	1	0	3	8	5	3	21
Steuben .....	2	34	1	5	0	13	3	28	4	90	0	7	0	0	0	13	2	6	28
Topsham .....	62	5	0	5	12	1	0	8	0	93									
Vassalborough .....	11	20	3	4	11	7	22	15	0	93	3	15	1	1	5	3	12	10	50
Warren .....	16	23	0	5	2	7	6	34	0	93									
NEW HAMPSHIRE—																			
Claremont .....	11	4	9	19	4	11	14	21	0	93	2	0	0	0	0	4	9	13	28
Manchester .....	18	11	3	1	11	0	6	31	1	82	11	12	3	2	3	5	15	7	58
North Littleton .....	3	9	16	2	5	34	15	9	0	93									
Shelburne .....	0	0	15	0	0	4	32	1	12	64	0	0	0	0	0	7	13	10	30
Stratford .....	0	11	13	1	8	10	14	16	20	93	0	0	0	0	0	3	5	7	15
Stratham .....	16	8	0	6	1	14	28	20	0	93									
VERMONT—																			
Brandon .....	14	0	2	9	33	5	9	20	1	93	1	0	0	0	3	4	6	16	30
Burlington .....	11	18	0	1	24	11	3	25	0	93									
Craftsbury .....	3	10	2	7	31	6	11	21	2	93	0	0	0	1	1	5	14	13	34
Lunenburg .....	1	0	2	7	10	8	35	19	0	82	0	0	1	0	3	1	0	0	5
Rupert .....											3	0	0	4	0	56	2	0	65
St. Johnsbury .....	39	0	1	2	24	0	4	12	9	91	1	0	0	0	0	0	3	0	4
MASSACHUSETTS—																			
Amherst .....	7	2	1	15	7	6	7	40	0	85	0	0	0	0	2	4	3	6	15
Bridgewater .....	6	17	5	1	4	19	3	38	0	93	6	16	5	2	4	15	4	25	77
Cambridge .....	15	7	6	2	11	9	13	15	14	92									
Florida .....	1	15	3	0	0	13	12	43	0	93									
Lawrence .....	0	27	0	1	0	15	1	49	0	93									
Mendon .....	0	35	1	0	2	4	20	28	3	93	0	32	2	0	1	4	17	22	79
Nantucket .....	10	12	4	6	1	13	7	34	5	92									
New Bedford .....	7	18	3	3	2	15	4	40	1	93	1	2	3	0	0	7	6	10	29
Westfield .....	13	12	3	11	2	8	13	31	0	93	0	0	0	0	0	0	2	0	2
Williamstown .....	0	1	14	12	5	7	8	24	17	88	0	0	0	0	0	0	0	1	1
Worcester .....	1	26	0	3	1	20	2	38	1	92	0	1	0	1	0	4	2	5	13
RHODE ISLAND—																			
Providence .....	6	18	3	1	2	15	10	38	0	93									
CONNECTICUT—																			
Columbia .....	1	19	0	3	0	15	0	41	14	93	0	18	0	3	0	14	0	14	49
Middletown .....	6	10	1	0	0	12	0	20	44	93	0	0	0	0	0	15	6	3	24
Pomfret .....	4	25	0	0	4	18	4	38	0	93	0	23	0	0	4	17	7	26	77
Saybrook .....	6	20	9	0	3	9	6	34	1	88	0	2	0	2	0	1	10	14	29
Wallingford .....	20	18	3	0	8	17	5	22	0	93	0	1	0	3	0	3	28	3	38

No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
NEW YORK—																				
Baldwinsville.....	2	7	23	1	3	12	15	30	0	93	2	2	2	1	2	6	33	31	79	
Bellport.....	18	15	6	3	2	14	10	25	0	93	7	7	0	1	1	9	6	9	40	
Beverly.....	3	17	0	14	1	24	1	20	0	84	1	10	2	9	6	26	9	2	55	
Cazenovia.....	1	0	0	21	14	15	12	29	0	92	0	0	0	14	7	10	18	22	71	
Charlotte.....	5	7	14	18	9	41	16	14	0	124	0	0	2	7	2	31	12	9	63	
Ilion.....	11	11	17	12	1	17	22	16	0	93	4	9	7	17	19	11	18	8	93	
Morrisania.....	9	8	1	3	3	7	5	9	0	45	8	3	3	0	2	1	2	0	19	
Niagara.....	19	1	1	1	38	29	26	6	0	124	7	1	1	8	20	2	11	34	84	
Nichols.....	8	1	2	22	26	3	4	27	0	93	0	0	0	0	0	0	5	0	5	
Ogdensburg.....	3	14	9	1	12	7	10	11	0	92	0	0	0	0	0	0	0	0	0	
Oswego.....	4	9	7	17	19	11	18	8	0	93	0	0	0	0	0	0	0	0	0	
Penn Yan.....	1	9	1	3	17	23	27	12	0	93	0	2	0	2	0	0	14	5	26	
Rochester.....	0	6	3	11	5	31	24	13	0	93	0	0	0	0	0	0	0	0	0	
Sackett's Harbor.....	3	45	0	9	21	12	4	22	2	124	0	0	0	0	0	0	0	0	3	
Wampsville.....	0	0	24	0	7	6	46	2	0	93	0	0	23	0	0	7	40	2	82	
Wilson.....	3	0	10	17	8	28	10	10	0	89	0	0	0	0	0	1	6	2	9	
NEW JERSEY—																				
Cinnaminson.....	9	26	2	0	1	18	10	26	1	93	0	0	0	0	0	0	0	0	0	
Lambertville.....	5	23	0	2	4	17	3	33	0	87	0	0	0	0	0	0	0	0	0	
Newark.....	2	21	1	2	0	17	7	13	0	63	0	0	0	0	0	0	0	0	0	
New Brunswick.....	5	22	0	0	6	7	21	31	1	93	0	0	0	0	0	0	0	0	0	
Woodstown.....	2	29	6	3	2	12	20	19	0	93	11	13	5	3	1	3	11	11	58	
PENNSYLVANIA—																				
Altoona.....	11	10	43	16	5	0	7	1	0	93	10	7	41	10	7	0	9	0	86	
Bedford.....	1	1	9	3	1	2	15	20	41	93	2	2	10	1	11	4	19	37	86	
Berwick.....	5	7	28	2	3	6	33	9	0	93	1	0	8	0	5	2	20	2	38	
Cannonsburg.....	0	0	20	1	0	10	49	7	0	93	0	0	2	0	1	4	40	10	57	
Chambersburg.....	11	0	13	1	2	0	49	10	1	93	0	0	2	0	1	4	40	10	57	
Easton.....	4	29	0	4	5	0	46	0	91	91	1	0	0	2	1	1	40	19	64	
Fleming.....	2	3	22	13	0	2	26	24	1	93	1	0	0	2	1	1	40	19	64	
Germantown.....	1	9	0	11	3	6	4	20	0	54	0	0	0	0	0	0	0	0	0	
Gettysburg.....	4	25	1	0	8	22	11	22	0	93	5	5	0	0	0	13	28	12	63	
Harrisburg, [Heisely].....	0	13	20	1	2	0	16	23	1	93	5	0	1	0	2	3	6	8	25	
Harrisburg, [Hickok].....	4	3	25	1	9	8	33	5	0	93	0	0	0	0	0	0	6	0	0	
Lewisburg.....	11	13	3	2	7	8	13	12	24	93	0	0	0	0	0	3	5	1	0	
Morrisville.....	1	21	7	6	1	20	6	26	2	90	1	18	7	4	0	18	0	14	68	
Mount Joy.....	2	5	1	17	0	0	0	24	0	49	0	0	0	2	0	1	1	11	15	
Norristown.....	0	10	16	4	1	3	35	12	0	81	0	2	15	0	1	6	39	3	66	
North Whitehall.....	1	5	6	0	0	4	7	22	48	93	0	0	3	0	0	2	20	22	47	
Philadelphia.....	2	31	1	1	1	23	11	23	0	93	0	0	0	0	0	11	7	0	27	
Pittsburg, [Marine Hos.].....	2	9	8	11	5	22	16	19	1	93	1	0	2	3	1	20	13	7	47	
Pleasant Ridge.....	1	16	1	11	2	11	2	46	0	90	0	0	0	0	0	0	0	0	0	
Pocopson.....	8	20	10	0	1	16	25	10	0	93	2	1	0	0	0	0	13	0	31	
Sewickleyville.....	1	2	2	17	1	10	8	28	19	88	0	1	2	0	1	4	6	23	37	
Shamokin.....	7	4	20	6	11	0	43	2	0	93	1	1	4	0	15	2	55	4	85	
Somerset.....	0	0	10	5	4	13	35	9	17	93	0	0	1	0	2	0	26	5	43	
Tarentum.....	4	12	3	0	4	19	15	6	30	93	1	1	0	2	0	10	35	0	60	
West Haverford.....	1	16	5	3	0	9	7	21	0	62	4	1	0	0	1	5	10	19	40	
Worthington.....	2	8	16	2	2	10	12	24	17	93	1	1	3	1	0	10	30	9	55	
MARYLAND—																				
Annapolis.....	9	29	1	1	10	23	2	13	5	93	0	0	0	0	0	0	21	0	21	
Bladensburg.....	4	13	4	0	0	17	0	20	0	58	0	0	0	0	0	0	0	0	0	
Chestertown.....	0	23	2	9	1	20	1	22	0	78	0	2	1	0	1	8	3	2	17	
Frederick.....	7	23	0	0	7	1	10	28	14	90	1	1	0	0	0	0	27	3	32	
Leitersburg.....	13	5	5	8	6	14	27	12	3	93	4	2	1	1	4	13	26	14	65	
St. Mary's City.....	19	12	7	4	6	10	8	14	0	80	3	1	1	1	0	0	0	2	8	
Sykesville.....	4	25	9	1	2	13	24	15	0	93	1	3	24	1	0	5	45	2	81	
DISTRICT OF COLUMBIA—																				
Georgetown.....	14	0	0	17	8	11	12	25	0	93	0	0	0	0	0	0	0	0	0	
Washington.....	7	24	0	2	14	0	0	26	6	91	0	0	0	0	0	0	0	0	0	
VIRGINIA—																				
Crack Whip.....	26	0	5	1	16	25	0	6	2	93	0	0	0	0	0	0	2	0	4	



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	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
VIRGINIA--Continued.																				
Crichton's Store .....	26	6	5	1	16	25	6	6	7	93	0	0	0	0	0	2	2	0	4	
Cross Creek .....											1	0	1	3	5	11	44	8	73	
Fork Union .....	40	10	2	1	19	12	5	4	0	93										
Fredericksburg .....	51	14	0	0	14	7	0	5	0	91										
Lewisburg .....	1	17	0	3	7	48	5	12	0	93	0	2	0	4	3	22	2	3	36	
Mont View .....	7	27	0	5	13	11	23	7	0	93	3	4	2	0	0	29	0	7	45	
Mustapha .....	19	0	0	0	23	9	1	0	8	60										
Poplar Grove .....	0	4	15	4	0	3	21	25	21	93	0	2	0	3	1	21	16	9	52	
Portsmouth .....	1	27	9	9	0	17	13	17	0	93										
Rougemont .....	12	24	0	0	14	7	16	0	4	77	2	5	0	0	0	0	15	2	24	
Smithfield .....	15	13	0	2	7	16	9	8	0	70	4	1	0	0	1	4	15	5	30	
Wheeling .....	8	16	0	6	12	22	3	13	13	93	0	0	0	1	1	2	2	1	7	
Winchester .....	3	3	2	0	3	6	7	14	55	93	0	1	3	0	2	0	3	1	10	
NORTH CAROLINA--																				
Chapel Hill .....	6	21	3	0	3	15	2	6	5	61	1	3	0	0	2	10	4	0	20	
Davidson College .....	2	37	0	2	4	31	5	3	2	86	2	16	0	2	3	20	6	0	49	
Murfreesborough .....	3	21	3	5	0	21	4	18	16	91	3	15	3	3	1	5	19	5	54	
Raleigh .....	20	8	4	3	15	8	3	5	27	93										
SOUTH CAROLINA--																				
Aiken .....	10	2	2	4	10	31	13	0	0	79										
All Saints .....	8	6	8	9	10	16	21	14	1	93	5	2	2	1	2	23	15	1	51	
Charleston .....	1	6	0	3	4	6	2	10	0	32										
St. John's .....	9	10	4	17	5	17	3	22	0	87	0	3	0	0	3	6	24	4	49	
GEORGIA--																				
Atlanta .....	2	2	7	12	11	9	4	46	0	93										
Augusta .....	5	1	0	3	1	32	31	17	0	90	1	7	0	10	1	30	5	0	54	
Clarksville .....	1	8	13	1	5	20	45	0	0	93	0	8	13	0	5	18	17	0	61	
Covington .....	0	16	7	5	2	17	9	37	0	93										
Sparta .....	2	14	5	10	5	21	11	21	0	89	1	2	1	0	2	13	15	2	36	
Thomaston .....	13	10	4	3	11	15	15	22	0	93	0	0	0	1	1	3	0	0	5	
Whitemarsh Island .....	5	11	1	8	4	10	5	16	32	92	0	3	0	3	2	9	14	3	34	
FLORIDA--																				
Alligator .....	0	13	5	10	5	10	8	20	22	93	0	0	0	1	6	13	4	2	26	
Atsena .....	15	22	8	3	10	8	5	18	4	93	3	7	4	0	7	6	4	9	40	
Belair .....	10	26	6	20	3	2	5	15	6	93	2	5	3	4	1	26	11	7	59	
Gainesville .....	13	13	0	21	0	23	0	20	0	90	0	0	0	2	0	9	1	0	12	
Jacksonville .....	13	19	6	7	8	18	12	8	3	93	5	19	8	0	2	1	1	3	39	
Micanopy .....	4	11	7	21	5	9	6	12	15	90	1	1	2	1	0	0	0	0	5	
St. Augustine .....	3	31	3	5	1	25	0	25	0	93	1	11	3	5	3	20	2	15	60	
Salt Ponds .....	13	21	12	5	4	0	3	1	3	62										
Seville .....	0	4	0	1	2	0	0	2	15	24										
Warrington .....	6	16	1	24	1	13	1	31	0	93	7	9	0	17	3	5	1	9	51	
ALABAMA--																				
Greene Springs .....	11	1	6	7	1	4	14	5	31	93	1	1	1	0	2	4	1	3	18	
Greensborough .....	4	1	1	10	8	3	4	26	0	57	3	0	0	1	0	5	9	3	21	
Livingston .....	14	2	3	10	20	0	0	35	6	90										
Montgomery .....	6	9	0	6	16	13	14	29	0	93										
Orville .....	39	6	0	12	7	14	1	14	0	93	7	7	0	8	0	16	9	18	65	
Uniontown .....	3	2	3	12	0	13	6	29	25	93										
MISSISSIPPI--																				
Columbus .....	22	5	6	0	16	4	15	24	0	92	3	0	0	0	2	9	7	5	26	
Grenada .....	48	0	0	0	22	12	8	3	0	93										
Hernando .....	5	10	0	4	10	31	0	33	0	93	2	2	0	1	0	23	2	18	53	
Natchez .....	23	22	2	3	17	8	0	18	0	93	0	0	0	0	0	6	4	3	13	
Paulding .....	1	6	2	5	2	20	4	21	0	61	1	5	0	6	2	12	5	6	37	
Westville .....	4	9	1	21	3	9	0	6	20	73	7	7	0	11	3	7	0	5	40	
LOUISIANA--																				
New Orleans .....	0	36	0	13	0	14	0	30	0	93										
Poydras College .....	56	0	0	2	24	8	0	3	0	93										
Tickfaw Station .....	9	10	4	22	10	10	3	25	0	93										
TEXAS--																				
Austin, [Palm] .....	21	0	3	1	14	20	7	27	0	93	1	0	1	0	6	11	0	4	23	

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
TEXAS—Continued.																				
Austin, [Van Nostrand] ..	28	1	1	0	28	1	19	12	3	93	3	0	0	0	14	3	2	1	23	
Bonham .....	39	0	8	5	16	10	9	4	2	93	6	0	2	1	2	10	2	1	24	
Boston .....	25	13	6	2	18	4	9	14	2	93										
Burkeville .....	18	20	5	3	5	14	5	6	17	93	0	2	1	1	0	8	1	0	13	
Cross Roads (a) .....	22	4	0	6	22	21	6	8	0	89	2	0	0	0	0	1	2	5	10	
Dallas .....	34	0	0	13	12	13	15	6	0	93										
Gilmer .....	16	0	0	5	14	8	1	6	43	93										
Gonzales .....	55	0	8	0	14	6	10	0	0	93										
Larissa .....	13	0	0	4	18	15	3	30	2	85	6	0	0	0	6	14	6	7	39	
New Braunfels .....	28	4	4	11	21	7	4	14	0	93	0	0	0	3	5	3	0	0	11	
Preston .....	40	1	2	2	27	0	4	0	17	93										
San Patricio .....	57	4	0	29	1	0	0	2	0	93										
Sisterdale .....	42	17	6	10	12	5	0	1	0	93	0	0	1	0	0	1	1	0	3	
Tarrant .....	14	0	3	2	44	5	6	6	13	93										
Union Hill .....	51	2	1	3	33	0	1	2	0	93	25	0	2	0	32	0	0	1	60	
Washington .....	25	0	0	1	14	0	0	18	30	88										
Webberville .....	47	0	1	0	18	10	3	4	1	84										
Wheelock .....	49	1	1	3	35	1	2	1	0	93										
ARKANSAS																				
Arkadelphia .....	4	34	3	1	0	21	2	28	0	93										
Bentonville .....	23	0	1	0	11	4	2	4	0	45										
Jacksonport .....	33	0	6	2	21	2	15	6	8	93										
Perryville .....	27	10	2	11	11	14	7	9	2	93										
Spring Hill .....	16	8	3	6	4	6	6	5	37	91										
Waldron .....	24	4	0	4	12	7	15	27	0	93										
Washington .....	11	0	0	0	3	1	1	0	0	15										
Yellsville .....	29	1	3	0	3	11	1	17	28	93										
TENNESSEE—																				
Glenwood .....	13	15	5	15	6	8	11	15	5	93	1	4	1	2	1	14	21	7	51	
Memphis .....	22	5	7	4	18	11	7	9	10	93										
Pomona .....	15	1	2	1	2	24	26	22	0	93										
University Place .....	2	7	0	11	1	34	5	30	0	90	0	0	0	1	1	0	11	0	13	
Winchester .....											23	2	0	3	10	14	24	17	93	
KENTUCKY—																				
Bardstown .....	3	12	0	10	10	19	5	18	15	92	1	5	0	4	4	16	3	8	41	
Danville .....	6	6	2	6	9	22	23	18	0	92	0	2	1	1	2	15	15	8	44	
Hardensburg .....	12	10	2	5	14	21	4	25	0	93										
Paducah .....	20	0	1	2	7	1	0	9	0	40										
Paris .....	0	12	0	7	12	30	9	23	0	93	0	1	1	0	11	2	31	0	46	
Springdale .....	2	8	2	0	5	25	9	14	28	93										
OHIO—																				
Avon .....	7	2	8	0	10	31	7	16	0	90	4	0	1	1	0	11	13	20	50	
Bellefontaine .....	0	25	3	8	0	13	10	34	0	93	0	0	3	30	1	19	2	4	67	
Bethel .....	4	4	6	4	10	22	0	9	0	68										
Bowling Green .....	3	16	2	5	3	39	3	10	11	92	0	4	0	0	1	6	0	14	36	
Brecksville .....	11	7	10	17	16	6	11	10	5	93	2	6	3	4	0	7	4	1	29	
Cincinnati, [Harper] .....	9	7	14	4	4	16	15	10	0	79	0	0	0	0	0	1	0	0	1	
Cincinnati, [Phillips] .....	12	3	2	0	1	16	9	32	18	93	1	4	0	0	0	15	18	18	56	
Cleveland .....	5	13	5	9	20	23	13	5	0	93	1	1	0	0	1	6	7	4	20	
College Hill .....	6	6	0	6	5	26	16	25	0	90	3	6	0	3	2	14	13	11	52	
College Hill .....	4	10	7	5	9	13	27	18	0	93										
Dallasburg .....	1	9	11	6	2	6	6	8	0	49										
Elk Run .....	5	11	6	3	11	27	12	16	1	92	1	0	0	0	1	10	9	4	25	
Freedom .....	13	4	1	0	3	21	47	3	0	92	15	3	1	0	3	13	43	3	81	
Hillsborough .....	0	22	0	10	0	33	3	25	0	93	0	0	0	0	0	1	0	0	1	
Hocking Port .....	4	2	5	1	8	27	39	13	0	90										
Hudson .....	5	9	10	9	7	20	22	8	0	90										
Jackson, (Monroe county) .....	9	7	0	1	18	0	0	0	37	72										
Kelley's Island .....	2	19	3	4	8	31	0	15	2	93										

a It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.



## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
OHIO—Continued																				
Madison, [Atkins].....	4	1	5	5	14	17	13	9	6	74	0	0	0	0	1	4	5	1	11	
Madison, [King].....	1	17	2	11	19	16	11	7	11	90	1	16	2	9	18	18	8	11	81	
Montville.....	4	10	0	11	6	41	0	21	0	93	0	0	0	1	2	1	0	7	10	
Mount Union.....	0	6	0	15	0	11	6	15	9	62	0	0	0	2	0	0	6	2	10	
Newark.....	6	22	0	3	19	35	4	4	0	93	—	—	—	—	—	—	—	—	—	
New Lisbon.....	4	8	4	8	5	34	7	23	0	93	1	8	3	9	5	23	8	21	18	
North Bend.....	5	3	4	4	2	7	37	2	29	93	0	0	1	0	0	2	5	0	8	
Northwood.....	4	12	2	10	1	49	0	15	0	93	4	10	3	5	0	38	3	9	72	
Portsmouth.....	9	10	5	3	0	25	10	28	0	90	1	12	3	1	0	23	3	18	61	
Ripley.....	4	3	3	10	1	2	1	13	15	52	0	0	0	0	0	0	1	0	1	
Rockport.....	2	7	12	3	9	19	36	4	1	93	—	—	—	—	—	—	—	—	—	
Rupell's Station.....	3	5	0	6	6	11	14	11	1	57	—	—	—	—	—	—	—	—	—	
Savannah.....	0	19	1	8	3	35	10	17	0	93	0	18	0	2	0	23	12	17	72	
Sharonville.....	6	0	0	0	24	2	13	9	0	54	—	—	—	—	—	—	—	—	—	
Troy.....	24	1	9	0	11	0	43	0	5	93	5	0	0	0	4	0	42	2	53	
Urbana.....	0	11	4	1	10	19	16	14	18	93	1	5	2	0	2	11	16	7	44	
Welchfield.....	12	3	1	26	1	30	8	12	0	93	0	0	0	0	0	1	0	0	1	
Westerville.....	18	8	0	2	17	28	5	15	0	93	5	6	0	0	4	13	8	10	46	
MICHIGAN—																				
Battle Creek.....	1	1	16	2	7	10	26	5	1	69	1	0	0	1	2	1	23	35	63	
Detroit.....	2	14	8	24	5	24	10	6	0	93	2	14	13	18	2	20	15	9	93	
Grand Haven.....	7	11	21	7	9	7	10	21	0	93	1	2	2	0	1	1	11	10	26	
Grand Rapids.....	5	9	12	8	18	10	14	17	0	93	0	0	9	0	4	7	43	28	91	
Marquette.....	5	6	1	3	11	13	16	36	2	93	0	0	0	0	0	2	11	6	19	
Monroe, [Bowlsby].....	0	5	3	4	5	34	12	24	6	93	—	—	—	—	—	—	—	—	—	
Monroe Piers.....	8	13	3	7	11	53	13	16	0	124	1	1	0	1	1	1	6	2	13	
Monroe, [Whelpley].....	2	30	0	10	0	12	3	24	0	81	2	28	0	7	0	7	2	21	67	
New Buffalo.....	—	—	—	—	—	—	—	—	—	—	1	0	9	0	1	6	20	33	70	
Ontonagon.....	0	9	0	0	22	1	29	20	0	90	—	—	—	—	—	—	—	—	—	
Otsego.....	6	9	6	12	4	25	10	7	14	93	—	—	—	—	—	—	—	—	—	
Ottawa Point.....	2	9	6	9	10	35	13	40	0	124	0	3	6	0	4	23	6	14	56	
Thunder Bay Island.....	14	4	6	18	7	16	12	46	1	124	7	2	5	8	4	5	7	39	77	
Ypsilanti.....	6	13	5	8	3	28	13	9	3	88	3	3	3	4	2	16	12	7	50	
INDIANA—																				
Aurora.....	0	6	2	2	2	6	11	2	0	31	—	—	—	—	—	—	—	—	—	
Cannelton.....	8	1	12	8	12	5	21	26	0	93	5	0	1	1	2	11	15	8	43	
Greencastle.....	9	6	4	3	9	27	10	25	0	93	—	—	—	—	—	—	—	—	—	
Green Mount.....	3	9	10	6	8	28	7	20	2	93	—	—	—	—	—	—	—	—	—	
Logansport.....	2	16	8	7	1	15	12	32	0	93	2	11	6	2	4	5	14	15	59	
Michigan City.....	23	0	0	3	16	17	6	59	0	124	—	—	—	—	—	—	—	—	—	
New Harmony.....	11	1	1	7	14	5	14	24	0	77	—	—	—	—	—	—	—	—	—	
Patoka.....	2	0	2	0	10	7	10	25	28	84	—	—	—	—	—	—	—	—	—	
Richmond, [Austin].....	3	13	0	5	7	12	5	6	2	53	2	5	0	1	1	3	4	3	19	
Rockville.....	10	12	3	5	6	23	10	24	0	93	—	—	—	—	—	—	—	—	—	
Shelbyville.....	16	2	11	5	4	8	35	12	0	93	—	—	—	—	—	—	—	—	—	
South Bend.....	2	0	0	0	1	15	38	7	0	63	—	—	—	—	—	—	—	—	—	
ILLINOIS—																				
Augusta.....	7	8	8	9	7	15	15	24	0	93	1	0	3	0	0	4	6	7	21	
Aurora.....	8	7	4	5	14	16	17	22	0	93	0	0	0	0	1	8	14	10	33	
Batavia.....	4	7	1	6	0	36	12	27	0	93	0	9	0	7	0	20	4	22	62	
Bloomington.....	6	5	6	4	18	12	33	9	0	93	—	—	—	—	—	—	—	—	—	
Bruce.....	12	3	15	1	16	10	12	24	0	93	0	1	0	1	0	0	0	0	2	
Chicago.....	7	9	0	11	1	23	6	36	0	93	—	—	—	—	—	—	—	—	—	
Dixon.....	22	5	7	0	19	17	17	0	0	93	—	—	—	—	—	—	—	—	—	
Edgington.....	0	3	7	6	0	34	5	38	0	93	2	2	6	0	0	17	5	25	63	
Elgin.....	3	5	5	4	12	11	11	37	5	93	0	0	0	0	0	3	5	3	11	
Galena.....	0	15	2	0	0	9	1	4	39	—	—	—	—	—	—	—	—	—	—	
Lebanon.....	6	5	0	7	6	18	8	34	0	93	0	1	0	1	0	0	0	0	2	
Manchester.....	11	11	5	15	8	4	20	19	0	93	7	0	6	7	1	2	14	10	53	
Marengo.....	0	3	7	2	10	9	53	6	1	91	—	—	—	—	—	—	—	—	—	
Naperville.....	6	9	4	6	13	16	20	19	0	93	8	0	5	0	3	2	3	8	29	
Ottawa.....	9	11	2	10	3	22	20	13	3	93	4	0	0	0	2	4	1	5	16	

## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.										MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.	
ILLINOIS—Continued.																				
Pekin.....	11	5	4	■	18	5	5	33	1	93	8	■	5	2	■	■	■	16	48	
Peoria.....	7	12	6	3	11	13	38	■	■	93	■	■	■	■	■	■	■	■	■	
Riley.....	7	■	8	2	8	15	16	26	8	90	■	■	■	■	■	■	■	■	■	
Sandwich.....	12	3	9	4	■	19	13	23	0	92	■	■	■	■	■	■	■	■	■	
Tiskilwa.....	2	13	6	5	2	25	3	37	0	93	■	■	■	■	■	■	■	■	■	
West Salem.....	7	7	0	6	7	9	12	24	21	93	■	0	■	0	0	14	8	■	22	
West Urbana.....	11	5	5	9	1	20	11	31	0	93	■	■	■	■	■	■	■	■	■	
Wheaton.....	4	7	3	4	6	22	13	31	2	92	1	0	1	■	■	3	1	3	9	
Willow Creek.....	10	5	5	10	10	15	19	18	0	92	■	■	■	■	■	■	■	■	■	
Winnebago.....	13	5	3	8	13	14	20	17	0	93	0	0	0	1	1	4	4	5	15	
MISSOURI—																				
Bethany.....	18	9	2	8	8	12	7	28	1	93	■	■	■	■	■	■	■	■	■	
Bolivar.....	12	5	4	7	13	28	2	16	3	90	■	■	■	■	■	■	■	■	■	
Boonville.....	3	1	7	20	■	24	7	31	0	93	■	■	■	■	■	■	■	■	■	
Cassville.....	36	0	1	1	33	2	4	11	5	93	0	0	1	0	0	10	4	1	16	
Dundee.....	19	5	4	18	6	7	19	15	0	93	■	■	■	■	■	■	■	■	■	
Greenfield.....	5	22	9	15	8	23	6	5	0	93	■	■	■	■	■	■	■	■	■	
Greenville.....	51	0	■	■	15	21	0	■	0	93	■	■	■	■	■	■	■	■	■	
Harrisonville.....	30	5	8	9	6	6	5	24	■	93	■	■	■	■	■	■	■	■	■	
Hermann.....	8	7	13	5	5	7	25	23	0	93	■	■	■	■	■	■	■	■	■	
Kirkville.....	9	15	2	8	4	16	4	35	0	93	■	■	■	■	■	■	■	■	■	
Lexington.....	7	7	10	8	1	9	16	35	0	93	■	■	■	■	■	■	■	■	■	
Paris.....	16	12	0	13	4	15	4	24	5	93	■	■	■	■	1	0	■	0	1	
Rhineland.....	10	6	4	12	3	5	7	44	1	92	■	■	■	■	■	1	0	■	1	
Richmond.....	47	3	3	7	8	5	0	14	2	89	■	■	■	■	■	■	■	■	■	
St. Louis.....	8	8	10	30	5	9	14	52	■	142	2	■	1	2	0	11	8	13	37	
St. Louis, [Engelmann].....	6	4	6	21	6	6	29	15	■	93	■	■	■	■	■	■	■	■	■	
Stockton.....	20	3	2	7	11	6	10	17	17	93	■	■	■	■	5	4	7	4	25	
Warrenton.....	4	14	■	4	1	13	19	28	■	93	■	■	■	■	■	■	■	■	■	
Wet au Glaize.....	1	3	3	■	5	12	34	35	■	93	■	■	■	■	■	■	■	■	■	
WISCONSIN—																				
Appleton.....	20	18	1	■	1	42	1	10	0	93	0	0	■	0	0	■	0	0	■	
Bay City.....	3	7	3	■	16	35	4	22	■	90	2	2	1	0	4	6	1	8	24	
Beloit.....	26	0	1	5	21	14	12	14	■	93	■	■	■	■	■	■	■	■	■	
Burlington.....	12	0	3	8	9	14	20	27	■	93	■	■	■	■	■	■	■	■	■	
Delafield.....	3	6	5	2	9	18	22	21	3	89	3	■	1	2	6	1	3	5	21	
Green Bay.....	17	0	7	3	1	6	10	16	18	78	4	1	4	0	0	0	1	0	10	
Kenosha.....	8	3	6	7	10	12	36	9	■	91	■	■	■	■	■	■	■	■	■	
Lake Mills.....	28	7	0	0	16	20	17	5	0	93	■	■	■	■	■	■	■	■	■	
Manitowoc.....	7	3	3	4	1	20	12	43	0	93	1	0	0	0	3	8	7	8	25	
Milwaukee, [Larkin].....	3	6	4	3	1	8	10	11	16	62	■	2	1	2	1	6	8	4	24	
Milwaukee, [Winkler].....	1	11	2	4	2	14	16	43	0	■	■	■	■	■	■	■	■	■	■	
Pardeeville.....	■	12	1	6	13	13	18	19	0	88	■	■	■	■	■	■	■	■	■	
Platteville.....	11	1	3	12	12	7	27	17	0	90	■	0	■	12	7	■	13	11	58	
Rocky Run.....	3	12	0	6	0	31	9	32	0	93	1	6	0	3	2	6	3	12	33	
Superior, [Mann].....	1	8	0	4	2	37	15	23	2	92	8	5	1	■	0	3	3	16	36	
Superior City, [Stuntz].....	2	0	6	11	14	24	55	12	0	124	■	■	■	■	■	■	■	■	■	
Wausau.....	37	4	2	5	10	5	9	21	0	93	20	2	3	0	8	■	4	2	42	
IOWA—																				
Bellevue.....	12	5	11	■	10	11	17	24	0	92	■	■	■	■	■	■	■	■	■	
Burlington.....	0	11	1	10	1	13	1	42	0	79	1	1	0	1	0	1	12	16	32	
Davenport.....	4	4	6	6	4	9	41	7	12	93	■	■	■	■	■	■	■	■	■	
Dubuque.....	10	4	3	10	4	5	11	36	10	93	1	1	1	6	0	2	■	15	32	
Fairfield.....	0	2	■	8	0	9	0	36	30	85	■	■	■	■	■	■	■	■	■	
Fayette Village.....	1	■	2	17	■	10	17	33	0	89	0	0	0	5	2	■	6	3	16	
Fort Madison.....	1	13	0	6	0	21	2	50	0	93	2	0	1	5	2	4	13	18	45	
Franklin.....	10	4	6	■	15	4	6	36	6	■	■	■	■	■	■	■	■	■	■	
Lyons City.....	14	5	2	0	20	1	27	12	12	93	■	■	■	■	■	■	■	■	■	
Muscataine.....	4	10	5	3	10	13	30	18	0	93	1	2	0	0	1	3	2	■	11	
Pleasant Plain.....	2	15	1	7	9	15	3	41	0	93	0	0	0	1	0	11	■	5	26	
Rossville.....	8	1	8	4	12	6	18	30	6	93	■	■	■	■	■	■	■	■	■	
Waterloo.....	3	3	0	17	7	10	25	28	0	93	■	■	■	■	■	■	■	■	■	



## No. 49.—WINDS—NUMBER OF OBSERVATIONS, DECEMBER, 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
MINNESOTA—																			
Beaver Bay .....	17	1	2	2	3	6	12	19	29	91									
Beaver Bay. [Clark] .....	14	2	1	3	8	13	20	15	17	93	4	1	0	0	4	9	2	3	23
Burlington .....	3	2	7	7	5	6	17	43	3	93	6	0	14	1	1	0	8	28	58
Chatfield .....	5	0	3	5	13	2	15	32	18	93	2	0	0	0	2	5	14	8	31
Forest City .....	8	0	0	8	5	8	18	12	34	93									
Hazlewood .....	6	1	3	2	18	3	10	50	0	93	1	0	2	0	1	0	0	7	11
Princeton .....	28	1	8	3	9	7	15	11	11	93	17	0	10	1	7	1	6	3	45
DACOTA TERRITORY—																			
Greenwood .....	6	5	0	8	4	0	0	59	11	93									
NEBRASKA—																			
Bellevue .....	44	5	0	1	13	9	14	7	0	93	12	3	0	0	3	6	2	4	30
Deer Creek .....	0	1	5	0	0	29	46	0	12	93									
Elkhorn .....	5	10	3	7	7	14	6	41	0	93									
Kanosh .....	0	3	2	13	0	1	4	70	0	93									
Nebraska City .....	21	4	1	0	9	6	12	18	22	93									
Omaha .....	11	8	0	3	9	14	8	37	3	93									
KANSAS—																			
Burlingame .....	38	5	5	1	17	0	4	0	23	93									
Celestville .....	5	11	1	9	8	22	0	35	0	93									
Fort Riley .....	9	9	4	16	1	30	1	23	0	93									
Leavenworth City .....	17	10	0	6	1	34	0	21	4	93	7	10	0	22	0	5	0	9	53
Lecompton .....	2	0	0	6	0	17	0	67	0	92									
Manhattan .....	7	10	4	3	3	15	5	29	17	93	2	1	1	1	0	7	2	17	31
Manhattan .....	25	13	7	7	5	18	1	14	0	90									
Neosho Falls .....	7	10	2	7	4	5	2	31	25	93									
Wyandott City .....	11	11	9	14	1	18	9	20	0	93									
CALIFORNIA—																			
Auburn .....	0	4	38	16	9	4	4	0	18	93									
Crescent City .....	23	4	0	1	20	2	0	14	29	93									
Monterey .....	6	1	0	0	6	8	16	9	46	92	4	0	1	0	4	6	5	5	25
Moquelumne Hill .....	0	6	11	22	2	37	5	10	0	93									
Sacramento .....	44	15	6	21	3	0	1	3	0	93	0	0	0	8	0	3	3	1	15
San Francisco .....	41	3	0	0	8	3	1	0	37	93	19	7	3	1	4	9	5	6	54
Santa Clara, [Frambes] ..	3	5	0	25	5	21	7	23	4	93									
Union Rancho .....	1	3	0	1	27	2	9	31	19	93	0	0	0	1	23	5	12	16	57
MEXICO—																			
Cordova .....	1	17	1	3	0	3	2	4	0	31									
Mirador .....	4	20	6	22	8	16	8	0	0	93	14	10	1	13	17	7	3	7	72
WEST INDIES—																			
St. George's, Bermuda ..	13	25	16	7	11	21	9	22	0	124									
Turk's Island .....	6	3	0	2	0	0	0	0	11	31									
CENTRAL AMERICA—																			
Guatemala .....	5	79	2	2	0	11	3	2	20	124									
SOUTH AMERICA—																			
Cathar's Sophia, Surinam.	2	46	9	27	8	1	0	0	0	93	0	20	34	35	0	0	0	0	89

## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1859.\*

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>BRITISH AMERICA—</b>													
Halifax (a).....				2.042									
Halifax (b).....				1.869									
Montreal.....	3.083	2.380	1.690				2.910	2.440	5.290	1.444	6.570	4.920	
Red River Settlement.....						8.750	5.501		6.000				
St. John's.....	3.810	2.960	6.000	4.610	2.080	5.170	6.118	6.460	12.130	3.050	7.770	65.988	
St. Martin.....	1.704	2.867	3.328	4.819	3.856	6.779	2.428	6.666	11.310	1.859	9.719	3.867	60.212
Tacanto.....	3.069	1.287	4.154	2.647	3.440	4.685	2.611	3.990	3.525	0.940	5.253	4.775	39.763
Windsor.....					2.220	2.490							
Wolville.....	5.722	3.670	13.990	8.820	4.350	6.130		6.680	9.620		5.000	6.640	
<b>MAINE—</b>													
Belfast.....									4.320	2.270			
Cornish (c).....	4.100		9.962	3.925	2.375	6.635	2.060	3.187	3.812	2.050			
Cornishville.....	5.570	3.890	9.300	3.320	2.460	7.490	1.530	2.210	3.130	1.520	4.270	5.690	50.150
Dexter (c).....	4.825	1.875	8.425	1.750	2.751	7.090		2.375	3.375	0.925	3.512	4.200	
Gardner.....	1.412	2.136	10.062	2.508	3.002	6.350	1.969	2.790	2.477	1.080	4.748	6.542	48.102
Lisbon.....				2.509	5.150	20.100	1.900	3.690	5.103	1.990	2.430	5.390	
Perry.....	2.526	2.290	12.290	3.540	4.620	7.900	1.149	0.950	3.760	1.980	7.020	5.120	61.780
Portland.....	4.630	2.767	8.032	2.253	3.430	5.950		2.242	4.445	2.260	4.563	6.119	
Stouba.....	4.915	6.410	9.970	3.360	4.700	7.331	2.700		5.610	3.510	2.450	7.260	
<b>NEW HAMPSHIRE—</b>													
Chatham.....									4.110	1.960	1.895	4.345	
Lancaster.....	5.940	3.020	7.160	3.220	2.296	5.620	2.750	1.710	4.330	2.110	3.870	4.740	
Lake Umbagog.....	5.010	2.480	7.740	3.030	2.320	4.580	3.119	2.960	3.920	1.920	3.770	4.540	44.820
Mount Washington.....						3.266	5.152	7.675					
Shelburne.....	2.500												
Stratford.....	1.210	1.250	4.630	1.930	1.870	6.180	2.599	1.900	4.200	1.160	3.620	4.330	
<b>VERMONT—</b>													
Brandon.....	2.815	1.390	3.950	2.200	1.860	4.120	1.315	2.845	4.615	1.390	2.290	2.650	
Burlington.....													
Colchester.....	2.450	1.760	4.490	1.910	1.770	4.450	1.840	2.520	4.310	2.000	3.810	3.200	
Concord (c).....									1.925		2.556		
St. Johnsbury.....		1.520		2.120	1.900	3.330		1.783	3.592		3.980	3.530	
<b>MASSACHUSETTS—</b>													
Amherst.....	4.887	3.540	6.292	2.962	4.075	6.157	2.607	6.652	4.466	1.853	2.960	4.847	51.279
Barnstable.....	7.030		6.694	2.226		6.644				2.801	2.149	4.540	
Cambridge.....	8.227	6.479	7.961		2.282	12.465	1.530	5.391	5.360	3.822	3.682	4.983	
Lynn.....	6.020	3.354	3.427	3.160	3.270	4.590	1.430	3.680	3.660	2.110	3.210	7.610	47.591
Malden.....				1.440	4.300	6.650	1.700	5.000	4.300	0.550			
Nantucket.....	7.965	4.299	4.627	3.406	4.145	5.679	2.773	3.442	3.299	3.163	1.365	4.692	48.281
New Bedford (a).....	7.785	3.940	5.890	3.060	4.565	5.470	0.850	3.550	3.240	1.840	1.870	3.860	45.710
New Bedford (c).....	8.121	4.460	6.550	3.510	4.940	6.090	0.995	4.120	3.600	2.090	2.240	4.340	51.025
New Bedford (f).....	7.615	4.070	6.480	3.450	5.550	5.970	0.995	4.090	3.635	2.120	2.130	4.340	49.915
Richmond (a).....	11.500	4.412	4.737	8.125	10.983		1.708	6.750			5.750		
Springfield.....						6.380	2.280	4.670					
Westfield.....	5.210	3.950	6.740	3.710	4.640	6.170	2.430	4.890	4.990	1.850	3.710	6.000	54.290
Weymouth.....	5.060												
Williamstown.....	7.330	1.745	4.620	3.875			3.457	2.591	3.785	1.306	3.045	5.049	
Worcester.....	4.950	3.670	7.710	3.050	3.650	5.170	1.230	5.450	4.002	2.160	3.000	4.550	48.572
<b>RHODE ISLAND—</b>													
Providence.....	5.750	1.850	8.000	2.280	3.400	7.060	1.140	3.690	3.650	2.620	2.270	3.450	45.160
<b>CONNECTICUT—</b>													
Middletown.....	7.180	4.200	7.520	3.060	4.180	6.090	2.170	6.570	3.900	2.130	2.450	3.680	53.339
Pomfret.....	6.490	2.510	8.825	2.530	3.300	8.592	2.010	7.750	2.900	2.430	3.170	3.165	53.730
Stamford.....	9.490	4.230	8.430	3.360	3.600	8.310	1.180	7.300	4.020	2.970	2.330	2.800	58.160
Wallingford.....	6.940	4.240	8.450	3.760	4.730	6.250	2.580	6.120	5.630	1.910	2.490	4.010	57.110
<b>NEW YORK—</b>													
Bellport.....	4.250	5.450	7.750	3.740	4.960	4.940	3.040	4.280	5.420	2.320	2.740	2.980	51.940
Beverly.....	4.885	2.830	7.770	4.100	3.490	4.671	3.280	4.551	5.830	1.630	3.590	3.070	49.727
Buffalo.....	2.080	1.278	4.547	4.577	2.091	2.510	1.515	4.252	2.204	2.067	2.941	5.480	35.728
Cazenovia.....	2.460	1.400	3.620	4.700	2.080	4.360	4.070	4.580	2.140	3.680	4.000	41.620	
Charlotte.....							2.200	4.300	2.660				
Charlotte.....										1.010	2.070	1.350	
Canton.....	2.705	1.429	3.280	5.850									
Danville.....								2.040	4.940	2.150	1.290	3.690	
Fishkill Landing.....	4.230	2.840	3.870	3.390	4.190	4.480	1.470	2.900	6.710	1.210	3.440	3.130	41.840
Hatfield.....	6.460	4.510	6.930	5.350	2.420	5.700	5.215	5.932	6.290	1.870	3.990	3.740	58.917
Fordham.....										1.410	2.290		
Fort Edward.....	4.310	1.530	4.800	3.790	1.830								
Fort Niagara.....							1.280	2.660	2.000				
Fort Niagara.....										1.670	3.110	4.540	
Honseville.....	2.170	1.760	6.530										
Madrid.....								3.551	2.956	1.131			
New York city.....	5.740	5.510	8.310	5.100	1.570	4.600	4.760	4.120	6.450	1.750	3.370	4.420	55.600
Ogdensburg.....	3.690	1.390	5.390	4.290	1.303	2.310	2.140	3.840	3.705	1.030	5.160		
Oswego.....			7.670	7.400	4.900	3.150	5.450	3.210	3.830	2.310	3.650	6.410	
Penn Yan.....	0.670	0.910	2.230	4.000	1.250	3.060	2.910	3.650	3.390	1.580	1.370	3.190	29.150
Rochester, [Dewey].....	1.370	1.970	2.490	4.000	2.710	1.170	4.158	5.140	2.882	1.210	1.998	4.462	32.600
Rochester, [Mathews].....									2.540	1.280	2.430	3.740	
Sackett's Harbor.....										1.040	4.720	5.180	
Sackett's Harbor.....							1.620	3.250	2.840				
Saratoga.....	1.500					2.500	2.900		3.600				
Schenectady, [Julien].....						2.790							

\* In cases where the observer recorded only the depth of snow as it fell, without melting, it is estimated in this table as equal to one-tenth of that depth in water; and whenever, from this cause or any other, there is reason to doubt the accuracy of the record, it is indicated by affixing a mark of interrogation.

a On the ground.

b Thirty feet above the ground.

c Without rain gauge.

d Old tin gauge.

e Smithsonian gauge.

f New brass gauge.

g Estimated without rain gauge.



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1859.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>NEW YORK—Continued.</b>													
Spencertown.....	3.169	2.209	2.288	.....	1.725	7.364	1.903	3.136	2.929	0.281	2.638	.....	.....
Wampsville.....	7.175	.....	.....	10.420	5.570	5.100	8.920	5.830	8.650	3.390	.....	4.670	.....
Waterford.....	3.220	2.010	3.140	3.810	1.580	4.240	2.410	2.660	4.270	0.762	3.110	3.780	34.992
Wilson.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.900	1.660	.....
<b>NEW JERSEY—</b>													
Lambertville.....	4.889	3.167	5.916	4.702	1.281	3.014	4.040	3.010	7.703	2.770	3.695	3.467	47.634
Newark.....	6.055	3.800	6.885	5.305	2.250	3.945	4.025	6.265	6.985	2.550	3.785	5.200	57.050
<b>PENNSYLVANIA—</b>													
Altoona.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.587	3.625	9.725	.....
Bedford.....	.....	.....	.....	5.573	1.890	2.210	1.660	1.871	6.800	0.950	1.200	2.660	.....
Berwick.....	.....	.....	.....	.....	1.580	3.040	3.330	3.330	6.660	1.170	2.150	3.290	.....
Cannonsburg.....	1.350	3.416	3.965	6.834	3.350	3.380	3.215	5.403	3.660	1.160	1.260	3.276	40.269
Carlisle.....	2.297	2.469	5.494	5.668	1.373	2.946	2.474	2.792	9.497	.....	.....	.....	42.422
Chambersburg.....	.....	.....	.....	.....	2.580	3.203	2.226	2.422	10.070	0.820	1.370	5.210	.....
Chromedale.....	6.740	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Easton.....	3.760	3.350	6.890	4.980	2.150	4.100	4.090	5.010	6.930	2.230	3.610	4.560	51.660
Fleming.....	3.000	2.805	4.480	5.200	3.229	3.920	1.601	3.112	4.855	1.436	2.425	3.685	39.748
Gettysburg.....	3.494	3.910	5.595	5.751	3.759	3.725	1.755	2.733	6.342	0.626	1.195	3.526	42.422
Harrisburg, [Heisely].....	.....	.....	5.761	5.534	1.398	4.296	3.348	5.046	8.965	0.794	.....	2.748	.....
Harrisburg, [Hickok].....	3.690	2.840	9.200	6.380	1.820	5.950	3.930	6.520	.....	1.160	1.490	4.040	.....
Lewisburg.....	2.603	2.730	5.670	5.730	2.195	4.340	2.320	4.460	4.970	1.030	2.120	3.940	41.505
Linden.....	.....	2.908	4.415	4.429	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morrisville (a).....	2.455	2.345	2.610	2.500	2.100	2.900	2.500	2.400	8.800	3.100	2.300	2.350	51.650
Mount Joy.....	4.790	1.910	.....	4.660	2.500	1.870	2.900	3.503	11.150	0.860	.....	2.020	.....
Murrysville.....	1.380	3.540	4.180	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nazareth.....	.....	.....	.....	.....	.....	.....	.....	.....	6.810	1.850	3.100	.....	.....
Norristown.....	4.800	3.040	6.140	5.080	1.340	3.800	2.210	2.970	7.740	2.630	3.590	3.620	46.950
Philadelphia.....	5.230	3.569	6.503	5.668	1.946	5.229	3.915	4.447	7.779	3.210	3.796	3.460	54.752
Pittsburg, [Marine Hospital].....	1.009	3.099	3.475	5.681	2.102	3.152	2.334	5.238	2.915	1.271	1.883	4.531	36.680
Pocopson.....	5.090	2.940	5.640	5.230	1.580	4.430	3.200	3.930	8.620	2.640	4.090	3.270	50.660
Shamokin.....	3.061	2.778	5.187	3.616	2.498	3.023	3.022	5.898	5.853	1.607	2.459	3.025	41.957
Somerset.....	1.655	4.387	3.108	5.559	1.656	3.864	1.761	3.713	4.678	1.155	1.258	3.902	36.676
West Haverford.....	5.000	3.280	7.830	4.910	1.020	4.870	4.060	4.733	8.530	3.050	3.960	3.640	51.886
Westtown.....	4.485	2.953	6.502	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worthington (b).....	.....	.....	.....	.....	.....	.....	2.750	2.400	5.875	2.875	1.750	.....	.....
<b>DELAWARE—</b>													
Georgetown.....	4.840	4.380	7.050	3.930	3.400	7.380	2.760	5.480	4.790	3.330	3.470	3.610	54.420
<b>MARYLAND—</b>													
Annapolis.....	5.160	3.790	5.720	6.120	4.060	5.760	1.150	3.630	7.400	3.070	2.100	3.490	51.450
Baltimore.....	4.500	3.120	4.620	4.050	1.300	1.930	6.200	3.761	.....	.....	.....	.....	.....
Bladensburg.....	4.650	2.910	5.520	4.610	3.370	5.240	1.160	1.665	5.750	2.950	1.550	.....	.....
Chesertown.....	.....	.....	5.990	.....	.....	3.120	2.200	.....	.....	3.130	.....	.....	.....
Frederick.....	5.115	4.752	5.014	5.220	4.074	2.205	1.954	1.296	11.406	1.393	1.516	3.782	47.727
Lettersburg.....	3.140	3.420	3.550	5.002	1.981	2.980	0.680	1.892	8.520	1.070	1.061	4.020	37.316
Sykesville (b).....	2.540	2.945	2.700	5.683	6.133	3.600	4.050	2.400	9.000	2.500	2.000	3.450	56.261
<b>DISTRICT OF COLUMBIA—</b>													
Washington.....	4.540	3.540	3.800	4.690	3.920	5.020	1.640	3.170	5.820	2.510	1.890	2.620	46.760
<b>VIRGINIA—</b>													
Crack Whip.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.610	.....
Crichton's Store.....	2.562	2.374	5.170	5.254	2.002	1.620	0.376	2.200	1.753	1.650	1.110	4.650	39.721
Cross Creek.....	.....	3.100	2.970	4.620	2.370	4.650	3.500	5.610	3.740	1.780	2.090	5.850	.....
Falmouth.....	.....	.....	.....	3.580	2.431	12.721	1.063	3.260	9.202	2.010	2.511	4.370	.....
Hartwood.....	5.370	3.730	4.230	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kanawha.....	.....	7.078	2.526	5.675	0.815	3.451	1.106	.....	.....	.....	.....	.....	.....
Lewinsville.....	3.460	2.450	4.071	4.750	2.530	5.350	1.280	2.200	5.890	2.460	.....	.....	.....
Lewisburg (d).....	1.570	3.580	3.270	4.270	1.240	3.470	1.540	2.320	4.720	1.130	1.320	2.920	31.980
Meadow Dale.....	2.250	3.131	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montross.....	.....	.....	5.230	3.780	6.000	3.341	5.760	4.060	0.560	.....	.....	.....	.....
Mont View (b).....	.....	.....	10.000	1.750	12.100	3.800	3.900	10.200	0.510	.....	1.860	3.760	.....
Point Pleasant (b).....	2.875	.....	1.009	8.175	3.700	5.687	.....	.....	.....	.....	.....	.....	.....
Poplar Grove (b).....	.....	.....	4.500	8.250	1.250	8.646	3.062	9.125	7.833	3.125	1.725	8.437	.....
Portsmouth.....	3.710	5.612	4.140	4.990	4.450	6.360	5.020	4.490	3.530	2.360	2.600	5.320	52.582
Rose Hill.....	3.310	6.210	2.820	4.800	3.520	3.900	3.470	3.400	4.450	1.420	1.970	1.900	41.150
Rougemont.....	6.080	2.885	5.070	5.140	2.550	9.100	2.400	3.820	11.900	1.590	1.580	3.650	55.795
Ruthven.....	.....	4.140	5.560	3.840	3.820	.....	.....	.....	.....	.....	.....	.....	.....
Smithfield.....	4.158	4.555	5.373	3.595	4.442	6.447	4.530	7.028	4.107	1.327	3.231	3.756	52.549
Westwood (b).....	.....	.....	.....	.....	2.250	2.625	5.750	4.875	3.250	1.500	.....	.....	.....
Wheeling.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.710	2.130	.....
Winchester.....	2.340	2.750	3.590	5.600	1.700	2.750	1.500	3.700	12.200	1.050	1.780	4.040	43.000
<b>NORTH CAROLINA—</b>													
Chapel Hill.....	3.126	3.353	6.281	3.435	3.659	0.692	3.946	5.686	4.069	2.239	2.704	2.981	42.171
Davidson College.....	5.280	4.220	.....	4.160	4.560	2.060	1.910	.....	.....	1.950	1.930	4.670	.....
Greene Plains.....	3.460	4.310	5.860	4.550	4.440	3.310	3.220	8.790	3.870	0.670	2.520	4.660	49.690
Murfreesborough.....	3.950	3.870	4.150	5.170	2.150	4.040	3.790	5.450	4.700	0.550	2.900	2.860	43.580
<b>SOUTH CAROLINA—</b>													
Aiken.....	2.705	4.140	4.261	4.005	4.070	3.745	4.265	7.603	2.055	0.950	2.485	4.335	44.616
All Saints.....	4.240	2.860	7.470	1.010	1.500	3.780	4.970	6.660	6.170	0.390	3.060	2.200	44.410
Charleston.....	4.212	3.850	5.312	2.050	0.437	7.238	4.175	15.150	1.850	0.600	.....	2.850	.....
Columbia, [Barton].....	3.035	5.090	2.955	.....	4.268	2.670	4.115	.....	.....	.....	.....	.....	.....
Columbia, [White].....	2.230	4.320	1.870	3.220	3.490	.....	4.010	7.950	2.300	.....	.....	.....	.....
St. John's.....	3.570	3.270	5.160	2.130	1.330	5.310	3.840	10.550	2.270	0.441	2.230	3.530	43.731
<b>GEORGIA—</b>													
Athens.....	4.009	5.171	8.473	5.990	4.269	2.611	1.441	9.412	5.244	.....	.....	.....	.....
Atlanta.....	3.840	4.500	6.000	5.470	4.870	3.490	5.610	6.700	7.240	1.630	3.870	11.250	64.540
Augusta.....	2.700	.....	5.490	2.710	2.320	3.520	4.290	8.330	6.430	0.640	2.130	5.150	.....

a Fractions less than one-tenth of an inch not recorded.

b Estimated without rain gauge.

c Probably a portion of this fell in the latter part of June.

d It is probable that the amounts of rain at this place should be increased about 6½ per cent., on account of an imperfection in the gauge.



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1859.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>GEORGIA—Continued.</b>													
Savannah.....	3.131	2.764	4 2 9	1 237	2.672	4.119	6.616	17.146	7.444	0.159	.....	.....	.....
Sparta.....	.....	5.330	5.470	3.190	3.760	2.390	6.940	13.270	4.240	1.760	2.350	8.690	.....
Thomaston.....	3.620	3.480	6.500	2.140	1.270	3.350	7.690	4.640	3.350	1.510	1.560	4.700	43.810
Thomson.....	2.062	2.643	4.784	2.540	2.882	.....	.....	.....	.....	.....	.....	.....	.....
Whitmarsh Island.....	2.840	1.570	4.890	1.920	2.760	5.690	4.920	11.390	6.360	0.150	3.770	0.690	45.650
<b>FLORIDA—</b>													
Alligator (a).....	2.600	2.400	2.200	2.600	2.600	2.800	11.300	14.050	2.800	2.090	2.940	2.780	75.550
Atsena (b).....	2.5250	6.150	0.800	.....	.....	2.400	10.600	13.130	2.600	2.150	1.140	1.100	.....
Gamesville.....	1.720	2.400	7.450	1.980	1.810	2.890	8.710	11.590	1.630	1.450	1.890	2.240	.....
Jacksonville.....	1.975	2.301	5.450	2.150	1.450	1.950	6.750	12.150	5.050	2.500	3.330	1.890	46.876
Micanopy.....	1.300	4.340	7.500	0.930	0.810	4.140	5.442	10.381	4.381	2.550	1.970	1.770	45.467
St. Augustine.....	1.550	3.100	8.850	0.600	2.450	6.550	4.738	8.400	4.105	4.000	2.185	1.000	47.528
Salt Ponds.....	2.340	0.730	0.130	0.160	1.460	2.770	2.850	3.720	3.020	6.560	4.450	0.690	28.890
Warrington.....	.....	.....	.....	.....	.....	.....	.....	.....	5.800	0.200	1.690	5.990	.....
<b>ALABAMA—</b>													
Carlisle.....	4.740	4.830	6.270	5.690	1.400	.....	2.900	8.520	11.450	1.690	1.700	.....	.....
Greene Springs.....	4.170	7.870	8.000	3.180	2.280	3.150	6.161	6.340	5.450	1.250	2.660	.....	.....
Greensborough.....	4.423	6.515	7.295	6.480	1.790	2.866	7.184	4.398	7.280	1.860	2.190	7.110	59.371
Montgomery.....	4.724	4.530	11.801	3.840	2.080	6.460	.....	.....	.....	.....	.....	.....	.....
Mountain.....	.....	.....	8.692	5.830	2.735	.....	.....	.....	.....	.....	.....	.....	.....
Orville.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.823	2.862	5.462	.....
Selma.....	5.229	5.434	10.969	6.293	0.759	4.192	2.032	5.284	7.310	.....	.....	.....	.....
<b>MISSISSIPPI—</b>													
Columbus.....	3.065	7.394	10.033	5.420	1.747	4.281	4.020	3.873	3.805	1.718	4.055	10.715	69.117
Herrando.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.890	3.170	5.170	.....
Natchez.....	5.900	5.000	4.763	2.260	0.660	4.470	4.310	4.630	3.940	2.110	1.590	8.260	47.890
Paulding.....	2.635	.....	.....	5.938	2.550	3.795	3.575	3.049	2.001	.....	.....	.....	.....
<b>LOUISIANA—</b>													
Black River.....	4.270	5.460	4.740	2.180	1.940	.....	.....	.....	.....	.....	.....	.....	.....
<b>TEXAS—</b>													
Austin, [Palm].....	.....	0.680	1.700	0.420	2.460	2.350	0.890	0.820	9.090	4.540	0.960	0.980	.....
Austin, [Van Nostrand].....	2.130	1.080	1.750	0.580	2.450	1.940	1.730	1.390	10.410	4.450	0.540	1.810	30.240
Bonham.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.920	0.680	2.090	.....
Cross Roads.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.450	3.400	.....
Huntsville.....	2.200	0.540	2.350	0.820	1.220	4.180	2.160	0.720	4.430	1.670	0.540	2.870	23.930
Larissa.....	2.751	.....	.....	.....	.....	1.751	.....	.....	1.310	.....	6.130	6.440	.....
New Braunfels.....	1.388	0.619	1.599	.....	2.487	0.639	2.664	1.300	7.350	3.200	0.000	0.490	.....
Round Top.....	5.250	0.620	1.240	1.240	1.310	2.550	0.850	1.170	6.940	4.440	0.070	0.490	26.180
Sisterdale.....	1.020	0.450	1.140	0.160	1.720	4.370	1.190	1.680	7.100	1.460	0.100	3.110	23.500
Union Hill.....	4.312	0.550	1.677	1.002	.....	3.876	1.725	.....	4.193	1.542	0.651	.....	.....
Washington.....	4.180	0.000	2.790	0.400	1.300	5.220	2.440	1.875	7.150	1.740	0.000	0.650	27.325
Webberville (c).....	.....	.....	.....	0.500	.....	.....	.....	.....	10.750	.....	0.003	.....	.....
<b>ARKANSAS—</b>													
Buckhorn (c).....	.....	.....	.....	.....	.....	.....	.....	3.000	7.15	3.000	1.225	.....	.....
Washington.....	3.800	2.290	5.600	4.400	2.000	5.300	7.000	1.800	3.900	2.200	3.600	5.400	47.200
<b>TENNESSEE—</b>													
Glenwood.....	2.572	8.227	4.068	5.179	2.462	3.464	0.935	4.654	2.120	1.069	5.651	5.188	45.569
Memphis.....	4.050	7.100	6.410	6.400	.....	.....	1.750	4.480	4.760	1.489	3.770	3.470	.....
University Place.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11.170	.....
<b>KENTUCKY—</b>													
Bardonia.....	3.050	8.280	4.240	6.090	2.738	2.545	1.630	6.535	3.834	2.080	3.330	.....	.....
Danville.....	2.391	8.462	3.722	5.032	1.765	3.985	3.701	.....	2.760	1.449	2.272	6.893	.....
Lexington.....	.....	.....	.....	.....	.....	.....	.....	5.616	3.782	0.957	2.796	.....	.....
Louisville.....	3.015	6.677	3.428	6.331	1.555	.....	.....	.....	.....	.....	.....	.....	.....
Millersburg.....	.....	.....	.....	.....	1.440	3.500	.....	.....	.....	.....	.....	.....	.....
Paris.....	8.150	7.283	3.824	4.666	1.419	4.357	1.890	7.040	3.495	1.121	2.246	5.000	46.201
Springdale.....	3.610	7.000	4.600	7.520	1.370	1.990	2.130	6.530	2.170	2.260	4.400	7.530	51.140
<b>OHIO—</b>													
Avon.....	2.275	3.990	3.975	4.280	3.235	4.320	2.100	1.740	4.190	2.199	6.360	3.527	42.001
Bellefontaine.....	1.900	2.610	2.940	5.540	1.760	5.020	0.731	2.250	2.890	1.040	5.460	3.090	35.331
Bowling Green.....	2.321	1.987	4.135	4.002	2.304	4.641	0.141	3.519	3.105	1.985	2.450	4.463	35.052
Brecksville (c).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.810	5.100	2.600	.....
Cincinnati, [Harper].....	.....	5.920	4.280	7.528	2.323	3.26	1.237	2.689	2.696	1.275	4.450	3.745	.....
Cincinnati, [Philips].....	2.941	6.424	4.897	7.625	2.225	3.060	2.660	4.000	2.370	1.400	5.510	5.290	48.462
Cleveland.....	2.380	2.350	4.840	4.590	2.975	3.150	1.091	3.003	3.450	2.850	3.790	4.430	28.795
College Hill.....	.....	.....	3.480	8.690	2.400	2.870	1.109	5.820	3.360	3.360	7.500	5.270	.....
Elk Run.....	.....	.....	.....	.....	.....	.....	.....	4.240	3.040	2.040	3.160	3.650	.....
Freedom.....	.....	.....	.....	.....	2.675	10.375	4.770	2.140	3.120	1.670	5.630	2.320	.....
Hillsborough.....	2.537	5.615	3.415	8.032	1.689	4.384	2.493	6.421	4.535	1.857	5.324	5.638	51.931
Hiram.....	2.455	2.420	3.953	4.250	.....	4.30	1.580	.....	.....	.....	.....	.....	.....
Hudson.....	2.940	2.700	4.130	3.009	2.710	4.480	1.025	3.705	2.335	3.050	6.550	4.740	41.375
Iberia (c).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.375	2.475	.....	.....
Jackson, (Monroe county).....	1.920	6.390	3.750	6.830	1.500	5.500	1.109	6.200	4.900	2.390	1.300	5.000	46.670
Kelley's Island.....	.....	.....	.....	.....	.....	.....	0.790	2.040	2.870	1.330	2.470	1.950	.....
Lancaster, [Davis].....	2.431	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madison, [King] (c).....	2.311	3.462	6.500	5.979	3.895	2.250	2.750	2.475	2.625	4.040	5.240	3.250	51.147
Montville.....	1.720	2.180	1.790	2.890	1.542	2.252	1.097	4.829	2.733	2.012	4.531	3.267	20.767
New Lisbon.....	1.490	4.020	3.330	4.580	1.370	3.110	2.850	3.380	4.620	3.130	3.960	4.390	49.160
North Bend.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.993	4.523	.....
Northwood.....	2.150	.....	4.280	4.880	2.800	4.600	2.550	2.580	1.780	.....	3.700	5.040	.....
Portsmouth.....	2.230	7.200	3.690	8.340	1.430	4.210	1.220	6.700	1.290	2.320	2.690	6.150	45.370
Ripley.....	2.631	6.691	.....	.....	.....	.....	.....	.....	.....	1.121	2.627	5.317	.....
Savannah.....	3.290	4.335	5.261	6.778	2.205	5.985	1.290	4.345	5.516	2.530	5.456	3.574	50.565
Troy.....	2.200	5.190	7.050	7.325	4.100	4.230	0.820	3.480	2.800	1.690	4.441	3.280	46.606
Urbana.....	2.300	3.050	4.160	4.250	1.610	4.180	0.800	2.200	3.350	1.260	4.690	4.600	36.510
Wetfield.....	3.500	4.276	6.774	4.532	3.694	4.643	2.273	4.599	3.788	4.551	6.992	6.626	56.154
Westerville.....	2.653	3.540	4.167	4.880	1.610	5.241	0.278	5.527	5.425	1.259	5.850	4.771	45.191

a Fractions less than one-tenth of an inch not recorded.

b Recorded in inches and twentieths.

c Estimated without rain gauge.



## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1859.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>MICHIGAN—</b>													
Battle Creek .....	2.700	1.030	2.4650	3.250	1.550	5.080	0.830	1.500	3.150	3.040	3.930	1.150	31.860
Detroit .....	1.970	1.660	2.980	2.240	1.680	2.200	2.170	3.160	2.315	2.340	4.300	1.830	23.915
Fort Gratiot .....						1.610	2.859	2.783					
Grand Haven .....										3.380	2.360	2.960	
Grand Rapids .....	2.250		7.580	4.770	3.510	4.340	0.700	0.860	3.870	3.740	6.420	1.600	
Lake George .....							3.680		2.942				
Marquette .....	2.1784	2.2920	3.510	3.666	6.670	3.770	3.250	3.620	3.640	3.760	3.740	2.228	42.550
Monroe, [Bowlsby] (a) .....							0.970	4.600		2.375	4.612		
Monroe Piers .....							0.680	4.140	2.100	1.850	2.470	3.930	
New Buffalo .....	2.430	1.730	4.050	4.450	3.360	3.470	1.380	2.660	7.810	4.780	3.870	3.190	43.120
Ontonagon .....								2.720	2.030	0.925	2.930	2.495	
Ottawa Point .....	2.2570	0.260	1.700	2.100	2.250	1.250	1.220	0.370	1.910	2.080	3.020	2.340	21.070
St. Mary's .....						5.431							
Thunder Bay Island .....	5.970	2.530	4.920	3.790	1.380	2.340	3.030	0.700	3.950	2.040	4.510	2.590	37.140
Ypsilanti .....	1.910	1.690	3.600	3.470	2.560	3.180	1.090	4.200	2.570	3.240	3.830	3.580	35.420
<b>INDIANA—</b>													
Aurora (b) .....	3.437	6.875	3.467	6.300	2.375	2.542	2.145	5.500	2.108	3.375	5.637	5.125	47.799
Cannelton .....	2.050	4.460	3.350	4.930	1.200	3.550	1.790	1.850	4.010	1.160	3.470	4.560	36.390
Logansport .....	1.591		4.630	4.870	2.800	1.810		4.920	2.660	2.551	3.910		
Michigan City .....										1.640	1.300	2.570	
Mishawaka .....				3.560	2.100	13.150	1.150	6.200	9.600	5.701			
New Harmony .....	1.873	5.010	4.050	4.330	3.050	2.090	3.520	3.080	4.830	1.150	6.410	4.940	44.333
Richmond, [Moore] .....	2.480	4.287	4.800	6.805	1.795	4.920	1.700						
<b>ILLINOIS—</b>													
Augu-la .....	3.877	3.635	4.389	3.350	7.611	6.784	1.218	5.431	3.719	1.795	1.720	1.085	44.884
Aurora .....	1.824	1.220	6.000	2.900	2.690	2.880	2.020	2.520	3.050	1.530	3.080	0.750	30.471
Batavia, [Mead] .....	1.900	1.140	6.610	3.130	4.000	2.800	1.190	1.930	2.240	1.780	2.230	1.370	21.030
Brighton .....	1.970	3.540											
Edgington .....							3.080	1.040	2.010	1.010			
Elgin .....	1.600	1.012	6.145	2.890	4.862	1.487	1.510	0.918	2.840	0.665	3.770	0.900	28.789
Lebanon .....										2.820	4.310		
Manchester .....	2.031	2.475	4.151	3.619	10.760	5.495	2.700	2.810	2.870	1.220	2.920	1.300	42.361
Marion .....	1.240	2.060	6.710	2.829	2.930	2.080	1.850	0.970	2.600		4.860		
Ottawa .....	1.713	0.860	5.243	4.082	3.120	1.684	0.732	3.440	1.663	2.342	2.069	0.944	27.912
Pekin .....	2.006	1.845	5.744	2.726	3.530	1.905	0.449	3.768	2.767	1.912	2.535	1.093	20.298
Peoria .....	1.500	1.420	5.082	2.600	3.170	2.180	0.670	4.140	2.840	2.150	2.400	1.230	29.382
Riley .....	1.233	1.720	4.330	3.130	3.390	2.300	1.140	1.520	1.940	1.040	2.310	1.485	25.535
Sandwich .....			5.180	4.070	4.370		1.450	2.753	6.250	4.100	4.370	0.500	
Upper Alton .....	1.086	2.700	3.090	3.950	5.000	4.440	2.140	2.307	2.938				
Waynesville (b) .....	1.530	1.967	3.085										
West Salem .....	2.260	4.600	4.020	5.910	2.780	2.640	4.110	1.620	3.620	0.930	4.170	4.330	41.020
West Urbana .....	1.182	2.955	2.073	4.793	2.617	2.293	1.700	4.925	5.128	1.576	1.696	2.242	33.430
Wheaton .....	1.875	1.161	7.280	3.285	4.175	3.470	1.280	1.410	2.030	2.250	2.310	1.260	30.786
Winnebago .....	1.280	1.360	4.880	3.440	2.820	2.420	1.890	1.310	2.570	0.680	3.040	0.790	25.510
<b>MISSOURI—</b>													
Rhinecland .....												1.075	
St. Louis .....	2.320	5.350	7.320	4.890	6.600	11.020	5.540	2.930	4.440	1.800	5.410	3.760	61.380
<b>WISCONSIN—</b>													
Appleton .....	0.750	2.128	4.062	3.150		3.372	1.122	1.876	3.355	2.296	3.381	0.312	
Bay City (b) .....	1.310	1.350	4.600	5.600	12.350		3.950	6.150	4.800	3.600	4.350	0.902	
Bayfield .....	1.800	2.100	4.220										
Beloit .....	1.029		4.172	2.448	2.687	2.717	1.420	0.310	2.230	0.850	2.305	0.887	
Green Bay .....					1.440	3.890	2.100	1.009	4.250	3.550	3.725		
Kenosha .....	1.400	1.460	4.450	4.160	3.610	2.160	0.740	0.631	3.520	1.700	2.120	1.600	27.551
Madison .....			3.070			3.331							
Milwaukee, [Winkler] .....	1.100	1.200	4.420	4.570	3.620	3.970	2.080	0.270	2.350	1.520	3.120	0.640	28.860
Platteville .....	1.000	1.000	5.098	3.138	2.012	6.535	2.282	0.763	1.418	0.831	2.257		
Rocky Run .....											2.937	1.192	
Superior, [Stantz] .....								3.610	2.240	1.420	2.050	0.580	
Wausau .....		0.812		6.900		14.500	3.600						
<b>IOWA—</b>													
Bellevue .....	1.800	1.650	6.370	3.490	3.250	3.350	2.030	0.693	1.430	0.940	2.420	0.550	27.970
Border Plains (b) .....	0.375	1.750	2.750	4.500	6.125	2.125	3.250	3.812	2.875				
Burlington .....								1.605	3.290	0.550	0.780		
Dubuque .....		1.220	4.510	4.160		4.610	3.420	1.060	2.830	0.600	1.915	0.310	
Fairfield .....	1.455	2.400	5.360	2.860	5.710	8.100	7.460	1.751	3.600	0.911	2.650	0.150	42.347
Fort Madison .....	2.639	1.753	4.560	2.330	6.610	6.849	4.290	1.810	3.999	0.890	1.400	0.332	37.465
Iowa City .....								0.920	1.830	0.785	2.870		
Muscatine .....	0.909	3.890	4.610	3.590	7.490	5.820	2.930	1.700	1.800	0.850	1.330	1.810	36.720
Pleasant Plain .....	0.780	1.810	4.509	2.470	6.170	8.300	5.550	3.470	3.850	1.000	1.850	0.170	39.950
Rossville .....	0.431	0.830	3.030	3.290	2.770	7.400	5.200	0.690	3.800	0.550	2.640	0.660	31.291
Sioux City .....	0.000												
<b>MINNESOTA—</b>													
Beaver Bay .....	1.540	0.835	3.550	4.165	6.097	4.450	3.981	2.889	2.388	1.437	1.463	0.750	33.515
Burlington .....	1.476	0.737	3.337		6.540	7.140	5.799	4.610	2.510	1.825	3.301	0.750	
Chatfield .....					7.487	6.975	5.565	3.265	3.717	0.796	2.585	0.525	
Forest City .....	0.700		2.620	0.460	4.850	6.270	3.870	5.200	4.870		0.940	0.851	
Hazlewood .....	0.570	0.730	1.220	1.220	4.590	7.390	2.650	1.930	2.120			0.840	
Princeton .....	0.602	0.030	3.280	3.280	3.830	7.060	3.240	6.640	6.910	1.110	1.840		
<b>NEBRASKA—</b>													
Bellevue .....	0.720	1.130	1.420	1.570	4.980	1.620	1.440	2.250	1.460	0.860	0.470		
Deer Creek Agency .....											1.330	0.660	
Gilbert's Trading Post .....	2.000				5.690	4.920	2.080	1.490	3.500	2.130	2.270	0.200	
Nebraska City .....													
Omaha, [Byers] .....	1.041	1.070											
Omaha, [Rain] .....	0.720	0.960	1.730	1.700	6.180	2.560	2.020	1.800	1.220	0.920	0.870	0.520	21.270

a Without rain gauge.

b Estimated without gauge.

## No. 50.—INCHES OF RAIN AND MELTED SNOW, 1859.

NAME OF STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.
<b>KANSAS—</b>													
Burlingame .....	1.340	0.220	3.050	2.222	6.280	7.203	3.700	4.420	1.250	0.160	.....	.....	.....
Leavenworth City, [McCarty] .....	1.440												
Manhattan .....	1.500	0.610	2.880	2.540	9.420	3.570	4.990	6.840	1.820	0.640	1.200	0.201	35.211
Neosho Falls .....			2.410	3.260	8.170	6.770	2.550	5.540	2.650	0.850	0.270	0.150	.....
<b>UTAH—</b>													
Great Salt Lake City .....	0.648	3.880	3.331	1.420	1.847	0.108	.....	0.125	1.577	0.225	3.850	0.760	.....
<b>OREGON—</b>													
Oregon City .....	0.120	8.280	10.720										
Portland .....		8.950	7.850	1.440	1.510	0.130	0.220	0.870					
<b>CALIFORNIA—</b>													
Crescent City .....												4.990	.....
Downsville .....												4.890	.....
Sacramento .....	0.986	3.906	1.637	0.981	1.037	0.600	0.030	0.001	0.026	0.000	20.510	6.485	16.903
San Francisco .....	1.850	5.261	3.069	4.000	1.510	0.000	0.001	0.022	0.001	0.450	7.691	1.555	25.410
Santa Clara .....											3.250	1.290	.....
Union Rancho .....						0.000	0.003	0.000	0.120		7.210	2.630	.....
<b>MEXICO—</b>													
Cordova .....	4.210	1.300	0.940	6.100	2.760	25.470	16.770	10.360	23.270	8.070	1.050	3.740	101.010
Mmatatlan .....			0.100	0.150	1.820								
Mirador .....	2.214	0.394	1.339	2.008	1.201	21.142	12.146	6.220	16.043	9.016	1.831	1.752	75.335
<b>WEST INDIES—</b>													
Ireland Island, Bermuda .....		4.310											
St. George's, Bermuda (a) .....	2.740	4.900	1.980	1.560	2.640	2.550	3.960	3.860	6.770	7.640	9.100	3.360	51.450
St. George's, Bermuda (b) .....	2.320	4.240	1.820	1.170	2.180	2.310	3.400	3.530	6.170	7.890	8.400	3.260	47.130
<b>CENTRAL AMERICA—</b>													
Guatemala .....	0.300	0.126	1.945	2.299	8.063	10.171	5.953	8.608	11.422	9.480	0.512	0.169	59.358
<b>SOUTH AMERICA—</b>													
Cartharina Sophia, Surinam .....	12.685	3.762	5.921	4.870	10.435	13.822	9.947	5.469	4.620	3.565	3.009	8.764	...
<b>EASTERN CONTINENT—</b>													
Jerusalem, Palestine .....	4.150	2.898	5.200										

a On the ground.

b Twenty feet above the ground.

c Owing to a probable misprint in the abstract from which this was taken, this total does not agree with that obtained from the separate months.



## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1859.

NAME OF STATION.	MEAN.	MAXIMUM.			MINIMUM.			Range for the year.	
		DATE.		HEIGHT.	DATE.		HEIGHT.		
		Day.	Hour.		Day.	Hour.			
	<i>Inches.</i>			<i>Inches.</i>			<i>Inches.</i>	<i>Inches.</i>	
British America	Hamilton	29.64	Jan. 10	9 a. m.	<i>a</i> 30.20	March 18	9 a. m.	28.44	1.76
	St. John's	29.56	Dec. 5	7 a. m.	30.51	April 7	7 a. m.	28.23	2.28
	Windsor	29.91	Dec. 4	7 a. m.	30.78	Feb. 21	7 a. m.	28.97	1.81
Maine	Gardiner	29.92	Dec. 4	7 a. m.	30.81	March 19	2 p. m.	29.01	1.80
	Perry	29.90	Dec. 4	7 a. m.	30.80	March 26	9 p. m.	29.04	1.76
	Portland	29.91	Dec. 3	9 p. m.	30.71	March 19	2 p. m.	29.01	1.70
	Steuben ( <i>b</i> )	29.90	Dec. 7	7 a. m.	30.77	Feb. 20	9 p. m.	29.02	1.75
New Hampshire	Shelburne	29.76			?			?	
Vermont	Burlington	29.61	Dec. 3	9 p. m.	30.42	March 19	7 a. m.	28.46	1.96
	St. Johnsbury	29.36	Dec. 3	9 p. m.	30.09	March 19	7 a. m.	28.26	1.83
Massachusetts	Amherst	29.76	Dec. 3	9 p. m.	30.43	March 19	7 a. m.	28.82	1.61
	Cambridge	29.94	Jan. 24	9 p. m.	<i>c</i> 30.63	March 19	2 p. m.	29.04	1.59
	Lawrence	29.83	Dec. 3	9 p. m.	30.57	March 19	7 a. m.	28.95	1.62
	Nantucket	29.98	Nov. 7	7 a. m.	30.63	March 29	9 p. m.	29.13	1.53
	New Bedford	29.91	Jan. 24	9 p. m.	30.60	March 29	9 p. m.	<i>d</i> 29.13	1.47
	Westfield	29.89	Dec. 3	9 p. m.	30.55	March 19	7 a. m.	29.02	1.53
	Worcester	29.42	Dec. 24	7 a. m.	30.40	April 23	9 p. m.	28.54	1.86
Rhode Island	Providence	29.81	Jan. 24	Sunrise	30.50	April 23	10 p. m.	28.96	1.54
Connecticut	Middletown	29.86	Dec. 24	7 a. m.	30.46	April 23	2 p. m.	28.89	1.55
	Pomfret	29.36	Jan. 24	9 p. m.	<i>c</i> 29.99	April 23	9 p. m.	28.49	1.50
	Wallingford	29.90	Dec. 24	7 a. m.	30.55	April 23	9 p. m.	28.94	1.61
New York	Bellport	29.31	Jan. 24	7 a. m.	29.89	March 4	2 p. m.	28.36	1.53
	Buffalo	29.33	Dec. 3	7 a. m.	30.01	March 18	9 p. m.	28.25	1.76
	Cazenovia	28.57	Nov. 6	9 p. m.	29.38	March 19	7 a. m.	27.52	1.86
	Flatbush	29.95	May 4	7 a. m.	30.79	April 23	2 p. m.	29.01	1.78
	New York city	30.00	Jan. 24	7 a. m.	30.65	March 19	7 a. m.	29.19	1.46
	Oswego	29.27	Dec. 3	2 p. m.	29.93	March 19	7 a. m.	28.20	1.73
	Penn Yan	29.45	Dec. 3	2 p. m.	30.02	March 19	Sunrise.	28.40	1.62
	Rochester, [Dewey]	29.31	Jan. 10	2 p. m.	30.16	March 19	7 a. m.	28.12	2.04
	Waterford	29.94	Dec. 3	9 p. m.	30.58	March 19	7 a. m.	28.94	1.64
New Jersey	Lambertville	30.00	Jan. 24	9 p. m.	30.62	April 23	2 p. m.	29.00	1.62
	Newark	29.96	Nov. 7	7 a. m.	30.60	April 23	9 p. m.	29.10	1.50
Pennsylvania	Berwick ( <i>e</i> )	29.31	Jan. 23	9 p. m.	<i>f</i> 29.84	April 23	2 p. m.	28.25	1.59
	Cannonsburg	28.81	Jan. 23	7 a. m.	29.37	March 29	7 a. m.	28.00	1.37
	Chambersburg	29.35	Jan. 24	7 a. m.	29.90	April 23	2 p. m.	28.14	1.76
	Easton	29.61	Nov. 7	7 a. m.	30.22	March 19	7 a. m.	28.76	1.46
	Gettysburg	29.48	Jan. 24	7 a. m.	30.09	April 23	2 p. m.	28.13	1.96
	Harrisburg, [Heisely]	29.76	Jan. 24	7 a. m.	<i>g</i> 30.35	Jan. 15	2 p. m.	29.23	1.12
	Harrisburg, [Hickok]	29.75	Jan. 24	7 a. m.	30.33	April 23	9 p. m.	29.01	1.32
	Lewisburg	29.55	Jan. 24	7 a. m.	30.15	April 23	2 p. m.	28.54	1.61
	Morrisville	30.07	Jan. 24	2 p. m.	<i>h</i> 30.72	April 23	2 p. m.	29.17	1.55
	Mount Joy ( <i>e</i> )	29.67	Jan. 24	9 p. m.	30.22	April 23	2 p. m.	28.58	1.64
	Norristown	29.92	Jan. 24	7 a. m.	30.56	April 23	2 p. m.	28.85	1.71
	Philadelphia	29.86	Jan. 24	7 a. m.	30.47	April 23	2 p. m.	28.89	1.58
	Pittsburg, [Marine Hosp.]	28.94	Jan. 23	2 p. m.	29.53	March 29	7 a. m.	28.12	1.41
	Somerset	29.63	Jan. 23	7 a. m.	28.01	April 23	7 a. m.	26.84	1.17
Maryland	Annapolis	29.83	Jan. 24	7 a. m.	30.45	April 23	9 p. m.	28.77	1.68
	Frederick	29.74	Jan. 24	7 a. m.	30.47	April 23	7 a. m.	28.63	1.84
Dist. of Columbia	Washington	30.00	Jan. 24	7 a. m.	30.61	April 23	7 a. m.	28.89	1.72
Virginia	Portsmouth	29.98	Dec. 11	9 p. m.	<i>i</i> 30.81	April 23	7 a. m.	29.18	1.63
North Carolina	Chapel Hill	29.59	Jan. 24	7 a. m.	30.15	March 18	2 p. m.	<i>i</i> 28.92	1.23
	Murfreesborough	29.25	Aug. 30	7 a. m.	30.22	March 29	2 p. m.	28.63	1.54
South Carolina	All Saints	29.99	Jan. 23	9 p. m.	30.53	July 20	2 p. m.	28.72	1.81
	Charleston	30.10	Jan. 24	7 a. m.	30.62	March 29	2 p. m.	29.51	1.11
	St. John's ( <i>j</i> )	30.15	Jan. 19	2 p. m.	30.60	March 29	2 p. m.	29.57	1.03
Georgia	Atlanta ( <i>k</i> )	30.04	Jan. 2	2 p. m.	<i>l</i> 30.40	March 29	7 a. m.	29.45	0.95
	Thomaston	28.96	April 1	7 a. m.	29.81	March 29	7 a. m.	28.49	1.32

*a* Same height, November 6th, at 9 a. m.*b* For 11 months only, September wanting.*c* Same height, November 7th, at 7 a. m.*d* Same height, April 23d, at 2 and 9 p. m.*e* Not corrected for temperature.*f* Same height, January 24th, at 7 a. m. and 2 p. m.; November 6th, at 7 a. m.; and November 7th, at 2 and 9 p. m.*g* Same height, June 12th, at 7 a. m.*h* Same height, January 24th, at 9 p. m.*i* Same height, April 22d, at 9 p. m.*j* Aneroid.*k* Not corrected for temperature. For 11 months only, Feb'y wanting.*l* Same height, November 2d, at 2 p. m.



## No. 51.—BAROMETER, CORRECTED TO 32° F.—SUMMARY FOR THE YEAR 1859.

NAME OF STATION.		MEAN.	MAXIMUM.			MINIMUM.			Range for the year.		
			DATE.		HEIGHT.	DATE.		HEIGHT.			
Day.	Hour.	Day.	Hour.								
		Inches.			Inches.			Inches.	Inches.		
Florida	Atsena	29.80	Jan.	18	9 p. m.	30.12	Oct.	28	2 p. m.	29.22	0.90
	Jacksonville	30.11	Dec.	9	7 a. m.	30.60	Feb.	9	7 a. m.	29.66	0.94
	St. Augustine	29.95	Jan.	18	2 p. m.	a 30.40	March	28	7 a. m.	29.51	0.89
	Salt Ponds (b)	29.69	Jan.	19	2 p. m.	29.93	Oct.	28	7 a. m.	29.32	0.61
Mississippi	Columbus	29.84	Jan.	23	7 a. m.	30.59	March	28	9 p. m.	29.04	1.55
	Natchez	29.52	Jan.	22	9 p. m.	30.20	March	28	2 p. m.	c 28.80	1.40
Texas	New Braunfels	27.72	Jan.	4	9 p. m.	28.15	March	28	2 p. m.	27.40	0.75
	Sisterdale	29.67				?				?	
	Washington	29.68	Jan.	23	7 a. m.	30.34	March	28	2 p. m.	28.95	1.39
Tennessee	Glenwood	29.56	Jan.	23	7 a. m.	30.29	March	28	9 p. m.	28.65	1.64
Kentucky	Bardstown	29.44	Jan.	22	9 p. m.	30.14	March	18	7 a. m.	28.85	1.29
	Springdale	29.39	Jan.	23	7 a. m.	30.09	March	28	9 p. m.	28.61	1.44
Ohio	Avon	29.04	Jan.	23	7 a. m.	29.64	March	29	7 a. m.	28.19	1.45
	Bowling Green	29.22	Jan.	23	7 a. m.	29.84	March	18	2 p. m.	28.38	1.46
	Cincinnati, [Harper]	29.40	Jan.	23	7 a. m.	30.18	Dec.	17	2 p. m.	28.57	1.61
	Cincinnati, [Phillips]	29.57	Jan.	23	7 a. m.	30.45	Dec.	17	2 p. m.	28.71	1.74
	Cleveland	29.01	Jan.	23	7 a. m.	29.50	March	29	7 a. m.	28.17	1.33
	Hillsborough	28.68	Jan.	23	7 a. m.	29.43	Oct.	26	2 p. m.	27.71	1.72
	Hudson	28.80	Jan.	23	7 a. m.	29.34	March	29	7 a. m.	27.87	1.47
	Montville	28.68	March	1	7 a. m.	29.42	March	29	7 a. m.	27.74	1.68
	New Lisbon (b)	28.73	Nov.	24	7 a. m.	29.34	March	18	2 p. m.	27.70	1.64
	Portsmouth	29.34	Jan.	23	7 a. m.	29.86	March	18	2 p. m.	c 28.82	1.04
	Savannah	28.86	Jan.	23	7 a. m.	29.45	March	29	7 a. m.	27.90	1.55
	Troy	29.90	Jan.	18	2 p. m.	30.50	March	28	9 p. m.	29.11	1.49
	Urbana	28.88	Nov.	24	7 a. m.	30.37	March	29	7 a. m.	28.03	2.34
	Westerville	28.87	Jan.	23	7 a. m.	29.46	March	29	7 a. m.	28.00	1.46
Michigan	Battle Creek	29.92	Nov.	24	7 a. m.	29.63	March	28	9 p. m.	28.16	1.47
	Detroit	29.22	Dec.	3	7 a. m.	30.04	March	29	2 p. m.	27.97	2.07
	Marquette	29.28	Nov.	5	9 p. m.	29.89	April	14	7 a. m.	28.39	1.50
	New Buffalo	29.29	Jan.	22	9 p. m.	29.88	March	28	9 p. m.	28.38	1.50
	Ottawa Point	29.36	Nov.	6	9 a. m.	30.13	March	29	6 a. m.	28.06	2.07
	Thunder Bay Island	29.34	Dec.	3	9 a. m.	30.07	March	29	9 a. m.	28.04	2.03
	Ypsilanti	29.00	Nov.	25	2 p. m.	29.56	March	29	7 a. m.	28.09	1.47
Indiana	Aurora	29.52	Jan.	22	9 p. m.	30.07	March	28	9 p. m.	28.66	1.41
	Cannelton	29.65	Jan.	22	9 p. m.	30.41	March	28	9 p. m.	28.72	1.69
	New Harmony	29.67	Jan.	22	9 p. m.	30.43	March	28	9 p. m.	28.65	1.78
Illinois	Batavia, [Mead]	29.15	Jan.	22	7 a. m.	d 29.78	March	28	9 p. m.	28.41	1.37
	Manchester	28.75	Jan.	22	7 a. m.	29.57	April	10	9 p. m.	28.20	1.37
	Marengo	28.92	Jan.	18	2 p. m.	29.59	March	3	2 p. m.	28.23	1.36
	West Urbana	29.18	Jan.	22	9 p. m.	29.87	April	10	9 p. m.	28.51	1.36
	Wheaton	29.19	Jan.	22	9 p. m.	29.83	March	28	9 p. m.	28.32	1.51
Missouri	St. Louis, [Engelmann]	29.52	Jan.	22	2 p. m.	e 30.30	March	28	2 p. m.	28.54	1.76
Wisconsin	Appleton	28.95	Dec.	3	7 a. m.	29.59	March	3	2 p. m.	28.15	1.44
	Beloit	29.14	Jan.	22	9 p. m.	29.77	March	28	2 p. m.	28.30	1.47
	Kenosha (b)	29.60	Jan.	20	9 p. m.	30.06	March	28	9 p. m.	28.77	1.29
	Manitowoc (b)	29.71	Nov.	23	9 p. m.	f 30.29	March	3	2 p. m.	28.90	1.39
	Milwaukee, [Winkler]	29.27	Jan.	22	2 p. m.	29.82	March	3	2 p. m.	28.54	1.28
Iowa	Dubuque	29.32	Jan.	22	2 p. m.	30.00	Nov.	25	2 p. m.	28.49	1.51
	Fairfield	27.22	Jan.	22	7 a. m.	28.40	April	10	9 p. m.	26.62	1.78
	Muscatine	29.47	Jan.	22	9 p. m.	30.17	March	3	7 a. m.	g 28.75	1.42
Minnesota	Beaver Bay, [Clark]	29.18	Dec.	2	7 a. m.	29.89	March	3	9 p. m.	28.38	1.51
California	Sacramento	30.01	Jan.	7	7 a. m.	30.49	Jan.	31	2 p. m.	29.44	1.05
Mexico	Cordova	27.14	Jan.	23	9 a. m.	27.58	March	28	3 p. m.	26.74	0.84
	Mitador	22.94	Dec.	10	2 p. m.	23.28	March	28	2 p. m.	22.52	0.76
West Indies	St. George's, Bermuda	29.97				30.46				29.40	1.06
Central America	Guatemala	25.25	Nov.	14	10 p. m.	25.43	Oct.	20	4 p. m.	25.06	0.37
South America	Catharina Sophia, Surinam	29.89	Aug.	23	6 a. m.	30.00	May	18	2 p. m.	h 29.79	0.21
	Catharina Sophia, Sur. (i)	29.79	Jan.	6	2 p. m.	j 30.06	Sept.	17	6 a. m.	29.54	0.52

a Same height, January 18th, at 9 p. m.

b Not corrected for temperature.

c Same height, March 28th, at 9 p. m.

d Same height, January 22d, at 2 p. m.

e Same height, January 22d, at 9 p. m.

f Same height, December 3d, at 7 a. m.

g Same height, April 10th, at 9 p. m.

h Same height, October 21st, at 2 p. m.

i Aneroid.

j Same height, January 7th and 18th, at 6 a. m.



## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp	Date.	Temp	Date.	M'n temp		
BRITISH AMERICA—														
Hamilton (a).....	46.93	.....	46.84	46.88	July 12	88	July 12	86.50	Jan. 1	-20	Jan. 9	-11.50	108	.....
Red River Settlement.....	.....	.....	.....	32.31	July 9	81	July 14	79.00	Jan. 7	-39	Jan. 7	-31.00	130	4.20
St. John's.....	43.55	49.47	42.36	45.13	Aug. 11	88	Aug. 11	78.00	Jan. 25	1	Jan. 3	4.33	87	5.91
St. Martin (c).....	34.91	49.57	39.42	41.30	July 12	97	July 23	85.30	Jan. 10	-44	Jan. 10	-28.70	141	.....
Stanbridge.....	38.20	47.64	39.69	41.84	June 29	90	July 12	81.33	Jan. 10	d-36	Jan. 10	-30.00	125	5.87
Toronto (c).....	40.94	48.63	42.80	44.12	June 29	85	July 12	79.88	Jan. 10	-26	Jan. 10	-8.65	111	6.12
Windsor.....	39.70	49.35	41.63	43.56	Aug. 4	86	Aug. 5	73.33	Jan. 13	-9	Jan. 11	-1.33	95	6.38
MAINE—														
Cornish, [West].....	37.69	47.77	39.58	41.68	July 12	87	June 29	f 0.67	Jan. 11	-32	Jan. 11	-18.67	119	4.55
Cornishville, [Westville].....	40.42	49.38	42.23	44.01	June 29	90	June 29	e 82.00	Jan. 11	-23	Jan. 10	f -13.00	113	4.89
Dexter.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.64
Gardner.....	37.92	48.42	39.19	41.84	July 12	85	June 29	79.00	Jan. 11	-32	Jan. 11	-19.67	117	5.57
Perry.....	37.74	46.93	38.94	41.20	July 13	87	July 13	71.33	Jan. 11	-22	Jan. 11	-12.67	109	4.73
Portland.....	40.11	48.24	41.75	43.37	July 25	g 85	June 29	79.67	Jan. 11	-23	Jan. 11	-14.00	108	5.50
Steuben (h).....	38.93	47.37	39.34	41.88	Aug. 9	83	July 13	72.67	Jan. 11	-21	Jan. 10	-11.00	104	5.86
NEW HAMPSHIRE—														
Shelburne.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.19
Stratford.....	35.36	47.39	37.51	40.09	July 12	94	July 12	81.33	Jan. 11	-35	Jan. 10	-24.00	130	5.68
VERMONT—														
Brandon.....	39.75	50.88	42.13	44.22	May 7	i 90	July 12	81.33	Jan. 10	-27	Jan. 10	-23.67	117	5.17
Burlington.....	39.70	47.24	41.59	42.84	June 29	88	July 12	80.33	Jan. 10	-31	Jan. 10	-26.83	119	5.62
Craftsbury.....	35.95	46.65	39.47	40.69	June 29	e 87	July 12	79.00	Jan. 11	-35	Jan. 10	-26.00	122	6.41
Rupert.....	41.52	54.22	47.59	47.78	Aug. 14	98	July 12	82.67	Jan. 10	-24	Jan. 10	-18.00	122	5.31
St. Johnsbury.....	33.99	48.50	37.51	40.00	June 29	92	June 29	e 76.67	Jan. 11	-40	Jan. 11	-29.33	132	5.51
MASSACHUSETTS—														
Amherst.....	41.12	52.81	44.41	46.11	June 29	91	July 12	78.90	Jan. 11	-19	Jan. 11	-12.50	110	5.04
Cambridge.....	43.11	53.22	45.12	47.15	June 29	95	July 12	79.67	Jan. 11	-17	Jan. 10	-5.50	112	5.36
Lawrence.....	41.64	52.05	43.97	45.89	June 29	91	June 29	79.00	Jan. 11	-17	Jan. 10	-7.00	108	5.67
Mendon.....	42.99	53.10	44.55	46.84	June 29	93	July 12	81.67	Jan. 11	-18	Jan. 10	f -7.67	111	4.85
Nantucket.....	49.45	54.47	48.42	50.78	Aug. 14	81	Aug. 14	74.67	Jan. 10	9	Dec. 28	14.33	72	5.03
New Bedford.....	45.16	53.54	45.57	48.09	June 29	e 83	July 12	74.80	Jan. 11	-12	Jan. 10	-2.50	95	5.82
Westfield.....	40.24	52.67	43.71	45.54	June 29	91	July 12	79.33	Jan. 11	-21	Jan. 11	-14.67	114	5.58
Worcester.....	43.53	53.58	45.76	47.62	June 29	92	July 12	81.83	Jan. 11	-15	Jan. 11	-5.17	107	5.32
RHODE ISLAND—														
Providence (j).....	44.77	55.16	46.02	48.65	July 12	90	June 29	79.33	Jan. 11	-11	Jan. 11	-5.33	101	5.11
CONNECTICUT—														
Columbia.....	43.22	54.91	42.73	46.95	July 13	93	July 12	80.00	Jan. 11	-14	Jan. 10	-7.00	107	5.12
Middletown.....	42.75	57.24	44.97	48.32	June 29	k 95	July 11	81.80	Jan. 11	-17	Jan. 11	-10.30	112	4.58
Pomfret.....	41.70	50.78	43.72	45.40	June 29	87	July 12	78.50	Jan. 11	-16	Jan. 10	-10.17	103	5.31
Saybrook.....	45.14	53.79	46.50	48.51	July 13	88	July 12	76.67	Dec. 29	-17?	Jan. 10	-5.00	105?	5.17
Wallingford.....	41.93	55.15	44.91	47.33	June 29	k 94	July 12	81.17	Jan. 11	-17	Jan. 11	-10.17	111	4.38
NEW YORK—														
Bellport.....	47.32	54.16	47.34	49.61	July 12	86	Aug. 4	79.33	Jan. 10	0	Jan. 10	3.00	86	4.67
Beverly.....	43.72	53.34	46.24	47.77	July 13	88	June 29	78.33	Jan. 10	-16	Jan. 10	-15.00	104	5.22
Buffalo (l).....	46.14	50.91	47.94	48.33	July 14	m 87	July 14	n 80.33	Jan. 10	-10	Jan. 10	-1.33	97	5.23
Flatbush.....	46.19	55.80	47.54	49.91	June 29	93	June 29	81.20	Jan. 10	-8	Jan. 10	-5.10	101	5.29
Nichols.....	42.74	56.51	43.64	47.63	July 19	95	July 19	80.33	Jan. 10	-18	Jan. 11	-13.00	113	6.03
Oswego.....	43.35	50.94	44.98	46.42	Aug. 3	86	July 12	80.00	Jan. 10	-18	Jan. 10	-15.00	104	5.70
Penn Yan (o).....	39.54	53.98	45.01	46.51	July 11	95	July 13	80.67	Jan. 10	-15	Jan. 10	-9.00	110	3.54
Rochester, [Dewey].....	44.66	53.51	46.92	48.33	July 11	94	July 12	83.67	Jan. 10	-10	Jan. 10	-0.67	104	5.84
Wampsville.....	41.53	52.10	42.45	45.36	July 13	90	July 13	78.67	Jan. 10	-23	Jan. 10	-22.00	118	6.10
Watford.....	43.30	54.08	45.94	47.77	June 12	92	July 12	84.54	Jan. 10	-20	Jan. 10	-17.00	112	5.17
NEW JERSEY—														
Freehold.....	46.61	58.25	49.02	51.29	July 13	99	June 29	85.33	Jan. 10	-6	Jan. 10	-3.00	105	.....
Lambertville.....	45.68	59.71	48.31	51.23	July 13	100	July 12	85.37	Jan. 10	-7	Jan. 10	-3.37	107	4.68
Newark (p).....	.....	.....	.....	50.11	June 29	k 91	July 13	83.13	Jan. 11	-12	Jan. 11	-2.38	103	.....
PENNSYLVANIA—														
Berwick.....	46.85	57.14	49.40	51.13	July 13	96	July 13	85.33	Jan. 10	-10	Jan. 10	-5.00	106	4.22
Cannonsburg.....	46.39	57.36	52.18	51.98	July 12	q 90	July 14	81.67	Jan. 8	r 6	Jan. 8	8.33	84	5.55
Chambersburg.....	48.57	59.50	50.97	53.01	July 13	98	July 12	87.67	Jan. 10	-2	Jan. 10	5.33	96	5.46
Easton (s).....	46.62	57.01	46.04	49.89	July 13	98	July 13	84.00	Jan. 10	-9	Jan. 10	-5.83	105	5.78
Fleming.....	44.21	59.12	45.75	49.69	July 18	99	July 13	85.00	Jan. 10	-11	Jan. 10	-2.00	110	5.12
Gettysburg.....	45.96	58.96	49.76	51.56	July 13	97	July 13	87.83	Jan. 10	-2	Jan. 10	0.00	99	4.81
Harrisburg, [Heisely].....	50.09	60.05	54.49	54.88	July 13	98	July 13	90.33	Jan. 10	4	Jan. 10	4.33	94	5.05
Harrisburg, [Hickok].....	47.44	58.06	51.85	52.65	July 13	95	July 13	84.83	Jan. 10	-1	Jan. 10	0.17	96	5.44
Lewisburg.....	45.51	56.50	47.47	49.83	July 13	95	June 29	82.97	Jan. 10	-9	Jan. 10	-5.23	105	6.10
Morrisville.....	45.61	58.32	47.88	50.61	July 13	94	June 29	83.33	Jan. 10	-4	Jan. 10	-2.33	98	3.86
Mount Joy.....	49.68	62.67	52.27	54.87	July 12	103	July 13	89.67	Jan. 10	5	Jan. 10	1.50	98	4.51
Norristown.....	47.17	57.14	49.74	51.35	July 13	95	June 29	81.67	Jan. 10	-2	Jan. 10	-1.33	97	4.89
North Whitehall (t).....	43.06	56.94	51.54	50.51	July 13	91	July 13	81.67	Jan. 10	-10	Jan. 10	-4.67	101	5.12
Philadelphia.....	49.69	60.21	52.72	54.21	June 29	n 95	July 13	86.50	Jan. 10	0	Jan. 10	2.00	95	5.52
Pittsburg, [Mar. Hosp.].....	47.41	57.28	50.78	51.76	July 13	q 92	July 13	85.67	Jan. 10	2	Jan. 10	6.67	90	5.94
Pocopson.....	47.46	59.87	49.63	52.32	July 3	n 93	July 13	85.67	Jan. 10	-1	Jan. 10	0.33	94	5.08
Shamokin.....	41.03	55.56	48.08	48.22	July 13	98	June 29	81.67	Jan. 10	-8	Jan. 10	-4.67	106	5.19
Somerset.....	43.47	57.23	46.38	49.03	July 14	96	July 14	82.33	Jan. 10	-8	Jan. 10	3.00	104	.....

a Observations taken at 9 a. m. and 9 p. m.

b Same temperature July 14th.

c Observations taken at 6 a. m., 2 p. m., and 10 p. m.

d Same temperature December 28th.

e Same temperature July 12th.

f Same temperature January 11th.

g Same temperature July 13th and 14th.

h April incomplete.

i Same temperature July 11th and 12th.

j For hours of observation, see monthly tables.

k Same temperature July 13th.

l Observations taken at 8 a. m., 2 p. m., and 9 p. m.

m Same temperature August 10th.

n Same temperature July 4th.

o Observations taken at sunrise, 2 p. m., and sunset.

p Daily maximum and minimum.

q Same temperature July 14th.

r Same temperature December 31st.

s Observations taken at 8 a. m., 2 p. m., and 10 p. m.

t Observations taken at sunrise, noon, and sunset.

u Same temperature July 13th and August 4th.



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NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
PENNSYLVANIA—Cont'd.														
West Haverford .....	47.53	59.10	.....	54.31	July 13	95	July 13	85.50	Jan. 10	-2	Jan. 10	1.00	97	6.23
Worthington .....	43.68	57.32	50.69	50.56	July 13	95	July 13	85.33	Jan. 10	-10	Jan. 10	5.00	106	.....
MARYLAND—														
Annapolis .....	49.73	60.31	55.86	55.30	Aug. 4	95	July 13	87.33	Jan. 10	7	Jan. 10	8.00	89	4.69
Bladesburg (a) .....	48.51	62.41	50.57	53.77	Aug. 3	94.95	July 13	83.67	Jan. 10	3	Jan. 10	6.33	92	5.55
Frederick .....	49.35	58.55	51.81	54.24	July 13	95	July 13	82.33	Dec. 29	14	Jan. 10	7.49	81	5.23
Leidersburg .....	46.60	59.29	49.45	51.85	July 13	96	July 13	86.00	Jan. 10	0	Jan. 10	2.33	96	4.42
Sykesville .....	48.19	59.47	50.47	52.68	July 13	90	July 13	84.33	Jan. 10	-2	Jan. 10	1.00	92	4.62
DIST. OF COLUMBIA—														
Washington .....	50.91	60.71	54.60	55.41	July 13	94	July 13	87.33	Jan. 10	5	Jan. 10	8.67	89	4.89
VIRGINIA—														
Crockett's Store (d) .....	55.71	65.56	64.39	61.89	July 14	101	July 14	91.33	Dec. 9	18	Jan. 23	20.67	83	5.07
Cross Creek .....	41.95	63.13	46.61	49.56	July 13	97	July 12	82.00	Jan. 10	-8	Dec. 31	2.00	105	.....
Lewisburg (g) .....	46.75	63.66	51.09	53.83	Aug. 20	92	June 29	81.33	Jan. 23	-2	Jan. 8	9.00	94	3.97
Papier Grove .....	48.63	65.13	50.81	55.19	July 13	99	July 11	83.33	Jan. 23	6	Dec. 8	12.00	93	5.21
Portsmouth .....	54.24	67.04	54.90	58.73	July 20	97.5	July 14	85.83	Jan. 10	15.5	Jan. 10	19.83	82	3.63
Rose Hill .....	.....	.....	.....	.....	July ..	91	.....	.....	Jan. ..	15	.....	.....	76	.....
Roughmont .....	51.29	64.60	55.52	57.31	July 13	95	July 13	90.00	Jan. 23	5	Jan. 10	11.67	99	5.02
Smithsland (f) .....	54.63	64.74	54.84	57.07	July 13	92	July 14	83.33	Jan. 10	11	Jan. 10	16.67	81	5.02
Woodward (z) .....	51.48	66.44	56.21	57.72	July 14	100	July 11	89.00	Jan. 10	13	Jan. 10	15.67	87	.....
NORTH CAROLINA—														
Chapel Hill (k) .....	53.46	68.64	57.12	59.74	July 18	99	July 18	89.67	Jan. 23	13	Jan. 23	18.67	86	5.04
Green Plains .....	52.75	67.69	54.08	58.17	July 14	102	July 14	90.00	Jan. 22	12	Jan. 22	16.67	90	.....
Murresborough (m) .....	54.54	65.77	58.80	60.07	July 14	95	July 14	85.67	Jan. 11	15	Jan. 23	20.33	80	3.77
SOUTH CAROLINA—														
Aiken .....	55.74	71.32	58.79	61.95	July 19	94	July 19	88.99	Jan. 21	18	Jan. 23	23.33	80	4.33
All Saints .....	60.92	69.57	62.10	63.90	July 19	92	July 18	85.00	Jan. 21	22	Jan. 23	27.67	70	.....
Charleston .....	61.70	71.19	65.62	66.17	July 19	94	July 19	87.33	Jan. 24	25	Jan. 23	31.67	69	.....
St. John's (o) .....	.....	.....	.....	64.24	July 19	98	July 19	87.67	Dec. 25	18	?	?	80	4.75
GEORGIA—														
Adrian .....	54.06	66.33	59.14	59.85	July 14	92	July 18	84.00	Dec. 8	16	Dec. 8	22.67	76	3.65
Tifton .....	52.75	67.69	54.08	58.17	July 14	95	July 14	85.67	Jan. 11	15	Jan. 23	20.33	80	3.77
Whitmarsh Island .....	62.54	71.55	65.17	66.42	July 19	97	July 26	86.00	Jan. 21	23	Jan. 23	33.33	74	4.39
FLORIDA—														
Aligator .....	63.28	78.11	66.16	69.18	July 18	100	July 25	87.33	Jan. 23	27	Jan. 23	31.00	77	3.77
Aspena .....	63.02	78.31	67.81	69.05	July 19	95	June 11	88.00	Dec. 8	22	Jan. 23	32.00	75	3.82
Belair (v) .....	63.02	78.31	67.81	69.05	July 19	95	June 11	88.00	Dec. 8	22	Jan. 23	32.00	75	3.82
Jacksonville .....	65.12	76.91	67.65	70.26	July 26	95	July 26	87.67	Jan. 9	34	Jan. 23	33.67	65	4.20
Macopoy .....	64.82	78.37	66.19	69.55	May 18	97	July 26	85.83	Jan. 9	25	Jan. 23	35.67	72	4.63
St. Augustine .....	69.93	75.17	69.73	71.61	July 26	95	July 23	87.33	Jan. 9	35	Jan. 23	40.67	60	4.04
Star Ponds (s) .....	78.20	81.61	.....	78.91	Sept. 4	91	July 23	87.50	Jan. 10	55	Jan. 10	56.00	36	3.62
ALABAMA—														
Greensborough (r) .....	57.14	70.54	60.73	62.80	July 13	93	July 19	85.67	Jan. 23	14	Jan. 23	21.00	79	3.87
MISSISSIPPI—														
Columbus .....	56.29	70.75	60.59	62.54	July 20	99	July 19	88.03	Dec. 8	12	Dec. 7	18.40	87	3.93
Natchez .....	58.61	72.54	65.22	65.46	July 14	91	July 20	83.67	Dec. 7	16	Dec. 7	21.00	75	4.59
LOUISIANA—														
New Orleans (d) .....	69.71	74.65	74.15	72.84	July 29	95	July 24	91.00	Dec. 8	26	Dec. 7	31.67	69	.....
TEXAS—														
Austin, [Palm] .....	61.25	76.70	64.35	67.44	July 29	101	July 14	89.67	Dec. 6	10	Dec. 6	12.34	91	4.57
Austin, Van Nostrand .....	60.88	77.73	65.63	68.03	June 21	101	Aug. 12	90.67	Dec. 21	10	Dec. 6	15.67	91	4.72
L. Ross .....	60.75	74.83	65.49	66.79	Aug. 11	104	Aug. 21	91.50	Dec. 7	3	Dec. 6	19.66	89	1.40
New Braunfels .....	61.95	79.94	68.31	70.07	Aug. 11	104.10	Aug. 13	92.00	Dec. 7	15	Dec. 6	19.66	89	1.40
Randall .....	61.75	79.39	68.46	70.17	August ..	104	.....	.....	Dec. ..	.....	.....	.....	95	.....
St. Louis .....	59.77	77.42	69.59	68.53	July 14	103	July 10	90.83	Dec. 7	8	Dec. 6	12.00	92	4.31
Union Hill .....	60.11	75.94	64.84	66.85	Aug. 29	100	July 31	85.00	Dec. 7	8	Dec. 6	12.00	92	4.90
Washington (en) .....	62.06	77.16	62.95	67.39	Aug. 13	103	Aug. 13	89.67	Dec. 7	16	Dec. 6	12.33	97	4.17
ARKANSAS—														
Washington (d) .....	55.02	72.26	.....	63.62	July 20	102	July 20	90.00	Dec. 7	6	Dec. 7	15.00	95	.....
TENNESSEE—														
Glenwood .....	50.97	63.71	55.22	56.63	July 18	94	July 18	85.17	Dec. 23	11	Dec. 7	7.67	94	5.26
KENTUCKY—														
Bardstown .....	51.10	63.03	51.07	56.07	July 14	103	July 14	91.67	Dec. 23	-7	Dec. 8	9.50	110	4.71
Paris .....	48.56	61.03	52.68	54.09	July 12	97	July 18	88.00	Dec. 23	-8	Dec. 7	6.67	105	5.06
Springdale (d) .....	45.95	63.57	57.14	55.56	July 14	101	July 16	87.00	Dec. 23	-12	Jan. 22	6.67	113	5.07
OHIO—														
Avon .....	47.53	55.53	48.16	50.41	July 18	94	July 14	84.33	Dec. 31	-8	Dec. 31	-1.17	102	5.37
Bedfontaine .....	48.95	56.78	47.11	49.98	July 14	97	July 15	85.67	Dec. 31	-4	Dec. 31	-10.00	111	5.50
Bowling Green .....	45.85	57.59	48.30	50.71	July 14	95	July 18	84.00	Dec. 31	14	Dec. 31	-4.67	109	5.43

a January and October incomplete.

b Same temperature August 4th.

c Same temperature July 12th.

d For hours of observation, see monthly tables.

e Same temperature January 11th and 23d.

f Same temperature July 12th and 14th.

g August incomplete; see monthly tables.

h Same temperature July 6th and 14th.

i Same temperature July 12th.

j December incomplete.

k June and December incomplete.

l Same temperature July 23d.

m May and July incomplete.

n Same temperature July 23th.

o Several months incomplete.

p Same temperature July 18th, 19th, and 20th.

q Same temperature January 23d.

r Several months incomplete; see monthly tables.

s Thermometer 24 to 25 degrees too high.

t Same temperature July 23d, 24th, and 29th.

u Same temperature July 24th.

v Same temperature January 11th.

w Same temperature July 19th and 20th.

x Same temperature December 5th.

y Same temperature August 14th.

z Same temperature July 6th and 12th.

aa Same temperature July 27th.

bb Same temperature August 29th.

cc May incomplete.

dd Same temperature December 8th and 21st.

ee Same temperature July 19th.

ff Same temperature January 10th.



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NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a. m.	2 p. m.	9 p. m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp.	Date.	Temp.	Date.	M'n temp.		
Ohio—Continued.														
Cincinnati, [Harper] ..	50.68	64.08	55.39	56.72	July 17	101	July 14	a 89.33	Dec. 8	— 3	Dec. 31	2.67	104	4.77
Cincinnati, [Phillips] ..	51.17	62.63	56.01	56.60	July 15	100	June 28	c 89.33	Dec. 23	— 2	Dec. 31	8.00	98	4.26
Cleveland .....	46.17	54.90	48.69	49.92	June 27	d 93	June 27	83.50	Dec. 31	— 8	Dec. 31	— 2.00	101	6.30
Collingwood .....	45.78	57.53	47.96	50.42	July 11	e 86	June 28	e 84.67	Dec. 31	— 15	Dec. 31	— 6.33	111	.....
Hillsborough .....	46.13	56.97	51.04	51.38	July 18	93	July 17	83.50	Dec. 31	f — 1	Dec. 31	1.50	94	4.57
Hudson (g) .....	45.65	55.12	48.26	49.68	July 2	89	.....	?	Dec. 31	— 5	Dec. 31	— 3.65	94	5.56
Jackson, (Mon. Co.) (h) ..	47.64	59.60	49.92	52.39	July 15	98	.....	?	Jan. 23	— 0.5	Jan. 23	8.17	98.5	.....
Madison, [King] .....	46.66	55.02	45.32	49.00	July 18	97	July 2	86.33	Dec. 31	— 8	Dec. 31	4.00	105	5.74
Montville .....	45.37	54.37	47.40	49.05	July 14	i 93	July 14	85.00	Dec. 31	— 10	Dec. 31	— 5.00	103	5.80
New Lisbon .....	47.26	61.75	49.89	52.97	July 12	98	June 28	85.33	Dec. 22	— 4	Dec. 31	0.67	102	4.32
Portsmouth .....	49.54	64.94	52.64	55.71	July 17	103	July 17	89.83	Dec. 8	j — 4	Dec. 31	10.33	99	4.47
Rockport .....	48.65	58.90	51.60	53.05	July 13	i 94	July 13	89.00	Dec. 31	— 7	Dec. 31	0.33	101	.....
Savannah .....	46.18	59.54	47.36	51.03	July 14	104	July 14	90.00	Dec. 8	— 20	Dec. 31	— 8.33	124	5.96
Troy .....	46.10	59.69	50.70	52.16	July 15	103	July 12	88.00	Dec. 8	— 15	Dec. 31	— 4.67	118	5.03
Urbana .....	45.13	59.81	48.22	51.05	July 12	k 96	July 18	84.67	Dec. 8	— 10	Dec. 31	— 5.33	106	5.48
Welchfield .....	45.97	56.48	45.11	49.19	July 14	100	July 14	89.00	Dec. 31	— 9	Dec. 31	— 4.00	109	4.74
Westerville .....	46.90	58.78	50.48	52.05	July 15	96½	.....	?	Dec. 8	— 12	Dec. 31	0.67	108.5	5.42
Windham .....	43.58	55.96	47.58	49.04	July 17	92	July 12	80.00	Dec. 31	— 5	Dec. 31	1.20	97	.....
MICHIGAN—														
Battle Creek (m) .....	43.72	56.41	45.70	48.61	July 17	99	July 17	86.33	Jan. 10	— 24	Dec. 31	— 9.00	123	4.40
Detroit .....	46.54	57.09	45.33	49.65	July 12	n 97	July 12	i 88.33	Dec. 31	— 14	Dec. 31	— 9.33	111	5.62
Marquette .....	36.95	45.49	36.80	39.75	Aug. 9	97	Aug. 9	81.03	Dec. 7	— 19	Dec. 30	— 7.40	116	5.69
Monroe, [Whelpley] .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.34
New Buffalo .....	45.26	.....	.....	.....	July 18	93	July 17	86.00	Dec. 31	— 16	Dec. 31	— 11.00	109	6.44
Ottawa Point (o) .....	40.12	48.01	45.97	44.33	July 18	83	July 18	79.00	Jan. 10	— 12	Jan. 10	— 1.75	95	6.38
Thunder Bay Island (p) ..	38.87	43.34	41.49	41.32	July 16	78.5	July 19	75.00	Dec. 31	— 5	Jan. 9	— 3.25	83.5	6.67
Ypsilanti (q) .....	43.27	55.39	45.09	47.92	July 14	98	July 13	84.33	Jan. 10	— 17	Jan. 10	4.33	115	6.00
INDIANA—														
Aurora (r) .....	48.31	63.76	54.12	55.56	July 17	108	July 18	94.33	Dec. 8	— 14	Jan. 22	1.33	122	.....
Cannelton .....	51.80	62.11	53.74	55.88	July 19	96	July 19	86.63	Dec. 23	— 2	Jan. 22	7.60	88	4.63
Logansport .....	47.43	60.06	50.85	52.78	July 17	102	July 17	92.67	Jan. 8	— 10	Dec. 31	— 4.33	112	5.69
New Harmony .....	50.72	62.17	54.30	55.73	July 11	s 96	July 18	90.33	Dec. 23	2	Dec. 31	6.33	94	5.00
ILLINOIS—														
Augusta .....	43.98	56.66	49.16	49.93	July 16	93	July 15	84.67	Dec. 31	— 13	Dec. 31	— 7.00	106	4.00
Aurora .....	42.09	55.30	44.54	47.31	July 17	b 95	July 17	85.67	Dec. 31	— 22	Dec. 31	— 16.67	117	4.73
Batavia, [Mead] .....	41.40	55.90	43.70	47.00	July 11	106	July 17	91.00	Dec. 31	— 22	Dec. 31	— 17.67	128	5.26
Edgington .....	42.74	57.19	47.31	49.68	July 15	a 100	July 17	90.00	Dec. 31	— 18	Dec. 31	t — 11.33	118	5.12
Elgin .....	41.37	54.12	43.94	46.48	July 17	100	July 17	88.33	Dec. 31	— 22	Dec. 31	— 17.00	122	5.54
Manchester (u) .....	46.37	59.08	48.93	51.46	July 15	94	July 18	85.67	Jan. 7	v — 8	Jan. 7	w — 0.33	106	4.93
Marengo .....	42.17	53.50	43.47	46.38	July 17	100	July 17	88.67	Dec. 31	— 18	Dec. 31	— 12.33	118	5.07
Ottawa .....	42.48	55.59	47.04	48.37	July 18	96	July 16	86.67	Dec. 31	— 20	Dec. 31	— 15.00	116	5.31
Pekin .....	44.51	58.31	48.35	50.39	July 18	99	July 18	89.00	Dec. 31	— 16	Dec. 31	— 9.33	115	4.98
Peoria .....	46.53	58.78	51.35	52.22	July 15	104	July 15	90.00	Dec. 31	— 13	Dec. 31	— 8.67	117	4.79
Riley .....	41.22	53.98	42.83	46.01	July 17	97	July 17	87.00	Dec. 31	— 26	Dec. 31	— 19.67	123	4.17
Sandwich .....	43.03	56.43	46.02	48.49	July 11	i 100	July 17	90.00	Jan. 8	— 21	Dec. 31	— 15.00	121	4.84
West Salem .....	50.41	63.93	54.07	56.14	July 17	b 101	July 18	90.33	Dec. 7	x 0	Jan. 22	4.33	101	4.83
West Urbana .....	47.00	58.26	49.40	51.55	July 15	98	July 17	89.67	Jan. 8	— 12	Dec. 31	— 5.67	110	5.24
Wheaton .....	43.28	53.82	44.29	47.13	July 17	96	July 17	88.67	Dec. 31	— 21	Dec. 31	— 16.17	117	5.72
Winnebago .....	41.15	54.24	43.85	46.41	July 16	i 95	July 17	86.50	Dec. 31	— 26	Dec. 31	— 20.00	121	4.93
MISSOURI—														
St. Louis, [Engelmann] ..	50.67	61.75	53.93	55.45	July 18	97	July 14	90.00	Dec. 8	— 3.5	Dec. 6	4.00	100.5	.....
WISCONSIN—														
Appleton .....	40.12	51.67	41.99	44.59	July 16	95	July 13	84.00	Dec. 31	— 20	Dec. 31	— 14.00	115	4.51
Beloit .....	41.45	55.77	43.75	46.99	July 13	98	July 17	86.33	Dec. 31	— 22	Dec. 31	— 17.00	120	3.96
Kenosha .....	44.16	51.25	45.52	47.08	July 12	88	June 28	83.50	Dec. 31	— 16	Dec. 31	— 10.33	104	3.89
Manitowoc .....	40.90	50.68	43.32	44.97	July 16	92	July 18	81.67	Dec. 31	— 16	Dec. 31	— 9.33	108	5.93
Milwaukee, [Winkler] ..	42.65	51.07	43.52	45.75	July 16	y 92	July 19	83.00	Dec. 31	— 21	Dec. 31	— 15.00	113	4.28
Platteville .....	40.97	54.61	41.50	46.69	July 16	97	July 17	87.67	Dec. 31	— 24	Dec. 31	— 18.00	121	4.87
Wausau .....	38.80	51.79	41.56	44.05	July 30	102	July 30	97.00	Jan. 8	— 31	Jan. 8	— 13.67	133	4.51
IOWA—														
Bellevue .....	41.64	44.63	41.64	47.54	July 16	101	July 16	88.00	Dec. 31	— 21	Dec. 31	— 14.00	122	5.29
Dubuque .....	43.22	54.05	46.81	48.03	July 16	98	July 16	89.00	Dec. 31	— 16	Dec. 30	— 12.67	114	4.44
Fairfield .....	44.46	56.10	46.90	46.32	Aug. 4	93	July 15	88.00	Dec. 6	— 12	.....	?	110	5.12
Fort Madison (z) .....	43.85	56.32	49.91	50.03	July 15	a 96	July 15	i 89.67	Dec. 31	— 15	Dec. 31	— 9.00	111	4.30
Muscatine .....	40.58	45.28	47.04	47.06	July 18	97	July 18	82.67	Dec. 31	— 22	Dec. 31	— 16.00	119	3.82
Pleasant Plain .....	43.10	57.21	45.75	48.69	July 15	100	July 17	87.67	Dec. 31	— 22	Dec. 31	— 13.33	122	4.51
Rossville .....	39.42	41.96	52.12	44.50	Aug. 14	99	July 16	87.83	Dec. 31	— 23	Dec. 31	— 18.50	122	4.77
MINNESOTA—														
Beaver Bay, [Clark] ..	33.17	40.49	34.81	36.16	July 19	85	July 19	70.33	Dec. 31	bb — 22	Dec. 31	bb — 17.83	107	4.81
Burlington .....	31.62	45.23	34.07	36.97	July 12	cc 93	July 12	85.67	Dec. 2	— 28	Dec. 6	— 20.33	121	4.79

a Same temperature July 16th.

b Same temperature July 18th.

c Same temperature June 29th.

d Same temperature July 2d.

e Same temperature July 12th.

f Same temperature January 8th and December 8th.

g April and July incomplete. The records of thermometer at this place are 0.85 too high.

h Several months incomplete; see monthly tables.

i Same temperature July 17th.

j Same temperature January 8th and 23d.

k Same temperature July 13th, 14th, 17th, and 18th.

l Same temperature July 14th.

m December incomplete.

n Same temperature July 19th.

o Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 43.23.

p Observations taken at 6 a. m., 9 a. m., 3 p. m., and 6 p. m. Mean at 9 a. m., 41.59.

q June incomplete.

r Observations taken at 6 a. m., 2 p. m., and 9 p. m.

s Same temperature July 14th, 16th, and 18th.

t Same temperature December 30th.

u For hours of observation, see monthly tables.

v Same temperature January 27th.

w Same temperature January 22d.

x Same temperature December 31st.

y Same temperature August 8th.

z Observations taken at 6 a. m., noon, and 7 p. m.

aa Same temperature July 16th and 17th.

bb Same temperature December 7th.

cc Same temperature July 15th.

## No. 52.—THERMOMETER—SUMMARY FOR THE YEAR 1859.

NAME OF STATION.	MEAN.				MAXIMA.				MINIMA.				Range for the year.	Mean cloudiness.
	7 a.m.	2 p.m.	9 p.m.	Mean.	HIGHEST DEG.		WARMEST DAY.		LOWEST DEGREE.		COLDEST DAY.			
					Date.	Temp.	Date.	M'n temp	Date.	Temp	Date.	M'n temp.		
MINNESOTA—Cont'd.	°	°	°	°		°	"		°		"	°		
Forest City .....	35.86	48.23	37.38	40.49	July 16	94	July 16	85.67	Dec. 2	—27	Dec. 30	—20.00	121	2.58
Hazlewood (a) .....	36.42	48.01	39.47	41.30	Aug. 7	96	July 17	87.00	Dec. 6	—24	Dec. 31	—20.00	120	4.73
Princeton .....	36.97	49.25	39.41	42.88	July 16	101	July 16	90.67	Dec. 7	—31	Dec. 6	—23.33	132	4.52
NEBRASKA—														
Bellevue .....	43.30	56.80	46.62	48.91	July 14	98	July 14	88.67	Dec. 31	—15	Dec. 31	—12.33	113	1
Elkhorn .....	40.79	57.00	45.18	47.65	July 15	102	July 15	88.00	Dec. 31	—28	Dec. 31	—20.33	130	4.57
Omaha, [Rain] .....	41.77	55.17	46.23	47.72	July 14	95	July 14	86.33	Dec. 31	—22	Dec. 31	—17.33	117	4.59
KANSAS—														
Burlingame .....	46.71	61.99	50.01	52.90	July 18	100	July 18	85.33	Feb. 12	—6	Dec. 5	0.67	106	3.41
Manhattan (a) .....	46.91	65.14	50.95	54.33	July 2	104	July 14	90.00	Dec. 6	—8	Dec. 5	—4.67	112	4.61
CALIFORNIA—														
Sacramento .....	54.32	63.55	58.34	58.74	June 16	95	June 22	87.00	Jan. 10	c 34	Jan. 10	36.00	62	2.91
MEXICO—														
Cordova (d) .....	69.09	72.49	69.78	70.78	Mar. 29	87.1	.....	.....	Jan. 8	56.1	.....	.....	31	.....
Mirador (e) .....	64.70	74.22	66.30	68.41	.....	.....	.....	.....	Nov. 15	46.4	.....	.....	.....	.....
WEST INDIES—														
St. George's, Ber. (f) .....	.....	.....	.....	69.78	August ..	86	.....	.....	March ..	49.1	.....	.....	37	.....
CENTRAL AMERICA—														
Guatemala (g) .....	.....	.....	.....	65.77	May 5	86.7	.....	.....	Nov. 3	f 45.3	.....	.....	41.4	.....
SOUTH AMERICA—														
Cathra Sophia, Sur. (j) .....	74.71	86.02	79.57	80.10	July 18	k 92	Aug. 7	l 82.67	Mar. 9	67	Nov. 21	m 76.00	25	4.96

a October incomplete.

b Same temperature July 15th.

c Same temperature December 6th and 29th.

d Observations taken at 9 a. m., 12 m., 3 p. m., 6 p. m., and 6 p. m.

Mean at 12 m., 71.29; mean at 6 p. m., 71.24.

e Observations taken at 7 a. m., 2 p. m., and 8 p. m.

f Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

g For hours of observation, see monthly tables.

h Same temperature May 7th.

i Same temperature November 15th.

j Observations taken at 6 a. m., 2 p. m., and 6 p. m.

k Same temperature August 18th, September 6th, and October 18th.

l Same temperature July 17th and 18th, and September 5th and 6th.

m Same temperature August 6th.



## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1859.

NAME OF STATION.	FORCE OF VAPOR.							RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.		MEAN.			MINIMA.*		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.
BRITISH AMERICA—	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>		<i>Inches</i>		<i>Inches</i>						
St. Martin (a).....	.228	.304	.255	July 12	.915	Jan. 10	.000	81	71	81	47	30	39
Toronto (a).....	.244	.259	.247	June 28	b. 770	Jan. 10	.008	82	65	77	31	14	27
Windsor.....	.258	.296	.264	Aug. 4	.895	Dec. 28	.019	87	70	84	51	29	54
MAINE—													
Portland.....	.243	.254	.249	June 29	.836	Jan. 11	.016	81	65	80	33	10?	21
Steuben.....	.232	.261	.238	Aug. 10	.759	April 1	c. 000	80	68	82	4	0	11
VERMONT—													
Burlington.....	.242	.267	.257	June 29	.935	Jan. 10	.012	75	63	73	32	19	29
MASSACHUSETTS—													
Amherst.....	.277	.315	.292	Aug. 4	.990	Jan. 11	.018	89	67	82	42	14	26
Cambridge.....								92	82	86	70	61	64
Lawrence.....	.239	.264	.256	Aug. 2	.991	Jan. 10	.006	74	60	75	20	10	29
Nantucket.....	.292	.294	.301	July 20	.800	Feb. 7	d. 000?	73	61	78	28	0	41
New Bedford.....	.299	.310	.305	Aug. 4	.837	Jan. 11	.026	85	67	86	39	9	29
Westfield.....	.252	.269	.278	July 13	.825	Jan. 11	.007	80	56	80	31	8	29
Worcester.....	.287	.313	.291	Aug. 27	.936	Dec. 29	.029	85	67	82	?	?	?
RHODE ISLAND—													
Providence (e).....													
CONNECTICUT—													
Middletown.....	.269	.283	.278	June 29	.915	Mar. 10	.000	82	54	79	40	11	19
Pomfret.....	.293	.346	.299	June 29	.989	Feb. 16	.000	91	79	89	?	11	?
Wallingford.....	.273	.289	.283	July 13	1.298	Jan. 10	.023	85	58	81	42	16	35
NEW YORK—													
Buffalo (f).....	.270	.289	.283	Aug. 10	.744	Dec. 28	.020	75	65	72	37	26	43
New York city.....	.292	.319	.303	July 30	1.016	Jan. 11	g. 000	71	59	67	27	0	0
PENNSYLVANIA—													
Berwick.....	.310	.361	.334	June 29	1.108	Dec. 31	.038	82	66	80	?	?	?
Chambersburg.....	.422	.457	.488	July 13	1.339	Dec. 31	.068	74	68	73	40	19	27
Easton (h).....	.296	.276	.295	June 29	.846			72	52	75			
Harrisburg, [Hickok].....	.273	.284	.297	Aug. 3	.800	Jan. 9	.000	70	50	65	24	11	11
Lewisburg.....	.280	.284	.283	June 29	.834	Feb. 1	i. 000	77	54	73	11	0	15
Norristown.....	.294	.308	.310	June 29	j. 945	Jan. 9	.034	77	58	75	21	16	33
Somerset.....	.294	.353	.301	July 14	.951	Jan. 10	.023	90	67	84	61	24	46
MARYLAND—													
Annapolis.....	.357	.364	.397	June 29	.955	Jan. 10	.039	84	61	77	43	15	39
DISTRICT OF COLUMBIA—													
Washington.....	.338	.335	.364	June 12	.935	Jan. 10	.022	77	56	73	33	12	33
NORTH CAROLINA—													
Murfreesborough.....	.465	.582	.519	?	?	Jan. 11	.094	94	83	91	?	?	?
SOUTH CAROLINA—													
All Saints.....	.489	.543	.506	Sept. 12	1.151	April 18	.041	86	69	83	49	7	39
St. John's (k).....	.470	.519	.495	July 21	.983	Jan. 24	l. 096	83	66	83	45	32	40
FLORIDA—													
Jacksonville.....	.622	.709	.623	Aug. 31	1.242	Jan. 8	m. 129	86	75	86	37	53	44
MISSISSIPPI—													
Columbus.....	.454	.489	.488	July 13	1.023	Dec. 8	.061	85	57	81	?	?	?
TEXAS—													
Austin, [Van Nostrand].....	.495	.416	.468	June 26	n. 907	Nov. 14	.003	80	42	67	28	1	7
Larissa.....	.504	.562	.521	June 13	1.242	Feb. 3	.000	83	63	76	?	0	?
Sisterdale.....	.445	.390	.424	June 30	.958	Nov. 13	o. 000	75	39	68	0	0	11
TENNESSEE—													
Glenwood.....	.367	.374	.388	July 26	.927	Oct. 26	.035	83	56	77	14	12	5

\* The maxima, being generally 100, or complete saturation, are omitted in this table.

a Observations taken at 6 a. m., 2 p. m., and 10 p. m.

b Same amount July 19th.

c Same amount January 12th and 30th, and February 10th.?

d Same amount February 15th.

e Mean relative humidity for the year, 64.

f Observations taken at 8 a. m., 2 p. m., and 9 p. m.

g Same amount February 14th.

h For 11 months only; December wanting. Observations taken at 8 a. m., 2 p. m., and 10 p. m.

i Same amount November 16th.

j Same amount August 24th.

k Several months incomplete.

l Same amount December 25th.

m Same amount January 23d.

n Same amount July 12th.

o Same amount March 10th.

## No. 53.—PSYCHROMETER—SUMMARY FOR THE YEAR 1859.

NAME OF STATION.	FORCE OF VAPOR.								RELATIVE HUMIDITY.					
	MEAN.			MAXIMUM.		MINIMUM.			MEAN.			MINIMA.		
	7 a. m.	2 p. m.	9 p. m.	Date.	Force.	Date.	Force.	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	
	Inches.	Inches.	Inches.		Inches.		Inches.							
KENTUCKY—														
Bardstown .....	.356	.376	.367	July	15	.931	Mar. 26	.000	79	58	75	38	0	0
Springdale (b) .....	.303	.404	.389	July	16	1.341	Dec. 7	.001	85	64	75	22	0	2
OHIO—														
Avon .....	.302	.326	.307	June	14	1.117	Feb. 14	.000	76	64	78	0	0	0
Cincinnati, [Harper] .....	.356	.462	.385	July	17	1.065	Dec. 24	.000	80	69	75	0	?	?
Hillsborough .....	.305	.332	.314	Aug.	5	.877	Dec. 31	.017	80	61	72	39	9	18
Montville .....	.285	.314	.301	Aug.	11	.883	Dec. 31	.027	81	65	78	83	12	35
Savannah .....	.296	.336	.305	June	28	1.382	Dec. 31	.000	83	67	88	0	14	40
Westerville .....	.321	.348	.349	May	7	.877	Dec. 8	.026	83	62	81	46	21	41
MICHIGAN—														
Detroit .....	.241	.318	.241	Aug.	11	1.038	April 29	.000	66	58	65	0	0	11
Marquette .....	.297	.231	.208	July	15	1.051	Feb. 5	.000	75	65	76	0	0	0
Ottawa Point (f) .....	.257	.322	.309	July	16	.996	Feb. 4	.019	86	81	82	43	33	39
Thunder Bay Island (g) .....	.226	.247	.240	July	19	.779	Dec. 7	.000	78	73	76	0	16	15
Ypsilanti (b) .....	.261	.264	.270	June	27	.778	Dec. 8	.000	76	55	70	0	15	0
INDIANA—														
New Harmony .....	.398	.449	.437	July	16	1.270	Dec. 23	.048	88	69	88	53	25	33
ILLINOIS—														
Angusta .....	.307	.361	.334	June	26	1.028	Dec. 31	.019	85	66	79	20	25	39
Batavia, [Mead] .....	.289	.356	.302	July	17	1.165	Mar. 5	.000	81	63	80	23	0	28
Manchester .....	.364	.462	.389	July	15	1.187	Jan. 7	.031	95	82	94	64	24	40
Peoria .....	.293	.308	.320	July	16	.942	Jan. 22	.014	75	53	70	45	17	32
Wheaton .....	.264	.263	.267	July	15	.839	Dec. 12	.001?	79	57	78	41	1?	36
MISSOURI—														
St. Louis, [Engelmann] .....	.338	.348	.357	July	14	.899	Jan. 22	.028	76	55	73	34	8	32
WISCONSIN—														
Appleton .....	.252	.323	.272	Aug.	17	1.283	Dec. 31	.000	70	64	75	0	0	0
IOWA—														
Fairfield .....	.261	.285	.264	July	15	.877	Feb. 16	.000	67	50	66	10	0	0
CALIFORNIA—														
Sacramento .....	.322	.371	.365	June	20	.942	Mar. 28	.078	74	63	74	34	18?	37
MEXICO—														
Mirador (j) .....	1.259	1.375	1.444	April	29	1.890	Jan. 5	.490						
WEST INDIES—														
St. George's, Bermuda (l) .....														
CENTRAL AMERICA—														
Guatemala (m) .....	.459	.474	.481						64	61	89	81	53	74
SOUTH AMERICA—														
Catharina Sophia, Surinam (b) .....	.769	.850	.848	Sept.	17	.997	Mar. 10	.577	89	69	84			

a Same amount March 23d.

b For changes in hours of observation, &amp;c., see tables of the thermometer.

c Same amount April 1st and 10th, and December 4th.

d Same amount January 10th, 22d, and 23d, and May 3d and 9th.

e Same amount March 1st, April 14th, May 17th, and December 30th.

f Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 9 a. m., .228; mean relative humidity at 9 a. m., 84.

g Observations taken at 6 and 9 a. m., and 3 and 6 p. m. Mean force of vapor at 9 a. m., .233; mean relative humidity at 9 a. m., 74.

h Same amount January 6th and 22d.

i Same amount December 1st.

j Observations taken at 7 a. m., 2 p. m., and 8 p. m., and "humidity reduced to 1500000 water in the cubic space of air."

k Same amount May 2d.

l Mean force of vapor for the year, .619; mean relative humidity, 81; minimum humidity, 39. Observations taken at 3½ a. m., 9½ a. m., 3½ p. m., and 9½ p. m.

m Mean force of vapor at 4 a. m., .465; mean relative humidity at 4 a. m., 95. For hours of observation see monthly tables of the thermometer.



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
BRITISH AMERICA—																			
Red River Settlement..	160	21	43	31	268	61	94	98	240	1016	54	21	19	43	76	30	57	60	360
St. John's.....	162	71	8	68	75	178	150	380	3	1095	98	59	3	22	40	87	95	210	604
St. Martin.....	9	245	17	198	34	393	62	137	0	1095	---	---	---	---	---	---	---	---	---
Stanbridge.....	74	79	53	304	189	75	196	76	49	1095	---	---	---	---	---	---	---	---	---
Toronto.....	31	216	43	126	23	256	43	292	65	1095	---	---	---	---	---	---	---	---	---
Windsor.....	119	68	63	45	67	201	148	135	132	978	---	---	---	---	---	---	---	---	---
MAINE—																			
Cornish.....	114	89	75	45	97	300	245	129	0	1094	4	2	0	1	5	26	31	27	94
Cornishville.....	99	58	22	57	143	134	213	366	3	1095	---	---	---	---	---	---	---	---	---
Dexter.....	65	142	59	59	106	159	101	361	43	1095	---	---	---	---	---	---	---	---	---
Gardiner.....	37	156	22	133	43	179	36	282	105	993	20	25	0	27	26	133	43	151	425
Perry.....	73	110	29	66	87	266	66	379	4	1080	43	31	1	7	18	98	67	130	395
Portland.....	146	138	60	81	148	128	187	184	1	1073	17	6	4	7	31	56	135	82	338
Steuben.....	23	256	9	58	11	380	34	269	51	1091	9	78	4	7	2	199	79	111	489
NEW HAMPSHIRE—																			
Shelburne.....	0	1	208	0	0	7	481	1	165	863	4	1	17	37	3	48	216	203	529
Stratford.....	12	130	177	28	89	164	201	118	176	1095	3	1	3	4	4	50	207	74	346
VERMONT—																			
Brandon.....	140	0	24	182	287	76	83	239	63	1094	37	3	0	10	24	99	78	282	533
Burlington.....	154	68	3	25	224	238	44	299	0	1055	---	---	---	---	---	---	---	---	---
Craftsbury.....	26	101	16	64	356	136	127	224	45	1095	23	13	3	5	50	80	324	164	562
Lunenburg.....	5	12	37	24	140	92	263	173	1	747	---	---	---	---	---	---	---	---	---
St. Johnsbury.....	246	11	22	19	300	10	223	171	45	1047	21	4	4	2	69	19	170	30	319
MASSACHUSETTS—																			
Amherst.....	35	39	28	248	70	94	69	433	1	1017	9	16	10	28	27	49	74	116	329
Cambridge.....	77	100	73	49	76	211	109	130	199	1024	---	---	---	---	---	---	---	---	---
Florida.....	7	62	16	95	14	190	385	328	1	1098	---	---	---	---	---	---	---	---	---
Lawrence.....	9	195	15	109	7	289	11	458	0	1093	---	---	---	---	---	---	---	---	---
Nantucket.....	82	148	36	98	56	273	78	242	80	1093	---	---	---	---	---	---	---	---	---
New Bedford.....	46	164	19	100	33	326	60	330	10	1088	15	20	5	7	6	45	50	60	208
Westfield.....	91	107	55	170	52	149	190	281	0	1095	0	0	0	1	0	12	3	6	22
Worcester.....	44	191	19	121	33	243	47	368	5	1071	4	22	1	14	11	93	26	114	285
RHODE ISLAND—																			
Providence.....	47	145	34	44	99	221	59	326	5	980	---	---	---	---	---	---	---	---	---
CONNECTICUT—																			
Middletown.....	99	62	9	58	72	191	47	228	327	1093	10	12	4	6	3	90	173	98	396
Pomfret.....	56	172	19	59	136	209	22	414	0	1087	19	124	7	39	78	145	53	263	728
Saybrook.....	73	118	109	94	64	168	96	246	80	1048	24	27	8	15	18	51	152	76	371
Wallingford.....	161	137	15	95	128	243	40	276	0	1095	10	21	6	15	9	93	192	76	422
NEW YORK—																			
Baldwinsville.....	33	44	134	56	71	126	398	230	1	1093	20	11	28	20	18	69	493	157	816
Bellport.....	116	118	50	138	64	266	96	224	22	1094	18	27	21	51	29	86	49	55	336
Beverly.....	62	134	1	135	66	362	12	223	0	995	21	71	20	92	59	234	102	64	663
Cazenovia.....	40	14	13	90	170	176	149	375	27	1054	14	8	6	57	51	137	258	275	806
Morrisania.....	74	123	93	143	100	190	200	116	8	1047	26	37	34	32	28	29	55	15	256
Nichols.....	98	13	66	239	260	31	69	319	0	1095	137	14	9	68	161	50	74	338	851
Ogdensburg.....	49	70	19	7	36	131	75	56	0	443	---	---	---	---	---	---	---	---	---
Oswego.....	64	116	76	178	178	77	312	64	26	1091	---	---	---	---	---	---	---	---	---
Penn Yan.....	56	59	3	11	280	290	294	101	0	1094	---	---	---	---	---	---	---	---	---
Wampsville.....	2	5	165	94	115	80	612	32	0	1095	2	16	107	62	83	148	399	20	807
NEW JERSEY—																			
Lambertville.....	58	156	25	105	87	197	53	309	0	990	---	---	---	---	---	---	---	---	---
Newark.....	45	183	20	85	6	205	43	144	2	733	---	---	---	---	---	---	---	---	---
PENNSYLVANIA—																			
Berwick.....	48	37	357	26	61	71	357	71	5	1033	---	---	---	---	---	---	---	---	---
Cannonsburg.....	6	33	264	33	4	154	495	95	8	1092	---	---	---	---	---	---	---	---	---
Chambersburg.....	71	44	199	117	58	78	290	62	176	1095	50	30	48	17	79	119	346	98	787
Easton.....	71	146	4	215	44	82	40	370	18	990	---	---	---	---	---	---	---	---	---
Fleming.....	10	26	130	163	4	171	223	322	5	1059	14	12	21	54	9	55	269	249	683
Gettysburg.....	81	148	20	36	122	276	112	174	125	1094	40	41	13	11	41	158	251	139	694
Harrisburg, [Heisely]..	81	32	117	130	145	75	219	248	29	1076	31	0	10	31	59	47	113	104	395
Harrisburg, [Hickok]..	127	70	202	49	157	82	333	65	5	1090	1	0	7	0	19	7	58	4	96



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1859.

NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
PENNSYLVANIA—Contin'd.																			
Lewisburg	104	99	23	53	155	123	158	82	215	1012	11	4	2	5	19	37	95	53	226
Morrisville	33	124	99	102	96	272	92	166	108	1092	9	89	56	55	16	255	145	119	744
Mount Joy	18	19	12	163	51	36	14	305	150	768	25	20	6	52	10	38	46	124	321
Norristown	7	51	167	104	39	107	101	63	0	939	1	32	100	38	16	126	337	26	676
Philadelphia	23	213	25	79	37	324	116	278	0	1095	5	31	7	6	15	87	78	69	298
Pittsburg, [Mar. Hosp.]	72	30	101	151	115	154	181	243	48	1095	15	18	27	39	39	192	138	54	522
Pocopson	116	114	57	44	93	243	236	100	28	1031	39	24	11	11	17	99	162	60	418
Shamokin	19	20	287	47	247	23	142	10	0	1095	3	5	274	17	25	23	486	14	847
Somerset	23	16	36	118	53	134	262	133	320	1095	12	7	21	29	28	121	376	94	691
MARYLAND—																			
Annapolis	88	217	37	83	238	188	34	129	82	1696	12	14	1	1	1	224	21	22	295
Frederick	48	219	10	24	82	103	178	118	214	996	7	10	1	16	41	48	283	30	436
Leitersburg	78	32	38	50	198	241	202	163	92	1694	46	30	24	28	49	123	291	187	778
Sykesville	115	135	62	94	147	175	261	104	0	1093	26	46	72	64	29	106	510	21	874
DISTRICT OF COLUMBIA—																			
Washington	68	138	38	75	235	75	81	199	164	1073									
VIRGINIA—																			
Crichton's Store	227	117	41	35	182	276	90	69	50	1087	1	0	1	1	8	131	30	0	166
Lewisburg	84	85	60	62	136	379	89	127	11	1031									
Poplar Grove	0	24	223	24	1	30	289	179	325	1095	23	23	8	16	21	170	228	109	603
Portsmouth	37	223	98	150	21	267	106	186	0	1088									
Rougmont	138	162	61	19	195	80	241	40	56	992	24	34	3	7	48	31	264	25	436
Smithfield	132	170	51	73	154	195	63	110	0	948	52	50	16	14	23	105	173	91	524
NORTH CAROLINA—																			
Chapel Hill	153	194	41	25	103	187	219	92	5	1019	38	69	14	3	47	229	115	29	544
Murfreesborough	43	152	54	119	56	195	89	96	142	946	29	67	17	25	19	83	249	42	531
SOUTH CAROLINA—																			
Aiken	47	140	177	38	107	186	123	7	11	825									
All Saints	165	66	96	81	271	187	161	61	2	1090	39	21	20	6	27	181	154	19	467
St John's	39	171	39	218	44	210	43	215	0	979	17	40	15	15	14	70	157	84	412
GEORGIA—																			
Atlanta	20	25	199	92	121	127	285	226	0	1095									
Thomaston	165	177	96	106	71	160	106	180	0	1061									
Whitemarsh Island	72	187	31	102	121	115	127	128	205	1088	21	60	14	36	28	102	113	109	483
FLORIDA—																			
Alligator	14	165	118	82	57	217	72	69	292	1086	27	106	38	19	37	119	85	27	458
Astoria	107	266	115	109	65	137	174	94	28	1095	48	118	79	76	62	98	89	57	627
Jacksonville	63	293	14	125	46	336	30	168	7	1082	19	180	24	45	25	268	55	35	651
St. Augustine	57	147	33	210	15	155	12	141	25	1095	59	326	51	132	32	93	22	98	813
Salt Ponds	115	144	162	154	81	25	17	15	17	730									
ALABAMA—																			
Greensborough	104	36	53	271	85	85	78	229	11	941	26	10	18	64	21	84	167	50	440
MISSISSIPPI—																			
Columbus	194	57	135	116	213	62	34	181	1	1093	35	8	27	38	108	94	176	71	537
Natchez	203	188	29	178	152	214	21	110	0	1095	11	50	12	29	3	118	52	78	353
LOUISIANA—																			
New Orleans	0	317	3	333	0	245	11	197	0	1095									
TEXAS—																			
Austin, [Palm]	144	32	73	181	262	255	64	79	5	1095	30	32	32	39	134	118	30	20	435
Austin, [Van Nostrand]	199	38	42	52	527	39	95	77	24	1093	36	12	12	22	257	127	34	8	508
Larissa	101	39	81	161	370	112	55	101	21	1041	74	22	28	16	144	81	50	32	447
New Braunfels	224	34	119	284	263	35	51	53	11	1063	3	0	22	13	52	15	7	2	114
Union Hill	249	28	74	88	526	47	42	13	28	1095	111	11	16	40	152	19	56	15	720
Washington	139	6	19	42	437	8	84	66	236	1037	6	6	1	5	58	6	19	0	101
TENNESSEE—																			
Glenwood	78	119	109	215	178	85	66	111	134	1095	31	36	32	29	76	159	287	116	766
KENTUCKY—																			
Bardstown	47	132	28	103	185	210	154	130	89	1078	35	37	24	28	46	187	220	83	665
Paris	48	137	23	109	95	308	126	217	2	1065	21	18	27	13	56	70	291	36	522
Springdale	14	151	62	42	86	277	86	73	304	1095									
OHIO—																			
Avon	54	138	49	108	153	241	78	150	1	1072	20	19	2	12	12	109	375	176	725



## No. 54.—WINDS—NUMBER OF OBSERVATIONS—SUMMARY FOR THE YEAR 1859.

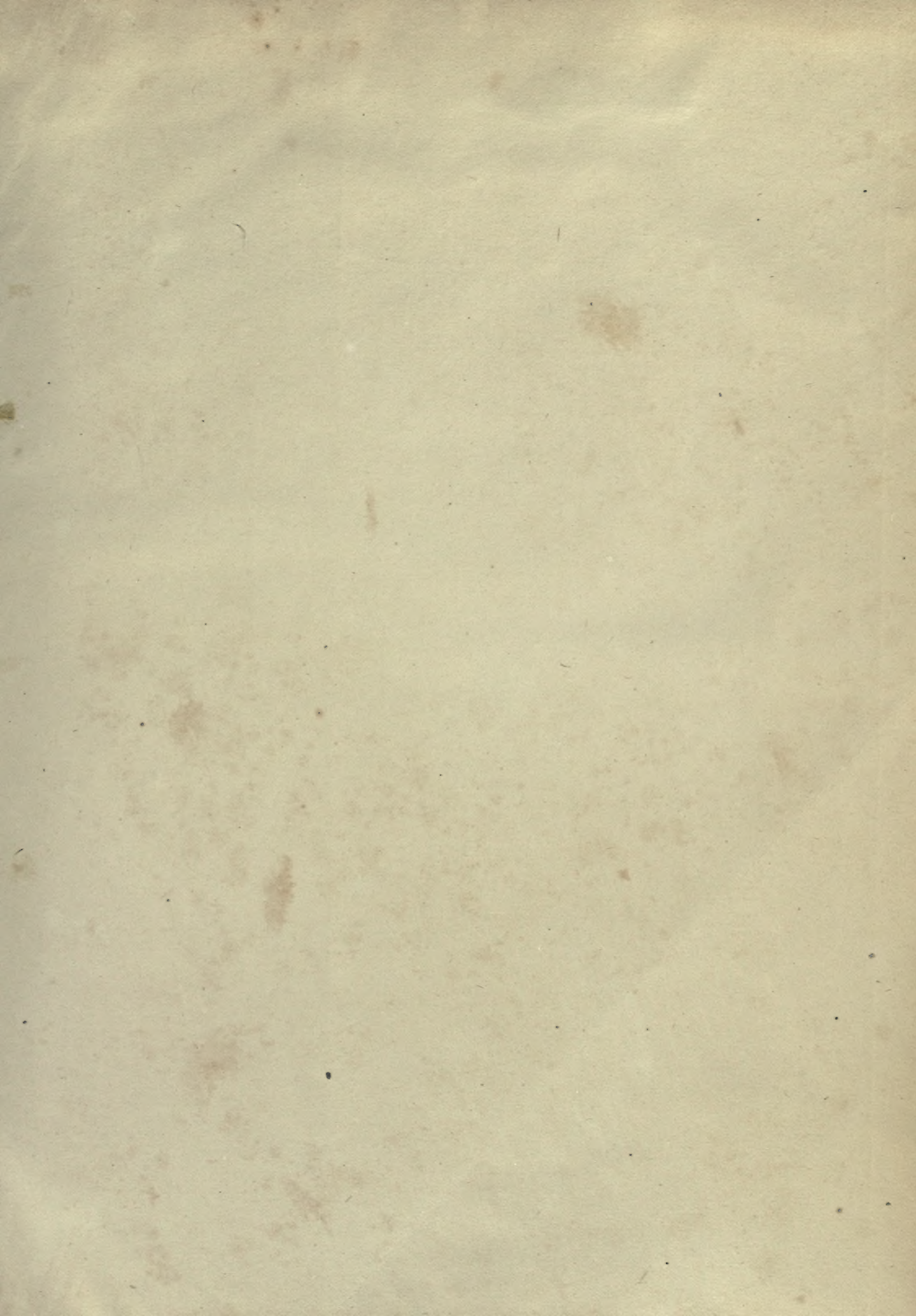
NAME OF STATION.	SURFACE CURRENT.									MOTION OF CLOUDS.									
	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Calm or variable.	Total.	North.	Between north and east.	East.	Between south and east.	South.	Between south and west.	West.	Between north and west.	Total.
OHIO—Continued.																			
Bellefontaine	2	144	62	198	17	269	122	224	0	1038	4	129	19	143	6	274	76	148	799
Bowling Green	29	139	35	53	63	284	77	100	285	1065	18	27	12	8	10	128	186	97	486
Cincinnati, [Harper]	96	81	137	50	148	188	229	132	0	1061	28	11	2	3	13	51	140	42	290
Cleveland	128	102	34	165	257	112	147	80	13	1038	28	11	2	3	13	51	140	42	290
Hillsborough	3	171	2	227	29	367	43	248	2	1092	1	2	2	4	0	68	4	39	120
Hudson	60	100	97	136	99	210	172	131	4	1009	27	48	14	50	60	247	132	107	685
Madison, [King]	60	110	17	120	131	218	101	129	94	980	27	48	14	50	60	247	132	107	685
Montville	91	96	1	225	150	320	23	181	6	1093	16	15	2	13	20	159	53	86	364
New Lisbon	55	41	55	127	95	350	139	232	1	1095	22	25	28	82	51	255	137	176	776
Portsmouth	94	123	70	90	51	384	86	162	1	1061	22	25	28	82	51	255	137	176	776
Rockport	110	86	110	28	112	210	341	107	1	1105	22	25	28	82	51	255	137	176	776
Savannah	29	80	7	164	25	420	162	208	0	1095	24	54	5	23	16	353	136	204	815
Urbana	13	68	34	138	101	159	136	100	309	1058	25	32	10	14	40	166	323	91	701
Welchfield	122	41	14	272	85	279	133	149	1	1095	3	0	1	1	0	19	4	9	37
Westerville	148	48	19	31	215	260	220	122	6	1069	58	28	4	15	93	159	222	87	666
MICHIGAN—																			
Battle Creek	46	75	127	91	145	146	232	87	121	1070	12	21	15	6	10	142	404	129	739
Detroit	15	55	75	208	85	361	252	44	0	1095	7	30	55	127	110	368	335	53	1085
Marquette	54	82	99	132	88	119	209	307	3	1093	15	145	36	174	7	193	53	163	786
Monroe	19	169	44	199	7	266	63	193	0	960	13	13	57	35	21	189	291	209	828
New Buffalo	75	277	90	125	200	285	106	301	0	1459	42	155	106	40	36	125	73	45	622
Ottawa Point (a)	255	102	86	255	201	139	78	263	80	1460	104	34	30	63	62	45	81	246	665
Thunder Bay Island	255	102	86	255	201	139	78	263	80	1460	104	34	30	63	62	45	81	246	665
Ypsilanti	49	115	102	118	50	304	165	131	29	1063	24	43	30	37	23	155	229	84	625
INDIANA—																			
Aurora	11	44	17	13	55	71	81	27	7	326	24	11	31	37	71	143	128	89	534
Cannelton	51	25	121	229	165	103	213	177	7	1091	44	135	82	53	30	125	218	199	886
Logansport	43	163	92	123	10	259	175	230	0	1095	44	135	82	53	30	125	218	199	886
New Harmony	77	16	40	172	164	156	113	206	0	944	44	135	82	53	30	125	218	199	886
ILLINOIS—																			
Augusta	28	150	82	147	121	178	140	177	72	1095	14	47	21	40	31	88	124	117	482
Aurora	73	177	45	116	186	173	179	146	0	1095	22	36	6	11	26	191	271	112	675
Batavia, [Mead]	6	302	9	102	3	414	67	192	0	1095	4	159	3	53	2	351	71	217	860
Edgington	40	145	25	138	53	326	38	330	0	1095	36	78	25	92	34	344	45	278	932
Elgin	58	141	60	130	142	153	98	214	99	1095	1	2	0	0	3	23	60	33	122
Manchester	147	108	44	82	345	90	169	109	1	1095	100	57	32	40	216	77	140	75	737
Marengo	9	63	146	197	103	366	156	29	5	1074	18	17	7	6	13	111	56	76	304
Ottawa	33	199	21	145	52	278	78	171	31	1068	18	17	7	6	13	111	56	76	304
Pekin	123	107	85	118	227	89	71	184	57	1061	50	23	32	21	46	126	214	106	618
Peoria	58	205	124	56	140	80	354	78	0	1095	2	2	1	3	10	8	36	6	68
Riley	64	76	89	83	104	139	200	175	117	1047	2	2	1	3	10	8	36	6	68
Sandwich	82	190	55	180	116	150	99	221	1	1094	1	24	1	3	0	27	425	59	540
West Salem	62	86	45	138	203	84	57	159	261	1095	11	7	2	4	10	162	292	22	510
West Urbana	88	138	38	207	86	248	84	205	0	1094	11	7	2	4	10	162	292	22	510
Wheaton	64	183	88	73	106	201	117	209	38	1079	14	9	1	1	10	36	41	38	150
Winnebago	96	130	56	164	167	187	144	151	0	1095	22	21	7	4	9	107	179	84	433
WISCONSIN—																			
Appleton	104	232	34	55	121	374	46	105	7	1078	33	75	12	18	23	135	29	38	363
Beloit	162	47	82	109	216	146	190	143	0	1095	33	75	12	18	23	135	29	38	363
Kenosha	50	85	168	118	150	165	211	74	26	1047	33	75	12	18	23	135	29	38	363
Manitowoc	84	86	58	123	132	188	159	265	0	1095	7	8	3	4	12	53	110	60	257
Milwaukee, [Winkler]	42	207	72	143	31	157	163	280	0	1095	7	8	3	4	12	53	110	60	257
Platteville	85	54	105	245	101	100	159	243	0	1092	51	34	50	101	52	140	168	183	779
Wausau	150	48	73	98	104	130	229	123	115	1070	74	24	26	40	45	91	171	83	554
IOWA—																			
Bellevue	87	78	105	112	125	148	222	190	1	1068	26	34	11	57	23	118	134	212	615
Dubuque	125	59	36	105	150	143	75	238	156	1087	26	34	11	57	23	118	134	212	615
Fairfield	7	69	2	217	6	184	17	298	286	1086	26	34	11	57	23	118	134	212	615
Fort Madison	21	152	10	202	9	322	23	337	19	1095	58	23	14	59	37	155	202	124	672
Muscatine	58	83	104	122	155	156	235	182	0	1095	3	17	1	5	4	122	72	25	249

<sup>a</sup> It is uncertain whether, in recording the motion of the clouds at this place, the direction toward which they moved was noted, or that from which they came.











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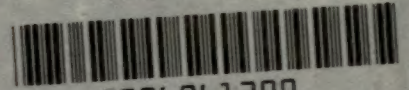
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